MATERIAL SAFETY DATA SHEETS

SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Name: 10w30, 5W30, 10W40, 20W50, 5W20
Product Class: Lubricant
WHMIS Classification: Not Controlled.

Supplier Name and Address:
Coastal Packaging Inc.
P.O. Box 993
Saint John, N.B.
E2L 4E3

Phone: (506) 633-3732
Emergency: (506) 648-3060

SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

Hazardous Ingredients	CAS#	wt%	ACGIH-TLV	LC_{50}	LD_{50}
None			5 mg/m^3 (oil mist)		

SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Light to Dark Brown
Odour: Petroleum
Specific Gravity @ 15°C: 0.85 - 0.89
Solubility: Negligible

Vapour Pressure (mm @ 20°C): < 0.10
Volatile (wt%): 0

SECTION 4 - FIRE AND EXPLOSION HAZARD

Flammability: ☒Yes ☐ No
Flash Point : > 210°C (COC)
Conditions: Open flame above flash point.

Upper Flammable Limit: Not established.
Auto Ignition Temperature: Not determined.
Sensitivity to Impact: None.

Lower Flammable Limit: Not established.
TDG Flammability Classification: Not classified.
Sensitivity to Static Discharge: None.

Means of Extinction: Dry chemical, water spray (fog), foam or carbon dioxide.
Hazardous Combustion Products: Hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.
Special Procedures: Water foam may cause frothing. Use water to cool exposed containers. Use self-contained breathing apparatus for fire fighting.

SECTION 5 - REACTIVITY DATA

Stability: This product is stable.
Hazardous Polymerisation: Will not occur.
Conditions to avoid: Extremely high temperatures.
Incompatibility with other substances: Strong oxidising agents.
Hazardous decomposition products: Thermal decomposition from high temperature or combustion will produce hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.

MATERIAL SAFETY DATA SHEETS

SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: ☐Eye ☒ Skin Contact ☐ Skin Absorption ☒ Inhalation ☒ Ingestion

Effects of Acute Exposure: Irritation to skin and eyes. Inhalation of hot oil mist or vapours may irritate the upper respiratory tract.
Effects of Chronic Exposure: Repeated or prolonged exposure may cause dermatitis and/or oil acne. Long-term intensive exposure to oil mist may cause benign lung fibrosis. No specific toxicity data but extrapolation from similar materials indicates that this product has low oral toxicity.

Exposure Limits:	5 mg/m^3 (oil mist)	**Carcinogenicity:**	Not determined.
Reproductive Toxicity:	Not determined.	**Teratogenicity:**	Not determined.
Irritancy of Product:	Slight.	**Mutagenicity:**	Not determined.

SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

Personal Protective Equipment:	*Gloves:*	Oil/Chemical resistant.
	Eye:	Chemical safety glasses or full face shield.
	Respiratory:	NOISH respirator if mist levels are high.
	Footwear:	Oil/Chemical resistant.
	Clothing:	Oil/Chemical resistant if repeated exposure to skin and clothing occurs.
	Other:	

Engineering Controls: Local exhaust at source of heated vapours.
Leak and Spill Procedure: Contain spills with dikes or absorbent material. Eliminate fire hazards. Prevent from entering sewers or water courses. Vacuum liquid or transfer absorbed material into containers. Advise authorities.
Waste Disposal: Follow local and governmental regulations. Not regulated as a hazardous waste.
Storage Requirements Cool, dry location. Keep containers closed.
Special Shipping Information: No special requirements.

SECTION 8 - FIRST AID MEASURES

Inhalation: Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.
Ingestion: Do not induce vomiting, give two glasses of water and seek medical attention.
Eye: Flush with water for 15 minutes.
Skin: Wash contaminated area with soap and water. Clean contaminated clothing before wearing again.
General Advice: High pressure injection under skin can be serious and requires urgent medical attention.

SECTION 9 - PREPARATION DATE OF MSDS

MSDS Prepared by: Coastal Packaging Inc. **Phone:** (506) 633-3732
MSDS Date: March 1,2006
Revision 01

MATERIAL SAFETY DATA SHEETS

SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Name: 80W90; 85W140
Product Class: Lubricant
WHMIS Classification: Not Controlled.

Supplier Name and Address:
Coastal Packaging Inc.
P.O. Box 993
Saint John, N.B.
E2L 4E3

Phone: (506) 633-3732
Emergency: (506) 648-3060

SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

Hazardous Ingredients	CAS#	wt%	ACGIH-TLV	LC_{50}	LD_{50}
None			5 mg/m^3 (oil mist)		

SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Brown
Odour: Petroleum
Specific Gravity @ 15°C: 0.88-.092
Solubility: Negligible

Vapour Pressure (mm @ 20°C): < 0.10
Volatile (wt%): 0

SECTION 4 - FIRE AND EXPLOSION HAZARD

Flammability: ☒Yes ☐ No
Flash Point : > 200°C (COC)
Conditions: Open flame above flash point.

Upper Flammable Limit: Not established.
Auto Ignition Temperature: Not determined.
Sensitivity to Impact: None.

Lower Flammable Limit: Not established.
TDG Flammability Classification: Not classified.
Sensitivity to Static Discharge: None.

Means of Extinction: Dry chemical, water spray (fog), foam or carbon dioxide.
Hazardous Combustion Products: Hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.
Special Procedures: Water foam may cause frothing. Use water to cool exposed containers. Use self-contained breathing apparatus for fire fighting.

SECTION 5 - REACTIVITY DATA

Stability: This product is stable.
Hazardous Polymerisation: Will not occur.
Conditions to avoid: Extremely high temperatures.
Incompatibility with other substances: Strong oxidising agents.
Hazardous decomposition products: Thermal decomposition from high temperature or combustion will produce hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.

MATERIAL SAFETY DATA SHEETS

SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: ☐Eye ☒ Skin Contact ☐ Skin Absorption ☒ Inhalation ☒ Ingestion

Effects of Acute Exposure: Irritation to skin and eyes. Inhalation of hot oil mist or vapours may irritate the upper respiratory tract.
Effects of Chronic Exposure: Repeated or prolonged exposure may cause dermatitis and/or oil acne. Long-term intensive exposure to oil mist may cause benign lung fibrosis. No specific toxicity data but extrapolation from similar materials indicates that this product has low oral toxicity.

Exposure Limits:	5 mg/m^3 (oil mist)	**Carcinogenicity:**	Not determined.
Reproductive Toxicity:	Not determined.	**Teratogenicity:**	Not determined.
Irritancy of Product:	Slight.	**Mutagenicity:**	Not determined.

SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

Personal Protective Equipment:	*Gloves:*	Oil/Chemical resistant.
	Eye:	Chemical safety glasses or full face shield.
	Respiratory:	NOISH respirator if mist levels are high.
	Footwear:	Oil/Chemical resistant.
	Clothing:	Oil/Chemical resistant if repeated exposure to skin and clothing occurs.
	Other:	

Engineering Controls: Local exhaust at source of heated vapours.
Leak and Spill Procedure: Contain spills with dikes or absorbent material. Eliminate fire hazards. Prevent from entering sewers or water courses. Vacuum liquid or transfer absorbed material into containers. Advise authorities.
Waste Disposal: Follow local and governmental regulations. Not regulated as a hazardous waste.
Storage Requirements Cool, dry location. Keep containers closed.
Special Shipping Information: No special requirements.

SECTION 8 - FIRST AID MEASURES

Inhalation: Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.
Ingestion: Do not induce vomiting, give two glasses of water and seek medical attention.
Eye: Flush with water for 15 minutes.
Skin: Wash contaminated area with soap and water. Clean contaminated clothing before wearing again.
General Advice: High pressure injection under skin can be serious and requires urgent medical attention.

SECTION 9 - PREPARATION DATE OF MSDS

MSDS Prepared by: Coastal Packaging Inc. **Phone:** (506) 633-3732
MSDS Date: March 1,2006
Revision 00

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Name: ATF
Product Class: Lubricant
WHMIS Classification: Not Controlled.

Supplier Name and Address:
Coastal Packaging Inc
P.O. Box 993
Saint John, N.B.
E2L 4E3

Phone: (506) 633-3732
Emergency: (506) 648-3060

SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

Hazardous Ingredients	CAS#	wt%	ACGIH-TLV	LC_{50}	LD_{50}
None			5 mg/m^3 (oil mist)		

SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Red
Odour: Petroleum
Specific Gravity @ 15°C: 0.85
Solubility: Negligible

Vapour Pressure (mm @ 20°C): < 0.10

SECTION 4 - FIRE AND EXPLOSION HAZARD

Flammability: ☒Yes ☐ No
Flash Point : > 160°C (COC)
Conditions: Open flame above flash point.

Upper Flammable Limit: Not established.
Auto Ignition Temperature: Not determined.
Sensitivity to Impact: None.
Lower Flammable Limit: Not established.
TDG Flammability Classification: Not classified.
Sensitivity to Static Discharge: None.

Means of Extinction: Dry chemical, water spray (fog), foam or carbon dioxide.
Hazardous Combustion Products: Hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.
Special Procedures: Water foam may cause frothing. Use water to cool exposed containers. Use self-contained breathing apparatus for fire fighting.

SECTION 5 - REACTIVITY DATA

Stability: This product is stable.
Hazardous Polymerisation: Will not occur.
Conditions to avoid: Extremely high temperatures.
Incompatibility with other substances: Strong oxidising agents.
Hazardous decomposition products: Thermal decomposition from high temperature or combustion will produce hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.

MATERIAL SAFETY DATA SHEET

SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: ☐Eye ☒ Skin Contact ☐ Skin Absorption ☒ Inhalation ☒ Ingestion

Effects of Acute Exposure: Irritation to skin and eyes. Inhalation of hot oil mist or vapours may irritate the upper respiratory tract.
Effects of Chronic Exposure: Repeated or prolonged exposure may cause dermatitis and/or oil acne. Long-term intensive exposure to oil mist may cause benign lung fibrosis. No specific toxicity data but extrapolation from similar materials indicates that this product has low oral toxicity.

Exposure Limits:	5 mg/m^3 (oil mist)	**Carcinogenicity:**	Not determined.
Reproductive Toxicity:	Not determined.	**Teratogenicity:**	Not determined.
Irritancy of Product:	Slight.	**Mutagenicity:**	Not determined.

SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

Personal Protective Equipment:	*Gloves:*	Oil/Chemical resistant.
	Eye:	Chemical safety glasses or full face shield.
	Respiratory:	NOISH respirator if mist levels are high.
	Footwear:	Oil/Chemical resistant.
	Clothing:	Oil/Chemical resistant if repeated exposure to skin and clothing occurs.
	Other:	

Engineering Controls: Local exhaust at source of heated vapours.
Leak and Spill Procedure: Contain spills with dikes or absorbent material. Eliminate fire hazards. Prevent from entering sewers or water courses. Vacuum liquid or transfer absorbed material into containers. Advise authorities.
Waste Disposal: Follow local and governmental regulations. Not regulated as a hazardous waste.
Storage Requirements Cool, dry location. Keep containers closed.
Special Shipping Information: No special requirements.

SECTION 8 - FIRST AID MEASURES

Inhalation: Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.
Ingestion: Do not induce vomiting, give two glasses of water and seek medical attention.
Eye: Flush with water for 15 minutes.
Skin: Wash contaminated area with soap and water. Clean contaminated clothing before wearing again.
General Advice: High pressure injection under skin can be serious and requires urgent medical attention.

SECTION 9 - PREPARATION DATE OF MSDS

MSDS Prepared by: Coastal Packaging Inc **Phone:** (506) 633-3732
MSDS Date: March 1,2006
Revision 01

MATERIAL SAFETY DATA SHEET

Revision Date: 10/29/2004

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: CARQUEST ® Antifreeze / Coolant
MSDS NUMBER: 402503X - 0
PRODUCT CODE(S): 5061695, 5061714

MANUFACTURER
Specialty Oil Company
P.O. Box 4427
Houston, TX. 77210-4427

TELEPHONE NUMBERS
Spill Information: (877) 242-7400
Health Information: (877) 504-9351
MSDS Assistance Number: (877) 276-7285

SECTION 2 PRODUCT/INGREDIENTS

INGREDIENTS	CAS#	CONCENTRATION
Antifreeze/Coolant		
Ethylene Glycol	107-21-1	90 - 98 %weight
Deionized Water	7732-18-5	1 - 3 %weight
Phosphoric acid	7664-38-2	1 - 3 %weight

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Appearance & Odor: Fluorescent green liquid. Mild odor.
Health Hazards: May be harmful or fatal if swallowed. May cause acidosis, cardiopulmonary and kidney effects. May cause CNS depression.
NFPA Rating (Health, Fire, Reactivity): 2, 1, 0
Hazard Rating:Least - 0 Slight - 1 Moderate - 2 High - 3 Extreme - 4

Inhalation:
In applications where vapors (caused by high temperature) or mists (caused by mixing or spraying) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

Eye Irritation:
If irritation occurs, a temporary burning sensation, minor redness, swelling, and/or blurred vision may result.

Skin Contact:
May cause slight irritation of the skin. If irritation occurs, a temporary burning sensation and minor redness and/or swelling may result. Other adverse effects not expected from brief skin contact.

Ingestion:
May be harmful or fatal if swallowed. Contains ethylene glycol and/or diethylene glycol which are toxic when swallowed. A lethal dose for an adult is 1 ml per kilogram or about 4 ounces (1/2 cup). Severe kidney damage can occur as a result of ingestion. Ingestion may result in nausea, vomiting and abdominal cramps. Metabolic acidosis and cardiopulmonary effects can occur following ingestion. May cause Central Nervous System (CNS) depression.

Other Health Effects:

Refer to Section 11, Toxicological Information, for specific information on the following effects:
Developmental Toxicity

Primary Target Organs:
The following organs and/or organ systems may be damaged by overexposure to this material and/or its components:
Cardiovascular System, Kidney, Liver, Lungs

Signs and Symptoms:
May cause cardiopulmonary effects including rapid respiration and heartbeat, cyanosis and in severe cases, pulmonary edema and pneumonia. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness and death may occur. Kidney damage may be indicated by changes in urine output or appearance, pain upon urination or in the lower back or general edema (swelling from fluid retention). Liver damage may be indicated by loss of appetite, jaundice (yellowish skin and eye color), fatigue and sometimes pain and swelling in the upper right abdomen.

Aggravated Medical Conditions:
Pre-existing eye, skin, respiratory, liver and kidney disorders and may be aggravated by exposure to this product.

For additional health information, refer to section 11.

SECTION 4 FIRST AID MEASURES

Inhalation:
Move victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.

Skin:
Flush exposed area with water and follow by washing with soap if available. If skin irritation persists after washing, get medical advice.

Eye:
Flush eyes with plenty of water while holding eyelids open. Rest eyes for 30 minutes. If eye irritation persists, seek medical advice.

Ingestion:
DO NOT take internally. If swallowed, IMMEDIATELY contact a poison control center, emergency treatment center, or physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Note to Physician:
IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! Ethylene Glycol (EG) and Diethylene Glycol (DEG) intoxication may initially produce behavioral changes, drowsiness, vomiting, diarrhea, thirst, and convulsions. EG and DEG are nephrotoxic. End stages of poisoning may include renal damage or failure with acidosis. Supportive measures, supplemented with hemodialysis if indicated, may limit the progression and severity of toxic effects. May cause cardiopulmonary effects. For ETHYLENE GLYCOL POISONING, intravenous ethanol is a recognized antidotal treatment; other antidotal treatments also exist for ethylene glycol poisoning.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point [Method]: 260 ºF/126.67 ºC [Pensky-Martens Closed Cup]

Extinguishing Media:
Prevent run off from fire control or dilution from entering streams, sewers or drinking water supply. Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water.

Fire Fighting Instructions:
Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures:
May burn although not readily ignitable.

Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management:
Shut off source of leak if safe to do so. Dike and contain spill.

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Reporting:
U.S. regulations require reporting releases of this material to the environment which exceed the reportable quantity to the National Response Center at (800)424-8802.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures:
Do not ingest. Avoid prolonged or repeated contact with eyes, skin or clothing. Avoid breathing of vapors, fumes or mists. Use with adequate ventilation. Wash thoroughly after handling.

Storage:
Do not store in open or unlabeled containers. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

Container Warnings:
Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical	Limit	TWA	STEL	Ceiling	Notation
Ethylene Glycol	ACGIH TLV			100 mg/m3	
Ethylene Glycol	OSHA PEL - 1989(revoked)			50 ppmv	
Phosphoric acid	ACGIH TLV	1 mg/m3			
Phosphoric acid	OSHA PEL - 1989(revoked)	1 mg/m3	3 mg/m3		

Exposure Controls

Provide adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

Personal Protection

Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.

Eye Protection:
Chemical Goggles - If liquid contact is likely., or Safety glasses with side shields

Skin Protection:
Use protective clothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements.

Published literature, test data and/or glove and clothing manufacturers indicate the best protection is provided by:

Neoprene, or Nitrile Rubber

Respiratory Protection:
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Types of respirator(s) to be considered in the selection process include:

For Mist: Air Purifying, R or P style NIOSH approved respirator.
For Vapors: Air Purifying, R or P style prefilter & organic cartridge, NIOSH approved respirator. Self-contained breathing apparatus for use in environments with unknown concentrations or emergency situations.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Fluorescent green liquid. Mild odor.
Substance Chemical Family: Ethylene Glycols

Boiling Point	226 ºF	**Flash Point**	260 ºF [Pensky-Martens Closed Cup]
Freezing Point	-34 ºF	**Odor**	Mild odor.
Specific Gravity	1.12 - 1.14	**Stability**	Stable

NOTE: The freezing and boiling point values reflect a 50% solution in water at atmospheric pressure.

SECTION 10 REACTIVITY AND STABILITY

Stability:
Material is stable under normal conditions.

Hazardous Decomposition Products:
Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion. Acids, Aldehydes, Carbon Monoxide, Carbon Dioxide, Ketones and other unidentified organic compounds may be formed upon combustion.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity

TEST	Result	OSHA	Material Tested

		Classification	
Dermal LD50	> 2 g/kg(Rabbit)	Non-Toxic	Based on components(s)

Carcinogenicity Classification

Chemical Name	NTP	IARC	ACGIH	OSHA
Antifreeze/Coolant	No	Not Reviewed	No	No

Cardiovascular System	Ingestion of large doses can cause metabolic acidosis that results in cardiopulmonary effects.
Developmental Toxicity	Oral exposure of pregnant rats and mice to ethylene glycol has produced birth defects in the offspring.
Kidney	Ingestion of ethylene glycol can cause bladder stones and kidney damage which can be fatal.
Liver	Prolonged and repeated ingestion of ethylene glycol has produced liver damage in rats.
Lungs	Ingestion of large doses can cause metabolic acidosis that results in cardiopulmonary effects.
Whole Animal	Orally, humans are more sensitive to ethylene glycol than rodents. The reported lethal dose range for an adult human is 1 -2 ml/kg, or 1/4 to 1/2 cup. Ingestion can result in metabolic acidosis.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Fate:
The toxicity of this material to aquatic organisms has not been fully evaluated. This material must not be discharged or allowed to come into contact with sewage and drainage systems and any surface water body.

SECTION 13 DISPOSAL CONSIDERATIONS

RCRA Information:
Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal. Follow all applicable laws and regulations. Used antifreeze recycling is recommended. Do not drain on the ground or into storm drainage systems. Do not dispose in sanitary sewer systems except where permitted by law.

SECTION 14 TRANSPORT INFORMATION

US Department of Transportation Classification
This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less. If shipped in a container of over 119 gallon capacity then the DOT information must be accompanied with RQ notation, or, an otherwise 'Not Regulated' product will be classified as Environmentally Hazardous (solid/liquid) N.O.S., Class 9, Packing group III unless the product qualifies for the petroleum exemption (49 CFR 171.8).

Hazardous Substance/Material RQ: Ethylene glycol / 5209.3481 lbs

International Air Transport Association

Hazard Class/Division: 9 (Miscellaneous)
Identification Number: UN3082
Packing Group: III
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.
Technical Name(s): Ethylene Glycol

International Maritime Organization Classification

Hazard Class/Division: 9 (Miscellaneous)
Identification Number: UN3082
Packing Group: III
Proper Shipping Name: Environmentally Hazardous Substances, Liquid, N.O.S.
Technical Name(s): Ethylene Glycol

SECTION 15 REGULATORY INFORMATION

Federal Regulatory Status

OSHA Classification:
Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Comprehensive Environmental Release, Compensation & Liability Act (CERCLA):

Ethylene Glycol	RQ 5000 lbs	Reportable Spill => 5209.348071 lbs or 624.85 gal
Potassium hydroxide	RQ 1000 lbs	Reportable Spill => 139664.804469 lbs or 16752.41 gal

Ozone Depleting Substances (40 CFR 82 Clean Air Act):
This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

Superfund Amendment & Reauthorization Act (SARA) Title III:

There are no components in this product on the SARA 302 list.

SARA Hazard Categories (311/312):

Immediate Health	Delayed Health	Fire	Pressure	Reactivity
YES	YES	NO	NO	NO

SARA Toxic Release Inventory (TRI) (313):
Ethylene Glycol,

Toxic Substances Control Act (TSCA) Status:
All component(s) of this material is(are) listed on the EPA/TSCA Inventory of Chemical Substances.

Other Chemical Inventories:
Component(s) of this material is (are) listed on the Australian AICS, Canadian DSL, Chinese Inventory, European EINECS, Korean Inventory, Philippines PICCS,

State Regulation

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

New Jersey Right-To-Know Chemical List:

Ethylene Glycol (0878)	90 - 98 %weight	Special Hazard
Phosphoric acid	1 - 3 %weight	Environmental Hazard

Pennsylvania Right-To-Know Chemical List:

1,2-Ethanediol (107-21-1)	90 - 98 %weight	Environmental Hazard
Phosphoric acid	1 - 3 %weight	Environmental Hazard

SECTION 16 OTHER INFORMATION

Revision#: 0
Revision Date: 10/29/2004
Revisions since last change (discussion): This Material Safety Data Sheet (MSDS) has been created to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998). We encourage you to take the opportunity to read the MSDS and review the information contained therein.

SECTION 17 LABEL INFORMATION

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

PRODUCT CODE(S): 5061695, 5061714

CARQUEST ® Antifreeze / Coolant

WARNING!

MAYBE HARMFUL OR FATAL IF SWALLOWED. MAY CAUSE ACIDOSIS, CARDIOPULMONARY AND KIDNEY EFFECTS. MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. The following organs and/or organ systems may be damaged by overexposure to this material and/or its components.

MAY CAUSE DAMAGE TO: Cardiovascular System, Kidney, Liver, Lungs

Refer to Section 11, Toxicological Information, for specific information on the following effects: Developmental Toxicity

Precautionary Measures:
Avoid prolonged or repeated contact with eyes, skin and clothing. Avoid breathing of vapors, fumes, or mist. Use only with adequate ventilation. Keep container closed when not in use. Wash thoroughly after handling.

FIRST AID

Inhalation: Move victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.
Skin Contact: Flush exposed area with water and follow by washing with soap if available. If skin irritation persists after washing, get medical advice.
Eye Contact: Flush eyes with plenty of water while holding eyelids open. Rest eyes for 30 minutes. If eye irritation persists, seek medical advice.
Ingestion: DO NOT take internally. If swallowed, IMMEDIATELY contact a poison control center, emergency treatment center, or physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

FIRE

In case of fire, Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do

not use a direct stream of water.

SPILL OR LEAK

Dike and contain spill.
FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

CONTAINS: Ethylene Glycol, 107-21-1; Deionized Water, 7732-18-5; Phosphoric acid, 7664-38-2

NFPA Rating (Health, Fire, Reactivity): 2, 1, 0

TRANSPORTATION

US Department of Transportation Classification
This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less. If shipped in a container of over 119 gallon capacity then the DOT information must be accompanied with RQ notation, or, an otherwise 'Not Regulated' product will be classified as Environmentally Hazardous (solid/liquid) N.O.S., Class 9, Packing group III unless the product qualifies for the petroleum exemption (49 CFR 171.8).

Hazardous Substance/Material RQ: Ethylene glycol / 5209.3481 lbs

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flames or heat. Keep container closed and drum bungs in place.

Name and Address

Specialty Oil Company
P.O. Box 4427
Houston, TX 77210-4427

ADMINISTRATIVE INFORMATION
MANUFACTURER ADDRESS: Specialty Oil Company, P.O. Box 4427, Houston, TX. 77210-4427
Company Product Stewardship & Regulatory Compliance Contact: Timothy W Childs
Phone Number: (713) 241-1524

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT : IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE

INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF SPECIALTY OIL COMPANY AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF SPECIALTY OIL COMPANY.

43716-11566-100R-10/14/2004

MATERIAL SAFETY DATA SHEETS

SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Name: Hydraulic - All
Product Class: Lubricant
WHMIS Classification: Not Controlled.

Supplier Name and Address:
Coastal Packaging Inc.
P.O. Box 993
Saint John, N.B.
E2L 4E3

Phone: (506) 633-3732
Emergency: (506) 648-3060

SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

Hazardous Ingredients	CAS#	wt%	ACGIH-TLV	LC_{50}	LD_{50}
None			5 mg/m^3 (oil mist)		

SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Yellow
Odour: Petroleum
Specific Gravity @ 15°C: 0.86 - 0.88
Solubility: Negligible

Vapour Pressure (mm @ 20°C): < 0.10
Volatile (wt%): 0

SECTION 4 - FIRE AND EXPLOSION HAZARD

Flammability: ☒Yes ☐ No
Flash Point : > 194°C (COC)
Conditions: Open flame above flash point.

Upper Flammable Limit: Not established.
Auto Ignition Temperature: Not determined.
Sensitivity to Impact: None.

Lower Flammable Limit: Not established.
TDG Flammability Classification: Not classified.
Sensitivity to Static Discharge: None.

Means of Extinction: Dry chemical, water spray (fog), foam or carbon dioxide.
Hazardous Combustion Products: Hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.
Special Procedures: Water foam may cause frothing. Use water to cool exposed containers. Use self-contained breathing apparatus for fire fighting.

SECTION 5 - REACTIVITY DATA

Stability: This product is stable.
Hazardous Polymerisation: Will not occur.
Conditions to avoid: Extremely high temperatures.
Incompatibility with other substances: Strong oxidising agents.
Hazardous decomposition products: Thermal decomposition from high temperature or combustion will produce hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.

MATERIAL SAFETY DATA SHEETS

SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: ☐Eye ☒ Skin Contact ☐ Skin Absorption ☒ Inhalation ☒ Ingestion

Effects of Acute Exposure: Irritation to skin and eyes. Inhalation of hot oil mist or vapours may irritate the upper respiratory tract.
Effects of Chronic Exposure: Repeated or prolonged exposure may cause dermatitis and/or oil acne. Long-term intensive exposure to oil mist may cause benign lung fibrosis. No specific toxicity data but extrapolation from similar materials indicates that this product has low oral toxicity.

Exposure Limits:	5 mg/m^3 (oil mist)	**Carcinogenicity:**	Not determined.
Reproductive Toxicity:	Not determined.	**Teratogenicity:**	Not determined.
Irritancy of Product:	Slight.	**Mutagenicity:**	Not determined.

SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

Personal Protective Equipment:	*Gloves:*	Oil/Chemical resistant.
	Eye:	Chemical safety glasses or full face shield.
	Respiratory:	NOISH respirator if mist levels are high.
	Footwear:	Oil/Chemical resistant.
	Clothing:	Oil/Chemical resistant if repeated exposure to skin and clothing occurs.
	Other:	

Engineering Controls: Local exhaust at source of heated vapours.
Leak and Spill Procedure: Contain spills with dikes or absorbent material. Eliminate fire hazards. Prevent from entering sewers or water courses. Vacuum liquid or transfer absorbed material into containers. Advise authorities.
Waste Disposal: Follow local and governmental regulations. Not regulated as a hazardous waste.
Storage Requirements Cool, dry location. Keep containers closed.
Special Shipping Information: No special requirements.

SECTION 8 - FIRST AID MEASURES

Inhalation: Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.
Ingestion: Do not induce vomiting, give two glasses of water and seek medical attention.
Eye: Flush with water for 15 minutes.
Skin: Wash contaminated area with soap and water. Clean contaminated clothing before wearing again.
General Advice: High pressure injection under skin can be serious and requires urgent medical attention.

SECTION 9 - PREPARATION DATE OF MSDS

MSDS Prepared by: Coastal Packaging Inc. **Phone:** (506) 633-3732
MSDS Date: March 1,2006
Revision 00

Material Safety Data Sheet

Windshield Washer Antifreeze (-20) **Revised 01/04**

I. General Information

Chemical Name & Synonyms:	**Windshield Washer Antifreeze (-20)**
Chemical Family:	Alcohol
Trade Name:	MSDS Applies to all Windshield Washer Antifreeze –20, Regardless of Brand or Trade Name
Formula:	Methanol/Surfactant Polyo/lColor/Water
	>1 Gallon: Flammable Liquid, N.O.S.
Hazard Class:	ORM-D; In quantities > 1 Gallon: Class 3
HMIS Rating:	Health-1; Flammability-3; Reactivity-0

Manufacturer: ***South\Win, Ltd.***
606 Walters Street
Reidsville, NC 27320
(336) 348-1808
CHEMTREC: ***(800) 424-9300***

II. Ingredients

COMPONENTS		PERCENT BY VOLUME
Methanol	CAS # 67-56-1	33%-36%
Surfactant Polyol	CAS# 9003-11-6	<1%
Color	CAS # 3486-30-4	<1%
Water		64-67%

III. Physical Data

Boiling Point (^{O}F):	183 deg F
Vapor Pressure (mm Hg.):	38-45 @ 20 deg. C
Vapor Density (Air=1):	1.1
Solubility in Water:	Complete
Appearance & Odor:	Transparent colored (usu. blue) liquid, mild alcohol odor
Specific Gravity (H_2O =1):	@ deg. C, 0.950-0.952
Percent Volatile By Volume (%):	32%
Evaporation Rate(n-Butyl Acetate =1):	n/a

IV. Fire & Explosion Data

Flash Point (Test Method):	Tag closed cup: 101 deg. F
Extinguishing Media:	Water fog, chemical foam, dry chemical powder, Carbon dioxide.
Special Fire Fighting Procedure:	Wear self-contained breathing apparatus when fire fighting in confined space.
Unusual Fire & Explosion Hazards:	Combustion will produce carbon monoxide and asphyxiants.

V. Health Hazard Data

ACGIH Threshold Limit Value	800 ppm
Symptoms of Exposure:	Early to moderate CNC depression may be evidenced by giddiness, headache, dizziness, and nausea.
EMERGENCY FIRST AID:	Inhalation: None normally required. Skin: Flush with water. Eye: Flush with water for 15 minutes. If required, seek medical assistance. Ingestion: Do not give liquids if unconscious or drowsy. Otherwise, induce vomiting. Seek medical attention.

VI. Reactivity Data

Stability:	Stable
Conditions To Avoid:	Avoid heat, sparks, flame and contact with strong oxidizing agents.
Incompatibility:	Strong oxidizers
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	Carbon monoxide and asphixiants

VII. Environmental Protection Procedures

Spill Response:	Contain spill. Remove ignition sources. Evacuate unprotected personnel. Advise EPA and State and Local agenices if required. Absorb with inert material. Dispose of in accordance with all regulations.
Waste Disposal Method:	Follow Federal, State, and Local regulation. Do not flush into drain or storm sewer. Contact authorize disposal service.

VIII. Special Protection Information

Eye Protection:	Splash proof chemical safety goggles.
Skin Protection:	If contact is unavoidable, wear appropriate impervious clothing. Launder soil clothing before reuse.
Respiratory Protection (Specific Type)	None under normal conditions. If required to maintain exposure limits use either supplied air respirator and/or air purifying respirator for organic vapors.
Ventilation Recommended:	Not normally required.

IX. Special Precautions

Hygienic Practices In Handling & Storage:	Material should be stored in closed original container.

***********End Of MSDS*********

Key: N/A Not Applicable
ND Not Determined

The information contained herein is based on the data available to us and is believed to be correct. However, the MFG and/or the prepare makes no warranty, expressed or implied, regarding the accuracy of this information or the results to be obtained from the use thereof. The MFG assumes no responsibility for injury from the use of the product

Supplier:
Permatex, Inc.
10 Columbus Blvd.
Hartford, CT 06106
Telephone: 1-87-Permatex
(877) 376-2839

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: **122GA CHAIN LUBE 5 OZ AE**
Item No: **80075**
Product Type: **Aerosol lubricant**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percent	ACGIH 8 Hr. TWA:	OSHA 8 Hr. TWA:
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC 64742-54-7	40-50	5mg/m3 TWA	5mg/m3 TWA
RESIDUAL OILS (PETROLEUM), SOLVENT-DEWAXED 64742-62-7	5-15	25 ppm TWA	25 ppm TWA
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC 64742-65-0	5-15	5 mg/m3 TWA	5 mg/m3 TWA
BUTANE [1], ISOBUTANE [2] 106-97-8	10-20	800 ppm TWA; 1900 mg/m3 TWA	800 ppm TWA; 1900 mg/m3 TWA
PROPANE 74-98-6	10-20	simple asphyxiant; 2500 ppm TWA	1000 ppm TWA; 1800 mg/m3 TWA
ETHOXYLATED NONYLPHENOL 9016-45-9	1-10		

3. HAZARDS IDENTIFICATION

Toxicity: Exposure to vapors or mist may result in irritation of the respiratory tract. Intentional misuse by concentrating and inhaling the vapor may be harmful or fatal. Harmful if swallowed. May cause eye and skin irritation. Prolonged exposure may cause liver and kidney effects and may affect the central nervous system.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.

Signs and Symptoms of Exposure: Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. May cause pain, redness or swelling of the eyes and excessive blinking and tear production. Skin redness.

Medical Conditions Recognized as Being Aggravated by Exposure: Preexisting pulmonary and dermatological disorders

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Drink water or milk. Seek medical attention immediately.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin Contact: Remove contaminated clothing. Wash area with soap and water. If irritation persists, seek medical attention.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): -165 degrees F. Based on propellant

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Keep containers cool. Use equipment or

	shielding required to protect against bursting or venting of containers. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.
Hazardous Products Formed by Fire or Thermal Decomposition:	Oxides of carbon.
Unusual Fire/Explosion Hazards:	Contents under pressure. Exposure to temperatures over 120 degrees F. may cause bursting or venting. Keep containers cool. Use equipment or shielding to protect personnel from bursting containers.
Lower Explosive Limit:	1.8
Upper Explosive Limit:	9.5

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:	Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage:	Store away from heat, sparks or open flame. Do not store at temperatures above 120 degrees F.
Handling:	Avoid contact with skin and eyes. Do not inhale vapors. Do not use near heat, sparks or open flame. Intentionally concentrating and inhaling the vapor may be harmful or fatal. Wash hands before eating and smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes:	Safety glasses or goggles.
Skin:	Chemical resistant gloves.
Ventilation:	General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product.
Respiratory Protection:	An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown foam
Odor:	SLIGHT SOLVENT
Boiling Point (°F):	Not determined.
pH:	Does not apply
Solubility in Water:	Nil
Specific Gravity:	0.85-0.9
VOC Content(Wt.%):	Not determined
Vapor Pressure:	40 psig
Vapor Density (Air=1):	Heavier than air
Evaporation Rate:	<1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable at normal conditions
Hazardous Polymerization:	WILL NOT OCCUR
Incompatabilities:	Strong oxidizers.
Conditions to Avoid:	Do not expose to heat or store at temperatures above 120 F.
Hazardous Products Formed by Fire or Thermal Decomposition:	Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal:	Disposal should be made in accordance with federal, state and local regulations. This container may be recycled in aerosol recycling centers. Before offering for recycling, empty the can by using the product according to the label. If recycling is not available, wrap the container and discard in the

trash.
US EPA Waste Number: D001 as per 40CFR 261.21

14. TRANSPORT INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: CONSUMER COMMODITY
Hazard Class: ORM-D
UN/ID Number: None
Marine Pollutant: None

IATA

Proper Shipping Name: Consumer Commodity
Class or Division: Class 9
UN/NA Number: ID 8000

IMDG

Proper Shipping: Aerosols, Limited Quantity
Hazard Class: Class 2.1
UN Number: UN 1950

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.
NONE

CALIFORNIA PROP 65:
No California Prop 65 chemicals are known to be present.

TSCA Inventory Status:
All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 4 , REACTIVITY 0
Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 4, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.
HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: **Denise Boyd Health and Safety Manager**
Company: **Permatex. Inc. 10 Columbus Blvd. Hartford, CT 06106**
Telephone Number: **1-87-Permatex (877) 376-2839**
Revision Date: 12/20/2000
Revision Number: 1

MATERIAL SAFETY DATA SHEET

OSHA - Meets 29 CFR 1910.1200 Standards

HMIS HAZARD RATINGS

HEALTH	1	* = Chronic Health Hazard	2 = MODERATE
FLAMMABILITY	0	0 = INSIGNIFICANT	3 = HIGH
PHYSICAL HAZARD	0	1 = SLIGHT	4 = EXTREME

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Not Regulated		
HAZARD CLASS / PKG GRP:	Not regulated	REF:	Not Applicable
IDENTIFICATION NUMBER:	None	LABEL:	None Required

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST)
172 Standard Weld Metal **34-6622-00 Rev. A**

MANUFACTURER'S NAME Thermoweld	EMERGENCY TELEPHONE NUMBER Infotrac (800) 535-5053 Outside USA (352) 323-3500
ADDRESS (NUMBER, STREET, P.O. BOX) 4102 South 74th East Ave.	TELEPHONE NUMBER FOR INFORMATION (800) 558-1373
(CITY, STATE AND ZIP CODE) Tulsa, OK 74145	DATE PREPARED: February 12, 2008 SUPERSEDES: December 23, 2004

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))	CAS #	% (OPTIONAL)	OSHA PEL PPM	OSHA PEL MG/M3	ACGIH TWA PPM	ACGIH TWA MG/M3	SARA TITLE III	RQ LBS
Cuprous oxide (a)	1317-39-1	60 - 90		1			Yes	
Copper (a,b)	7440-50-8	7 - 13		1.0		1.0	Yes	5000
Aluminum (fume or dust) (a)	7429-90-5	7 - 13		15		10	Yes	
Calcium fluoride	7789-75-5	1 - 5	not established					
Tin	7440-31-5	1 - 5		2		2		
Iron oxide, black (c)	1317-61-9	1 - 5		10				
Calcium Silicon	Mixture	1 - 5	not established					

(a) A "Yes" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

(b) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture > 24000 lbs) or greater amounts, if < 4 µ diameter, according to 40 CFR 302.

(c) The exposure limits of this product, when allowed to enter the environment as dust particulate, are covered under the rules of 29 CFR 1910.1000, Table Z - 3, "All inert or nuisance dusts, whether mineral, inorganic or organic."

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS AND SYMPTOMS OF EXPOSURE	EMERGENCY AND FIRST AID PROCEDURES
INHALATION: Breathing airborne particles or dust from mixing, spraying, sanding, grinding, etc. may cause irritation to respiratory tract. Contains substances which are considered nuisance dusts which require a NIOSH approved respirator when airborne particulate exceeds maximum allowable limit.	Remove affected person to fresh air; if symptoms persist seek medical attention.
SKIN: None expected, however, prolonged contact may cause irritation.	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
EYES: Contact with eyes may cause irritation.	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
INGESTION: May cause gastric distress, stomach pains, vomiting and diarrhea.	Give two glasses of water for dilution; induce vomiting as directed by medical personnel; never give anything by mouth to an unconscious person; seek medical attention.

CARCINOGENICITY NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986 - there are no reportable chemicals present known to the state to cause cancer or reproductive toxicity.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Preexisting skin, eye, or respiratory disorders may become aggravated through prolonged exposure.

MATERIAL SAFETY DATA SHEET

IDENTITY (AS USED ON LABEL AND LIST)
172 Standard Weld Metal 34-6622-00 Rev. A

Date: February 12, 2008

SECTION 4 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)	NFPA RATING	FLAMMABLE LIMITS
Not applicable	**None**	LEL: Not applicable UEL: Not applicable

EXTINGUISHING MEDIA

Use dry sand, graphite, dolomite, sodium chloride, water spray or chemical foam.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Thermoweld copper base welding/joining materials are exothermic mixtures, which when reacted, produce hot molten materials with temperatures in excess of 4000° F and a localized release of smoke. The materials are not explosive, ignition temperatures are in excess of 850° F for starting material and 1750° F for base material. They are not shock sensitive, nor are they subject to spontaneous ignition. Should the material be accidentally ignited, the immediate and direct application of large volumes of water will effectively retard the spread of fire and control it. Large amounts of dense, dusty smoke will be liberated during an accidental fire.

SECTION 5 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Confine and segregate product for reuse; place material into approved containers for disposal; for spills in excess of allowable limits (RQ) notify the National Response Center (800) 424 - 8802; refer to CERCLA 40 CFR 302 for detailed instructions; refer to SARA Title III, Section 313, 40 CFR 372 for reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

SECTION 6 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Storage of Thermoweld Exothermic materials should be in a clean dry area and restricted to access by authorized personnel only. Do not subject to rough handling or physical damage, nor excessive vibration. Store in accordance with "This Side Up" labels. Protect from weather and moisture. DO NOT USE PRODUCTS THAT HAVE BEEN EXPOSED TO MOISTURE. Before using Thermoweld Exothermic Process, personnel should be trained by a Thermoweld representative. Read and understand the instruction sheet packaged with the mold, and observe all general and safety instructions.

SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

VENTILATION	LOCAL EXHAUST: Recommended MECHANICAL (GENERAL): Yes	SPECIAL: None OTHER: None
PROTECTIVE GLOVES: Neoprene or rubber gloves.		EYE PROTECTION: Protective eyeglasses or chemical safety goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT Not applicable	SPECIFIC GRAVITY (WATER = 1) Approximately 6.0
VAPOR PRESSURE (MM Hg) Not applicable	pH Not applicable
VAPOR DENSITY (AIR = 1) Not applicable	EVAPORATION RATE (WATER = 1) Not applicable
SOLUBILITY IN WATER Insoluble	% VOLATILE (BY WEIGHT) None
APPEARANCE AND ODOR Gray / silver granules, characteristic odor	

SECTION 9 - STABILITY AND REACTIVITY

STABILITY	UNSTABLE: STABLE: X	CONDITIONS TO AVOID: Avoid generating airborne dust

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of fire, smoke, oxides of carbon; fumes of copper and aluminum. Small amounts of fluoride fume or hydrofluoric acid fume may be released under ignition.

HAZARDOUS POLYMERIZATION	MAY OCCUR: WILL NOT OCCUR: X	CONDITIONS TO AVOID: None

SECTION 10 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Do not flush to sanitary sewer or waterway. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

Material Safety Data Sheet

An RPM Company

24 Hour Emergency Phone Numbers:
Medical/Poison Control:
In U.S.: Call 1-800-222-1222
Outside U.S.: Call your local poison control center
Transportation/National Response Center:
1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
On peut demader cette fiche signalétique (MSDS) a la langue francaise-canadienne.
Los Datos de Serguridad del Producto pueden obtenerse en Espanol si lo riquiere.

Product Name: Alex Plus Clear
Product UPC Number: 070798180710
Product Use/Class: Latex Caulk
Manufacturer: **DAP Inc.**
2400 Boston Street Suite 200
Baltimore, MD 21224-4723
888-327-8477 (non-emergency matters)

Revision Date: 06/24/2008
Supersedes: 05/31/2005
MSDS Number: 00010019002

Section 2 - Hazards Identification

Emergency Overview: A white to off-white paste product with a very slight ammonia odor. WARNING! May cause eye, skin, nose, throat and respiratory tract irritation. May cause eye or skin irritation. Harmful if swallowed or absorbed through the skin. This product contains ethylene glycol.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: May cause eye irritation.

Effects Of Overexposure - Skin Contact: May cause allergic skin reaction or sensitization. May cause skin irritation. Harmful if absorbed through the skin.

Effects Of Overexposure - Inhalation: Harmful if inhaled. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Inhalation of mist or dried residue causes irritation of respiratory system.

Effects Of Overexposure - Ingestion: Ingestion of ethylene glycol can cause gastrointestinal irritation, nausea, vomiting, diarrhea and if ingested in sufficient quantities, death. Harmful or fatal if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. If ingested, may cause vomiting, diarrhea, and depressed respiration.

Effects Of Overexposure - Chronic Hazards: Repeated or prolonged exposure may cause skin, respiratory, kidney and liver damage. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Prolonged and repeated skin contact may cause irritation and possibly dermatitis. Prolonged, repeated, or high exposures may cause weakness and depression of the

central nervous system.

Formaldehyde vapor is a known animal carcinogen according to OSHA and NTP and is considered possibly carcinogenic to humans by inhalation. The International Agency for Research on Cancer considers formaldehyde to be a human carcinogen.

Ethylene Glycol may cause kidney and liver damage upon prolonged and repeated overexposures. Studies have shown that repeated inhalation of ethylene glycol has produced adverse cardiovascular changes in laboratory animals. Ethylene glycol has been shown to cause birth defects in laboratory animals.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Eye Contact

Medical Conditions which May be Aggravated by Exposure: None known.

Carcinogenicity:

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP
50-00-0	Formaldehyde	Suspected human carcinogen.	Potential cancer hazard.	Human carcinogen.	Anticipated carcinogen.

Section 3 - Composition / Information On Ingredients

Chemical Name	CASRN	Wt%
Ethylene glycol	107-21-1	1-5
Amorphous silica	112945-52-5	1-5
Ammonia	7664-41-7	0.1-1.0
Formaldehyde	50-00-0	<0.06

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical aid if symptoms persist. If skin irritation persists, call a physician. Remove and wash contaminated clothing. In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes.

First Aid - Inhalation: If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If continued breathing difficulty is experienced, get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

Note to Physician: None.

COMMENTS: If over-exposure occurs, call your poison control center at 1-800-222-1222.

Section 5 - Fire Fighting Measures

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: No special protective measures against fire required.

Special Firefighting Procedures: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. Use absorbent material or scrape up dried material and place in container.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Avoid breathing vapor and contact with eyes, skin and clothing. Use only with adequate ventilation. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Wash thoroughly after handling.

Storage: Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Close container after each use. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name	CASRN	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Ethylene glycol	107-21-1	N.E.	N.E.	100 MGM3	N.E.	N.E.	N.E.	No
Amorphous silica	112945-52-5	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Ammonia	7664-41-7	25 PPM	35 PPM	N.E.	50 PPM	N.E.	N.E.	No
Formaldehyde	50-00-0	N.E.	N.E.	0.3 PPM	0.75 PPM	2 PPM	N.E.	No

Exposure Notes:

50-00-0 Formaldehyde is a specially regulated substance for which an OSHA chemical-specific exposure standard exits. Detailed information regarding this substance may be found in 29 CFR 1910.1048. Medical surveillance information regarding this substance may be found in Appendix C to 29 CFR 1910.1048.

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Good general ventilation should be sufficient to control airborne levels. Ensure adequate ventilation, especially in confined areas. Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Rubber gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices.

Section 9 - Physical And Chemical Properties

Boiling Range:	210 - 220 F	**Vapor Density:**	Heavier Than Air
Odor:	Very Slight Ammonia	**Odor Threshold:**	Not Established
Color:	White to Off-White	**Evaporation Rate:**	Slower Than n-Butyl Acetate
Solubility in H2O:	Not Established	**Specific Gravity:**	1.1
Freeze Point:	Not Established	**pH:**	Between 7.0 and 12.0
Vapor Pressure:	Not Established	**Viscosity:**	Not Established
Physical State:	Paste	**Flammability:**	Non-Flammable
Flash Point, F:	Greater than 200	**Method:**	(Seta Closed Cup)
Lower Explosive Limit, %:	Not Established	**Upper Explosive Limit, %:**	Not Established

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Incompatible with strong bases and oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established **Product LC50:** Not Established

CASRN	Chemical Name	LD50	LC50
107-21-1	Ethylene glycol	Rat:4700 mg/kg	Rat:10876 mg/kg
112945-52-5	Amorphous silica	Rat:3160 mg/kg	----------
7664-41-7	Ammonia	----------	Rat:2000 ppm/4H
50-00-0	Formaldehyde	----------	Rat:203 mg/m3

Significant Data with Possible Relevance to Humans: This product contains trace amounts of free formaldehyde. OSHA and NTP identify formaldehyde as a potential carcinogen. IARC identifies formaldehyde as a human carcinogen. Formaldehyde has been shown to cause mutations in a variety of in-vitro test systems, the significance of which to humans is unknown. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of formaldehyde below the recommended exposure limits.
Maintain adequate ventilation to prevent exposure above current OSHA / ACGIH exposure limits. Workplace monitoring of the air to define formaldehyde exposure levels may be necessary.
In a two-year inhalation study, rats showed carcinogenic effects in the respiratory system at 15 ppm of formaldehyde.

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Not Regulated	**Packing Group:**	N.A.
DOT Technical Name:	N.A.	**Hazard Subclass:**	N.A.
DOT Hazard Class:	N.A.	**DOT UN/NA Number:**	N.A.

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard, Chronic Health Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Ethylene glycol	107-21-1

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number
Proprietary Acrylic Polymer	Proprietary
Water	7732-18-5
White mineral oil	8042-47-5

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number
Proprietary Acrylic Polymer	Proprietary
Water	7732-18-5
White mineral oil	8042-47-5

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

HMIS Ratings:

Health: 1	Flammability: 1	Reactivity: 0	Personal Protection: X

Volatile Organic Compounds (VOC), less water less exempts: g/L: 44.4 lb/gal: 0.4 wt:wt%: 2.4

Volatile Organic Compounds (VOC), less water less exempts, less LVP-VOCs: wt:wt%: 0.1

REASON FOR REVISION: Periodic Update

Legend:

N.A. – Not Applicable	ACGIH – American Conference of Governmental Industrial Hygienists
N.E. – Not Established	SARA – Superfund Amendments and Reauthorization Act of 1986
N.D. – Not Determined	NJRTK – New Jersey Right-to-Know Law
VOC – Volatile Organic Compound	OSHA – Occupational Safety and Health Administration
PEL – Permissible Exposure Limit	HMIS – Hazardous Materials Identification System
TLV – Threshold Limit Value	NTP – National Toxicology Program
CEIL – Ceiling Exposure Limit	STEL – Short Term Exposure Limit
LD50 – Lethal Dose 50	LC50 – Lethal Concentration 50
F – Degree Fahrenheit	MSDS – Material Safety Data Sheet
C – Degree Celsius	CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>

MSDS for: LN-903 Revised: 12-Feb-2009

SECTION 1:

PRODUCT IDENTIFIER:	LN-903 LIQUID NAILS MULTIPURPOSE CONSTRUCTION ADHESIVE
DATE OF PREPARATION:	FEBRUARY 5, 2008
PRODUCT USE:	ADHESIVE
MANUFACTURED BY:	AKZO NOBEL 15885 WEST SPRAGUE ROAD STRONGSVILLE, OHIO 44136, U.S.A. AKZO NOBEL (CANADA) 8200 KEELE STREET CONCORD, ONTARIO L4K 2A5, CANADA
EMERGENCY AND MSDS TELEPHONE NUMBER:	1-800-545-2643
MSDS PREPARED BY:	PRODUCT SAFETY AND COMPLIANCE DEPARTMENT AKZO NOBEL NORTH AMERICA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT		**WT. %**
CHEMICAL NAME:	STYRENE BUTADIENE COPOLYMER	10-20
COMMON NAME:	STYRENE BUTADIENE COPOLYMER	
CAS NUMBER:	CONFIDENTIAL	
CHEMICAL NAME:	LIMESTONE	10-20
COMMON NAME:	LIMESTONE	
CAS NUMBER:	1317-65-3	
CHEMICAL NAME:	KAOLIN	20-30
COMMON NAME:	CLAY	
CAS NUMBER:	1332-58-7	
CHEMICAL NAME:	TITANIUM OXIDE	0.1-1.0
COMMON NAME:	TITANIUM DIOXIDE	
CAS NUMBER:	13463-67-7	
CHEMICAL NAME:	CRISTOBALITE	0.1-1.0
COMMON NAME:	CRYSTALLINE SILICA, CRISTOBALITE	
CAS NUMBER:	14464-46-1	
CHEMICAL NAME:	QUARTZ	1-5
COMMON NAME:	QUARTZ	
CAS NUMBER:	14808-60-7	
CHEMICAL NAME:	HEAVY NAPHTHENIC DISTILLATE, SEVERELY HYDROTREATED*	1-5
COMMON NAME:	PETROLEUM HYDROCARBON	
CAS NUMBER:	64742-52-5*	

CHEMICAL NAME:	SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC	1-5
COMMON NAME:	MEDIUM ALIPHATIC SOLVENT NAPHTHA	
CAS NUMBER:	64742-88-7	
CHEMICAL NAME:	ALKENES, ETHYLENE-MANUF.-BY-PRODUCT PIPERYLENE-CUT, POLYMERS WITH STEAM-CRACKED PETROLEUM DISTILLATES	5-10
COMMON NAME:	RESIN	
CAS NUMBER:	68131-89-5	
CHEMICAL NAME:	WATER	20-30
COMMON NAME:	WATER	
CAS NUMBER:	7732-18-5	

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF EXPOSURE: INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION

EFFECTS OF OVEREXPOSURE

INHALATION:	IRRITATION OF RESPIRATORY TRACT. PROLONGED INHALATION MAY LEAD TO LOSS OF APPETITE, MUCOUS MEMBRANE IRRITATION, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, NAUSEA, SORE THROAT, CENTRAL NERVOUS SYSTEM DEPRESSION, INTOXICATION, DIFFICULTY OF BREATHING, SEVERE LUNG IRRITATION OR DAMAGE, CONVULSIONS, PNEUMOCONIOSIS, LOSS OF CONSCIOUSNESS, ASPHYXIATION.
SKIN CONTACT:	IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING. SKIN CONTACT MAY RESULT IN DERMAL ABSORPTION OF COMPONENT(S) OF THIS PRODUCT WHICH MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.
EYE CONTACT:	IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE CONJUNCTIVITIS, TEARING OF EYES, REDNESS OF EYES.
INGESTION:	INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE TO ASPIRATION OF MATERIAL INTO LUNGS, MUCOUS MEMBRANE IRRITATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN, COUGHING, CENTRAL NERVOUS SYSTEM DEPRESSION, DIFFICULTY OF BREATHING, PULMONARY EDEMA, CYANOSIS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS, RESPIRATORY DISORDERS

SECTION 4: FIRST-AID MEASURES

INHALATION:	REMOVE TO FRESH AIR. RESTORE AND SUPPORT CONTINUED BREATHING. GET EMERGENCY MEDICAL ATTENTION. HAVE TRAINED PERSON GIVE OXYGEN IF NECESSARY. GET MEDICAL HELP FOR ANY BREATHING DIFFICULTY.
SKIN CONTACT:	WASH THOROUGHLY WITH SOAP AND WATER. IF ANY PRODUCT REMAINS, GENTLY RUB PETROLEUM JELLY, VEGETABLE OR MINERAL/BABY OIL ONTO SKIN. REPEATED APPLICATIONS MAY BE NEEDED. REMOVE CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE RE-USE.
EYE CONTACT:	FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, ESPECIALLY UNDER LIDS FOR AT LEAST 15 MINUTES. IF IRRITATION OR OTHER EFFECTS PERSIST, OBTAIN MEDICAL TREATMENT.
INGESTION:	IF SWALLOWED, OBTAIN MEDICAL TREATMENT IMMEDIATELY.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT (SETA): ABOVE 200F/93C LOWER EXPLOSIVE LIMIT: NOT AVAILABLE
UPPER EXPLOSIVE LIMIT: 7.0 %

FIRE EXTINGUISHING MEDIA: DRY CHEMICAL OR FOAM, WATER FOG, CARBON DIOXIDE

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK. CLOSED CONTAINERS MAY BURST IF EXPOSED TO EXTREME HEAT OR FIRE. MAY DECOMPOSE UNDER FIRE CONDITIONS EMITTING IRRITANT AND/OR TOXIC GASES.

FIRE FIGHTING PROCEDURES

WATER MAY BE USED TO COOL AND PROTECT EXPOSED CONTAINERS. FIREFIGHTERS SHOULD USE FULL PROTECTIVE CLOTHING, EYE PROTECTION, AND SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF SULFUR, ALDEHYDES, TOXIC GASES, STYRENE, OXIDES OF CALCIUM, SMOKE

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS. VENTILATE AREA. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS: SHUT OFF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN SPILL. PUMP TO STORAGE OR SALVAGE VESSELS. USE ABSORBENT TO PICK UP EXCESS RESIDUE. KEEP SALVAGEABLE MATERIAL AND RINSE WATER OUT OF SEWERS AND WATER COURSES.

SMALL SPILLS: USE ABSORBENT TO PICK UP RESIDUE AND DISPOSE OF PROPERLY.

SECTION 7: HANDLING AND STORAGE

STORE BELOW 80F. STORE BELOW 100F (38C). KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. KEEP FROM FREEZING. STORE ABOVE 20F (-7C).

OTHER PRECAUTIONS

USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. AVOID CONTACT WITH SKIN AND EYES, AND BREATHING OF VAPORS. WASH HANDS THOROUGHLY AFTER HANDLING, ESPECIALLY BEFORE EATING OR SMOKING. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT WHEN NOT IN USE. AVOID CONDITIONS WHICH RESULT IN FORMATION OF INHALABLE PARTICLES SUCH AS SPRAYING OR ABRADING (SANDING) PAINTED SURFACES. IF SUCH CONDITIONS CANNOT BE AVOIDED, USE APPROPRIATE RESPIRATORY PROTECTION AS DIRECTED UNDER EXPOSURE CONTROLS/PERSONAL PROTECTION. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES. GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME:	LIMESTONE		
CAS NUMBER:	1317-65-3		
ACGIH(TWA):	10 MG/M3	OSHA(TWA):	5 MG/M3
COMMON NAME:	CLAY		
CAS NUMBER:	1332-58-7		
ACGIH(TWA):	2 MG/M3	OSHA(TWA):	5 MG/M3
COMMON NAME:	TITANIUM DIOXIDE		
CAS NUMBER:	13463-67-7		
ACGIH(TWA):	10 MG/M3	OSHA(TWA):	10 MG/M3
COMMON NAME:	CRYSTALLINE SILICA, CRISTOBALITE		
CAS NUMBER:	14464-46-1		
ACGIH(TWA):	0.025 MG/M3	OSHA(TWA):	0.05 MG/M3
COMMON NAME:	QUARTZ		
CAS NUMBER:	14808-60-7		
ACGIH(TWA):	0.025 MG/M3	OSHA(TWA):	0.1 MG/M3
COMMON NAME:	PETROLEUM HYDROCARBON		
CAS NUMBER:	64742-52-5*		
ACGIH(TWA):	5 MG/M3	OSHA(TWA):	5 MG/M3
ACGIH(STEL):	10 MG/M3		

COMMON NAME: MEDIUM ALIPHATIC SOLVENT NAPHTHA
CAS NUMBER: 64742-88-7
OSHA(TWA): 500 * PPM
* AS PETROLEUM DISTILLATES

RESPIRATORY PROTECTION

CONTROL ENVIRONMENTAL CONCENTRATIONS BELOW APPLICABLE EXPOSURE STANDARDS WHEN USING THIS MATERIAL. WHEN RESPIRATORY PROTECTION IS DETERMINED TO BE NECESSARY, USE A NIOSH/MSHA (CANADIAN Z94.4) APPROVED ELASTOMERIC SEALING-SURFACE FACEPIECE RESPIRATOR OUTFITTED WITH ORGANIC VAPOR CARTRIDGES AND PAINT SPRAY (DUST/MIST) PREFILTERS. DETERMINE THE PROPER LEVEL OF PROTECTION BY CONDUCTING APPROPRIATE AIR MONITORING. CONSULT 29CFR1910.134 FOR SELECTION OF RESPIRATORS (CANADIAN Z94.4).

VENTILATION

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS. USE EXPLOSION-PROOF EQUIPMENT.

PERSONAL PROTECTIVE EQUIPMENT

EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR GOGGLES, IMPERVIOUS GLOVES, IMPERVIOUS CLOTHING, APRON, BOOTS

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.384
BOILING RANGE (F/C):	212-306/100-152	WEIGHT PER GALLON:	11.53/13.85 IMP
APPEARANCE:	WHITE	%VOLATILE BY VOLUME:	38.99
PHYSICAL STATE:	PASTE	PH:	8.00
SOLUBLE IN WATER:	YES		

SECTION 10: STABILITY AND REACTIVITY

UNDER NORMAL CONDITIONS:	STABLE (SEE SECTION 5 FIRE FIGHTING MEASURES)
MATERIALS TO AVOID:	OXIDIZERS, ACIDS, BASES, AMMONIUM SALTS, PEROXIDES, METAL SALTS, METAL COMPOUNDS, STYRENE MONOMER
CONDITIONS TO AVOID:	ELEVATED TEMPERATURES, CONTACT WITH OXIDIZING AGENT, FREEZING, SPARKS, OPEN FLAME, IGNITION SOURCES
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

COMMON NAME: STYRENE BUTADIENE COPOLYMER
CAS NUMBER: CONFIDENTIAL

CARCINOGENICITY LISTED BY:	NTP NO	IARC NO	OSHA NO	ACGIH NO

COMMON NAME: LIMESTONE
CAS NUMBER: 1317-65-3
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 6450.00 MG/KG ORL RAT

COMMON NAME: CLAY
CAS NUMBER: 1332-58-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: TITANIUM DIOXIDE
CAS NUMBER: 13463-67-7
CARCINOGENICITY LISTED BY: NTP YES 2B IARC YES 2B OSHA NO ACGIH NO
LD50: 24.00 GM/KG ORL RAT
LC50: 6820.00 MG/M3/4HR IHL RAT

COMMON NAME: CRYSTALLINE SILICA, CRISTOBALITE
CAS NUMBER: 14464-46-1
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH YES A2

COMMON NAME: QUARTZ
CAS NUMBER: 14808-60-7
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH YES A2

COMMON NAME: PETROLEUM HYDROCARBON
CAS NUMBER: 64742-52-5*
CARCINOGENICITY LISTED BY: NTP NO IARC YES 3 OSHA NO ACGIH NO

COMMON NAME: MEDIUM ALIPHATIC SOLVENT NAPHTHA
CAS NUMBER: 64742-88-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 28.00 GM/KG SKN RBT
LD50: 28.00 GM/KG ORL RAT

COMMON NAME: RESIN
CAS NUMBER: 68131-89-5
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

SUPPLEMENTAL HEALTH INFORMATION

NOTICE - REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CARCINOGENICITY: STODDARD SOLVENT IIC HAS BEEN SHOWN TO CAUSE KIDNEY TUMORS IN MALE RATS IN A NATIONAL TOXICOLOGY PROGRAM (NTP) STUDY. THESE TUMORS WERE ASSOCIATED WITH A SPECIFIC PROTEIN, ALPHA-2U-MICROGLOBULIN. BECAUSE HUMANS DO NOT PRODUCE THIS PROTEIN STODDARD SOLVENT IIC HAS NOT BEEN CLASSIFIED AS A HUMAN CARCINOGEN. CONTAINS CRYSTALLINE SILICA WHICH IS CONSIDERED A HAZARD BY INHALATION. IARC HAS CLASSIFIED CRYSTALLINE SILICA AS CARCINOGENIC TO HUMANS (GROUP 1). CRYSTALLINE SILICA IS ALSO A KNOWN CAUSE OF SILICOSIS, A NONCANCEROUS LUNG DISEASE. THE NATIONAL

TOXICOLOGY PROGRAM (NTP) HAS CLASSIFIED CRYSTALLINE SILICA AS A KNOWN HUMAN CARCINOGEN. IN A LIFETIME INHALATION STUDY, EXPOSURE TO 250 MG/M3 TITANIUM DIOXIDE RESULTED IN THE DEVELOPMENT OF LUNG TUMORS IN RATS. THESE TUMORS OCCURRED ONLY AT DUST LEVELS THAT OVERWHELMED THE ANIMALS' LUNG CLEARANCE MECHANISMS AND WERE DIFFERENT FROM COMMON HUMAN LUNG TUMORS IN BOTH TYPE AND LOCATION. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNKNOWN BUT QUESTIONABLE. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED TITANIUM DIOXIDE AS POSSIBLY CARCINOGENIC TO HUMANS (GROUP 2B) BASED ON INADEQUATE EVIDENCE OF CARCINOGENICITY IN HUMANS AND SUFFICIENT EVIDENCE OF CARCINOGENICITY IN EXPERIMENTAL ANIMALS.

REPRODUCTIVE EFFECTS: NO REPRODUCTIVE EFFECTS ARE ANTICIPATED

MUTAGENICITY: NO MUTAGENIC EFFECTS ARE ANTICIPATED

TERATOGENICITY: NO TERATOGENIC EFFECTS ARE ANTICIPATED

SECTION 12: ECOLOGICAL INFORMATION

NO ECOLOGICAL TESTING HAS BEEN DONE BY AKZO NOBEL ON THIS PRODUCT AS A WHOLE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. AVOID DISCHARGE TO NATURAL WATERS.

SECTION 14: TRANSPORT INFORMATION

DOT: ADHESIVE

IMDG: NOT AVAILABLE

IATA: NOT AVAILABLE

TDG: NOT AVAILABLE

SECTION 15: REGULATORY INFORMATION

SARA 302	SARA 313	CERCLA 302.4	HAZ AIR POLLUTANT	MARINE POLTNT

THIS PRODUCT CONTAINS NO SARA 302, CERCLA 302.4 OR HAZARDOUS AIR POLLUTANT CHEMICALS. IT ALSO CONTAINS NO CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS UNDER SARA 313. AS OF THE DATE OF THIS MSDS, ALL OF THE COMPONENTS IN THIS PRODUCT ARE LISTED (OR ARE OTHERWISE EXEMPT FROM

LISTING) ON THE TSCA INVENTORY. THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE AT THE TIME OF PREPARATION OF THIS DATA SHEET AND WHICH AKZO NOBEL BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA. AKZO NOBEL SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS INFORMATION, OR OF ANY PRODUCT, METHOD OR APPARATUS MENTIONED AND YOU MUST MAKE YOUR OWN DETERMINATION OF ITS SUITABILITY AND COMPLETENESS FOR YOUR OWN USE, FOR THE PROTECTION OF THE ENVIRONMENT, AND THE HEALTH AND SAFETY OF YOUR EMPLOYEES AND USERS OF THIS MATERIAL. COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29CFR1910.1200.

Tim

(575) 576-9657

Material Safety Data Sheet
Brite Products
14650 Dequindre
Detroit, Mi 48212
PH: (313)865-4380 FAX: (313)883-4930

SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

REVISED DATE: 05/08/08
TRADE NAME: BRITE ZINC
EMERGENCY NUMBER (USA) 1-800-424-9300
CODE IDENTIFICATION: B-100
PRODUCT CLASS: AEROSOL COATINGS
INTERNATIONAL EMERGENCY: 1-703-527-3887

"SECTION 2 - COMPOSITION, INFORMATION & INGREDIENTS"

ALIPHATIC PETROLEUM DISTILLATE
CAS# 64742-89-8
PCT BY WT: 1.0000 LEL .90
EXPOSURE LIMIT:
ACGIH TLV-TWA 300 PPM
ACGIH TLV-STEL NO INFO

N-BUTANE
CAS# 106-97-8
PCT BY WT: 5.0000 LEL 1.80
VAPOR PRESSURE: 879.100 MMHG @ 68 F
EXPOSURE LIMIT:
ACGIH TLV-TWA 800 PPM
ACGIH TLV-STEL NO INFO
OSHA PEL-TWA 800 PPM
COMPANY N.E.

ZINC
CAS# 7440-66-6
PCT BY WT: 18.0000 LEL 100.00
EXPOSURE LIMIT:
ACGIH TLV-TWA NO INFO
ACGIH TLV-STEL NO INFO

ACETONE
CAS# 6764-1
PCT BY WT: 11.0000 LEL 2.60
VAPOR PRESSURE: 185.000 MMHG @ 68 F
EXPOSURE LIMIT:
ACGIH TLV-TWA 750 PPM
ACGIH TLV-STEL 1000 PPM
OSHA PEL-TWA 750 PPM
OSHA PEL-STEL 1000 PPM
COMPANY N.E.

PETROLEUM NAPHTHA
CAS# 8032-32-4
PCT BY WT:12.0000 LEL .90
EXPOSURE LIMIT:
ACGIH TLV-TWA 300 PPM
ACGIH TLV-STEL NO INFO
OSHA PEL-TWA 300 PPM
COMPANY N.E.

MINERAL SPIRITS
CAS# 8052-41-3
PCT BY WT: 4.0000 LEL 1.10
EXPOSURE LIMIT:
ACGIH TLV-TWA 100 PPM
ACGIH TLV-STEL NO INFO
OSHA PEL-TWA 300 PPM
COMPANY N.E.

PROPANE
CAS# 74-98-6
PCT BY WT: 15.0000 LEL 2.20
VAPOR PRESSURE: 5585.200 @ 68 F
EXPOSURE LIMIT:
ACGIH TLV-TWA 1000 PPM
ACGIH TLV-STEL NO INFO

TOLUENE
CAS# 108-88-3
PCT BY WT: 8.000 LEL 1.40
PRESSURE: 38.000 MMHG@ 68F
EXPOSURE LIMIT:
ACGIH TLV-TWA 50 PPM
ACGIH TLV-STEL NO INFO
OSHA PEL-TWA 50 PPM
COMPANY N.E.

METHYL ETHYL KETONE
CAS# 78-93-3
PCT BY WT: 11.0000 LEL 1.80
VAPOR PRESSURE: 85.000 MMHG @ 68F
EXPOSURE LIMIT:
ACGIH TLV-TWA 200 PPM
ACGIH TLV-STEL 300 PPM
OSHA PEL-TWA 200 PPM
COMPANY N.E.

ALUMINUM
CAS# 7429-90-5
PCT BY WT: 2.0000 LEL 1.00
EXPOSURE LIMIT:
ACGIH TLV-TWA 10 mg/m3
ACGIH TLV-STEL NO INFO

****THIS PRODUCT CONTAINS NO REPORTED OR SUSPECTED CARCINOGENS****

SECTION 3 - HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if swallowed or inhaled. Causes eye and skin irritation. Vapors irritating to eyes and respiratory tract. Extremely flammable liquid and vapor. POTENTIAL HEALTH EFFECTS: May cause severe corneal injury if liquid comes in contact with the eyes. May cause skin irritation. Repeated and prolonged contact with the skin may cause allergic dermatitis. Exposure to high concentrations of "Vapors may cause dizziness, staggering, confusion, unconsciousness, coma or death. Vapor may be irritating to skin, eyes, throat or lungs." Intentional misuse by deliberately concentrating and inhaling the contents of this product can be harmful or fatal. Moderately toxic. May cause "Stomach discomfort, nausea, vomiting, diarrhea, and narcosis. Aspiration of material into the lungs if swallowed or if vomiting occurs can cause" chemical pneumonitis, which can be fatal. CHRONIC EFFECTS: Chronic overexposure to a component or components in this material has been found "To cause the following effects in laboratory animals: Kidney, eye, lung, liver and brain damage. Chronic overexposure to a component or components" in this product has been suggested as a cause of cardiac abnormalities in humans. Reports have associated repeated and prolonged overexposure permanent brain and nervous system damage. Repeated breathing or skin contact of methyl ethyl ketone may increase the potency of neurotoxins such as hexane if exposures occur at the same time.

SECTION 4 - FIRST AID MEASURES

"EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. Flush with water for 15 minutes."
SKIN CONTACT: Wash thoroughly with soap and water and seek medical attention. Remove contaminated clothing.
"INHALATION: For inhalation overexposure move person to fresh air. If breathing stops, apply artificial respiration and seek medical attention."
"INGESTION: Since this product may contain materials which can cause lung damage if aspirated into the lungs, the decision whether to induce" vomiting or not must be made by a physician after careful consideration of all materials ingested.

SECTION 5 - FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE PRODUCT:

FLASHPOINT	Less than -25 F		EXPLOSION LEVEL	Low	0.9 High	12.8
FLAMMABILITY LIMITS	Lower	N/A	Higher	N/A		

"EXTINGUISING MEDIA: Use dry chemical, Carbon Dioxide or Chemical Foam. FIRE-FIGHTING PROCEDURES AND EQUIPMENT: Keep containers"
"tightly closed. Isolate from heat, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Contents under pressure."
"Do not use or store near sources of heat, sparks or open flame. Keep away from any source of heat such as sunlight, heaters or stoves that could"
cause the container to burst. Do not puncture or incinerate. Do not crush or place in garbage compactor. Do not store above 120 degrees F. Aerosol containers may explode when exposed to extreme heat. Product vapors are heavier than air and may travel a long distance to a source of ignition and flash back. Full protective equipment including self-contained breathing apparatus to avoid inhalation of vapors should be used. Water spray
"should not be used except to keep down vapors or cool closed containers to prevent build-up of pressure. If water is used, fog nozzles are preferred."

SECTION 6 - ACCIDENTAL RELEASE MEASURES

"CLEAN-UP AND CONTAINMENT: Remove all sources of ignition. Avoid heat, sparks, flames and anything, which could cause fire. Ventilate area of" spill and adjacent low lying areas. Avoid breathing solvent vapors. Remove with inert absorbent materials and non-sparking tools.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash hands thoroughly after handling. STORAGE: Store in a cool dry area with ventilation suitable for storing materials shown in "section 2. Keep away from heat, sparks and flame. Store in a cool place away from direct sunlight or any source of ignition. Do not store at" temperatures above 120 degrees F.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION"

"ENGINEERING CONTROLS: Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA"
permissible exposure limit or ACGIH's TLV limit. RESPIRATORY PROTECTION: If workplace exposure limits are exceeded for any component (see "section 2 for hazardous components and exposure limits), a NIOSH/OSHA approved respirator suitable for components listed is recommended."
SKIN PROTECTION: Chemical resistant plastic or rubber gloves recommended for prolonged or repeated contact. EYE PROTECTION: Chemical goggles with side shields or face shields recommended if contact with the eyes is likely. OTHER PROTECTIVE EQUIPMENT: Appropriate impervious clothing is recommended if prolonged or repeated contact is likely. HYGIENIC PRACTICES: Wash hands before eating or smoking.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE	5585.200 mm Hg @ 20 C		FORMULA WT PER VOLUME	7.2584 LB/GL
VAPOR DENSITY	N/A		"VOC (Calculated, LB/GAL)"	5.188
BOILING RANGE	Lower	1.00 F	"VOC (Calculated, GM/L)"	621.67
	Higher	285.00 F	VOC Percent by Weight	73.0056
SPECIFIC GRAVITY	0.896		EVAPORATION RATE	7.70000 (n-Butyl Acetate = 1
			VISCOSITY	N/A

SECTION 10 - STABILITY AND REACTIVITY

"CONDITIONS TO AVOID: Avoid contact with heat, sparks, and open flame. Product may explode if heated. Keep cool, avoid exposure to heat."
"INCOMPATIBILITIES: Strong oxidizing agents. DECOMPOSITION: Thermal decomposition may produce carbon dioxide, carbon monoxide, and" unidentifiable organic materials. POLYMERIZATION: No hazardous polymerization will occur under normal conditions. STABILITY: The product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

No specific information is available. Please refer to Section 3 for available information on potential health effects.

SECTION 12 - ECOLOGICAL INFORMATION

No specific ecological information is available for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

"WASTE DISPOSAL: Place in closed containers. Dispose of product in accordance with local, county, state, and federal regulations."

SECTION 14 - TRANSPORTATION INFORMATION

DOMESTIC GROUND: "Consumer Commodity, ORM-D" DOMESTIC AIR: " Consumer Commodity, CLASS 9, ID 8000, MISC. LABEL"
INTERNATIONAL AIR: "AEROSOLS, FLAMMABLE, N.O.S. CLASS 2.1, UN 1950, FLAMMABLE GAS LABEL"
"See 49 CFR 172.101, Hazardous Materials Table 1 for more information on shipping hazardous materials on land. See IATA Dangerous Goods" Regulations for more details on shipping hazardous materials by air.

SECTION 15 - REGULATORY INFORMATION

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

ALUMINUM	CAS# 7429-90-5	PCT BY WT:	2.4380
ZINC	CAS# 7440-66-6	PCT BY WT:	20.2870
METHYL ETHYL KETONE	CAS# 78-93-3	PCT BY WT:	10.8790
TOLUENE	CAS# 108-88-3	PCT BY WT:	8.4230

FEDERAL REGULATIONS: TOXIC XUBSTANCES CONTROL ACT: The chemical substances in this product are listed on the TSCA Section 8 inventory
INTERNATIONAL REGULATIONS: CANADA: The chemical substances in this product are listed on the Canadian Domestic Substances List

SECTION 16 - OTHER INFORMATION

HMIS RATINGS: HEALTH: 2* FLAMMABILITY: 4 REACTIVITY: 0 PERSONAL PROTECTION: G
CALIFORNIA MIR COMPLIANCE MET AT 1.11

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Professional Galvanizing Compound - Aerosol	Revision Date:	11/22/2006
Identification Number:	7584838, 7585838		
Product Use/Class:	Galvanizing Compound/Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Zinc	7440-66-6	50.0	10mg/m3-dust	N.E.	15mg/m3-dust	N.E.
Toluene	108-88-3	30.0	50 PPM	150 PPM	200 PPM	300 PPM
Liquefied Petroleum Gas	68476-86-8	20.0	1000 PPM	N.E.	1000 PPM	N.E.
Aluminum Flake	7429-90-5	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Stoddard Solvents	8052-41-3	10.0	100 PPM	N.E.	500 PPM	N.E.
Xylene	1330-20-7	5.0	100 PPM	150 PPM	100 PPM	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Mineral Spirits	64742-88-7	5.0	100 PPM	N.E.	100 PPM	N.E.
Lead Compounds	NOT SPECIFIED	1.0	0.05 MG/M3	N.E.	0.05 MG/MS	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Extremely flammable liquid and vapor. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: May cause reproductive system disorder and/or damage. Overexposure may cause nervous system damage. May cause central nervous system disorder (e,g.,narcosis

involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 9.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Perforation of the pressurized container may cause bursting of the can. Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Wash hands before eating. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage: Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of

NFPA Class I flammable liquids. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.9230
Vapor Pressure:		PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Zinc	N.D.	N.D.
Toluene	N.D.	N.D.
Liquefied Petroleum Gas	N.D.	N.D.
Aluminum Flake	N.D.	N.D.
Stoddard Solvents	N.D.	N.D.
Xylene	N.D.	N.D.
Hydrotreated Light Distillate	N.D.	N.D.
Mineral Spirits	RAT >8ML/KG	RAT >1400PPM 4HR
Lead Compounds	N.D.	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosol	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD, REACTIVE HAZARD, PRESSURIZED GAS HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Lead Compounds	NOT SPECIFIED

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

none

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

none

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 4 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: NA

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

MATERIAL SAFETY DATA SHEET

Date Prepared: September 30, 2005

1. PRODUCT/COMPANY IDENTIFICATION

Product Name:
SAKRETE® Crack Resistant 5000 Concrete Mix

Emergency Telephone:
800-424-9300 (Chemtrec) or
703-527-3887 (Outside USA)

Manufacturer's Name & Address:
Bonsal American/ an Oldcastle Company
8201 Arrowridge Blvd.
Charlotte, NC 28273

Telephone Number for Information:
704-525-1621

2. EMERGENCY AND FIRST AID

EMERGENCY INFORMATION:	Sakrete® Crack Resistant Concrete Mix is a gray cementitious mixture of cement, sand & rock. When in contact with moisture in eyes or on skin, or when mixed with water, it becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 12.
EYES:	Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.
SKIN:	Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.
INHALATION:	Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of Concrete Mix require immediate medical attention.
INGESTION:	Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

3. COMPOSITION INFORMATION

DESCRIPTION: This product consists of a heterogeneous mixture of hydraulic cement, sand and rock. The major compounds are:

$3CaO•SiO_2$	Tricalcium Silicate	CAS #12168-85-3
$2CaO•SiO_2$	Dicalcium Silicate	CAS #10034-77-2
$3CaO•Al_2O_3$	Tricalcium Aluminate	CAS #12042-78-3
$4CaO•Al_2O_3•Fe_2O_3$	Tetracalcium aluminoferrite	CAS #12068-35-8
$CaSO_4•2H_2O$	Calcium Sulfate dihydrate (Gypsum)	CAS #7778-18-9 (CAS #13397-24-5)
SiO_2	Silica Sand	CAS #14808-60-7

4. HAZARDOUS INGREDIENTS

COMPONENT	OSHA PEL	ACGIH TLV-TWA	NIOSH REL
Hydraulic Cement	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Calcium sulfate (CAS #7778-18-9) [Gypsum (CAS #13397-24-5)]	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Iron oxide (CAS #1309-37-1)	10 mg/m^3	5 mg/m^3	
Calcium carbonate (CAS #1317-65-3)	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Magnesium oxide (CAS #1309-48-4)	15 mg total dust/m^3	10 mg total dust/m^3	
Calcium oxide (CAS #1306-78-8)	5 mg/m^3	2 mg/m^3	
Crystalline silica (CAS #14808-60-7)	10 mg of respirable dust/m^3 % SiO_2 + 2	0.5 mg respirable quartz/m^3	0.05 mg respirable quartz dust/m^3

TRACE INGREDIENTS:

Due to the use of substances mined from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis.

5. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

NOTE: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 12.

EYE CONTACT:

(Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea. Eye contact by larger amounts of dry powder or splashes of wet Concrete Mix may cause effects ranging from moderate eye irritation to chemical burns and blindness.

SKIN CONTACT:

(Acute) Exposure to dry Concrete Mix may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure.

(Chronic) Dry Concrete Mix coming in contact with wet skin or exposure to wet Concrete Mix may cause more severe skin effects, including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of chemical (caustic) burns.

(Acute/Chronic) Some individuals may exhibit an allergic response upon exposure to Concrete Mix. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers.

INHALATION:

(Acute) Exposure to Concrete Mix may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system. Pre-existing upper respiratory and lung diseases may be aggravated by inhalation.

(Chronic) Inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.

INGESTION:

(Acute/Chronic) Internal discomfort or ill effects are possible if large quantities are swallowed.

CARCINOGENIC POTENTIAL:

Concrete Mix is not recognized as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, it also contains crystalline silica which IARC classifies as a known human carcinogen (Group I). The NTP, in it's ninth Annual Report on Carcinogens, classified "silica, crystalline (respirable)" as a known carcinogen. (See also Sections 4 and 12.)

6. ACCIDENTAL RELEASE MEASURES
(See Section for Regulatory Information)

Contain material to prevent contamination of soil, surface water or ground water. Use dry clean-up methods that do not disperse dust into the air or entry into surface water. Material can be used if not contaminated. Place in an appropriate labeled container for disposal or use. Avoid inhalation of dust and contact with skin and eyes. Use exposure control and personal protection methods as described in Section 12.

7. PHYSICAL/CHEMICAL DATA

APPEARANCE/ODOR:	Gray, odorless	**PHYSICAL STATE:**	Solid (Powder mixed with sand and rock.)
BOILING POINT:	> 1000°C	**MELTING POINT:**	> 1000°C
VAPOR PRESSURE:	Not applicable	**VAPOR DENSITY:**	Not applicable
pH (IN WATER) (ASTM D 1293-95)	12 to 13	**SOLUBILITY IN WATER:**	Slightly soluble (0.1% to 1.0%)
SPECIFIC GRAVITY (H_2O = 1.0):	2.5 – 2.8	**EVAPORATION RATE:**	None

8. FIRE AND EXPLOSION

FLASH POINT:	None	**LOWER EXPLOSIVE LIMIT:**	None
AUTO IGNITION TEMPERATURE:	Not combustible	**UPPER EXPLOSIVE LIMIT:**	None
FLAMMABLE LIMITS	Not applicable	**SPECIAL FIRE FIGHTING PROCEDURES:**	None
EXTINGUISHING MEDIA:	Not combustible	**UNUSUAL FIRE AND EXPLOSION HAZARDS:**	None
HAZARDOUS COMBUSTION PRODUCTS:	None		

9. STABILITY AND REACTIVITY DATA

STABILITY:	Product is stable. Keep dry until used.
CONDITIONS TO AVOID:	Unintentional contact with water. Contact with water will result in hydration and produces (caustic) calcium hydroxide.
INCOMPATIBILITY:	Wet Concrete Mix is alkaline. As such, it is incompatible with acids, ammonium salts and aluminum metal.
HAZARDOUS DECOMPOSITION:	Will not occur.
HAZARDOUS POLYMERIZATION:	Will not occur.

10. PRECAUTIONS FOR HANDLING AND STORAGE

HANDLING AND STORAGE

Keep dry until used. Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 12.

11. TOXICOLOGICAL INFORMATION

See Section 5 for Hazard Identification. No recognized unusual toxicity to plants and animals.

Conditions aggravated by exposure: Eye disease, Skin disorders and Chronic Respiratory conditions.

12. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air.

If local or general ventilation is not adequate to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use MSHA/NIOSH approved respirators.

EYE PROTECTION:

Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when handling cement or cement containing products.

SKIN PROTECTION:

Wear impervious abrasion- and alkali-resistant gloves, boots, long-sleeved shirt, long pants or other protective clothing to prevent skin contact. Promptly remove clothing dusty with dry Concrete Mix or clothing dampened with moisture mixed with Concrete Mix, and launder before re-use. If contact occurs, wash areas contacted by material with pH neutral soap and water.

13. DISPOSAL CONSIDERATIONS

DISPOSAL:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/ Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

IF THIS MATERIAL AS PACKAGED, BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA FOR A HAZARDOUS WASTE AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY UNDER THE AUTHORITY OF THE RESOURCE CONSERVATION AND RECOVER ACT (40CFR 261), DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state and federal regulations.

14. TRANSPORTATION DATA

Concrete Mix is not hazardous under U.S. DOT or TDG regulations.

15. OTHER REGULATORY INFORMATION

Status under US OSHA Hazard Communication Rule 29 CFR 1910.1200:	Concrete Mix is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.
Status under CERCLA/Superfund, 40 CFR 117 and 302:	Not listed.
Hazard Category under SARA (Title III), Sections 311 and 312:	Concrete Mix qualifies as a hazardous substance with delayed health effects.
Status under SARA (Title III), Section 313:	Not subject to reporting requirements under Section 313.
Status under TSCA (as of May 1997):	Some substances in Concrete Mix are on the TSCA inventory list.
Status under the Federal Hazardous Substances Act:	Concrete Mix is a hazardous substance subject to statutes promulgated under the subject act.
Status under California Proposition 65:	This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects or other reproductive harm.
Status under Canadian Environmental Protection Act:	Not listed.
Status under Canadian WHMIS:	Concrete Mix is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E - Corrosive Material) and subject to the requirements of WHMIS.

16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.

Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M Brand Fire Barrier CP-25WB+
MANUFACTURER: 3M
DIVISION: Building & Commercial Services Division

ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 02/05/2008
Supercedes Date: 03/15/2007

Document Group: 09-5451-1

Product Use:
Intended Use: Used as a firestop in buildings.
Specific Use: Used as Firestop in buildings.

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	20 - 30
Zinc Borate	1332-07-6	20 - 30
Synthetic Polymer Latex	Trade Secret	15 - 25
Sodium Silicate	1344-09-8	10 - 20
Ethylhexyldiphenyl Phosphate	1241-94-7	5 - 10
Iron Oxide	1309-37-1	1 - 5
Polyethylene Glycol	25322-68-3	1 - 5
Chopped Fiberglass	65997-17-3	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste
Odor, Color, Grade: Brown caulk thixotropic paste with negligible odor.
General Physical Form: Solid
Immediate health, physical, and environmental hazards:

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:
Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion:
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	*Not Applicable*
Flash Point	*Not Applicable*
Flammable Limits - LEL	*Not Applicable*
Flammable Limits - UEL	*Not Applicable*
OSHA Flammability Classification:	Not Applicable

5.2 EXTINGUISHING MEDIA
Material will not burn.

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Ventilate the area with fresh air. Collect as much of the spilled material as possible. Clean up residue with detergent and water. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. For industrial or professional use only.

7.2 STORAGE

Store in a cool, dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended: Polyvinyl Chloride.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
Iron Oxide	ACGIH	TWA, respirable	5 mg/m3	Table A4
Iron Oxide	OSHA	TWA, as fume	10 mg/m3	Table Z-1A
Chopped Fiberglass	3M	TWA, as dust	10 mg/m3	
POLYETHYLENE GLYCOLS	AIHA	TWA, as aerosol	10 mg/m3	

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Paste
Odor, Color, Grade:	Brown caulk thixotropic paste with negligible odor.
General Physical Form:	Solid
Autoignition temperature	*Not Applicable*
Flash Point	*Not Applicable*
Flammable Limits - LEL	*Not Applicable*
Flammable Limits - UEL	*Not Applicable*

Specific Gravity	1.35 [*Ref Std:* WATER=1]
Melting point	*No Data Available*
Solubility in Water	Complete
Volatile Organic Compounds	0 % weight
Percent volatile	30 %
VOC Less H2O & Exempt Solvents	0 g/l

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	Condition

Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):
42-0016-4710-8, 42-0016-4715-7, 42-0016-4716-5, 98-0400-5380-7, 98-0400-5381-5, 98-0400-5382-3, 98-0400-5383-1, 98-0400-5406-0, 98-0400-5456-5, 98-0400-5463-1

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:
Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
Zinc Borate (ZINC COMPOUNDS)	1332-07-6	20 - 30

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 **Flammability:** 0 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 **Flammability:** 0 **Reactivity:** 0 **Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Reason for Reissue: Reissued to make corrections in tables.

Revision Changes:
Copyright was modified.
Section 9: Property description for optional properties was modified.
Section 14: ID Number Heading Template 1 was added.
Section 14: ID Number(s) Template 1 was added.
Section 2: Ingredient table was added.
Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guidelines data source legend was added.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

3M MSDSs are available at www.3M.com

DAP BLOCKADE RED

REVISION DATE: 10/27/2005 SUPERCEDE DATE: 02/28/2003

SECTION 1 - PRODUCT IDENTIFICATION

Trade name	:	DAP BLOCKADE RED
Product code	:	7079818858
Manufactured For	:	DAP Inc. 2400 Boston Street Ste 200 Baltimore, MD 21224
Telephone		Medical: 1-800-327-3874
Telephone		Transportation: 1-800-535-5053
Product use	:	Intumescent Sealant for Fire Stoping

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

Red. Non-sag gunnable paste. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation	:	May cause slight irritation to the respiratory system.
Eyes	:	Slightly irritating.
Ingestion	:	May cause irritation to the mouth, throat and stomach.
Skin	:	Irritant effect may be delayed.

Aggravated Medical Conditions

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

The International Agency for Research on Cancer (IARC) has classified ceramic fiber, fibrous glasswool, and mineral wool (rockwool and slagwool) as possible human carcinogens (Group 2B) based on sufficient evidence of carcinogenicity in animals but insufficient data in humans. In the National Toxicology Program's (NTP) 7th Annual Report on Carcinogens (1994), respirible glasswool was classified as reasonably anticipated to be carcinogenic. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. OSHA considers fibrous glass dust a nuisance dust with an ACGIH TLV of 10mg/m3 total dust. Fibrous glass can cause dermatitis, local irritation. Long term overexposure to propylene glycol caused liver abnormalities, kidney damage in laboratory animals. Repeated excessive ingestion may cause central nervous system effects. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	30.0 - 60.0
Acrylic Polymer	NJ TSRN# 51721300-5816P	15.0 - 40.0
Limestone (Calcium carbonate)	1317-65-3	15.0 - 40.0
White mineral oil	8042-47-5	5.0 - 10.0

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Amine phosphate	NJ TSRN# 51721300-5352P	3.0 - 7.0
Graphite intercallation	NJ TSRN# 51721300-5378P	1.0 - 5.0
Glass oxide	65997-17-3	1.0 - 5.0
Amorphous silica	7631-86-9	1.0 - 5.0
Pentaerythritol	115-77-5	1.0 - 5.0
Propylene glycol	57-55-6	1.0 - 5.0
Melamine	108-78-1	1.0 - 5.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	- <1.0
Chlorothalonil	1897-45-6	- <1.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation	:	Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
Eye contact	:	Flush with water for 15 minutes. If irritation persists, get medical attention.
Skin contact	:	Wash with water. If irritation, rash or other disorders develop, get medical attention immediately.
Ingestion	:	Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point	:	Not available.
Method	:	Not available.
Burning rate	:	Non-flammable solid
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Extinguishing media	:	This product is not expected to burn under normal conditions of use.Use that which is appropriate to the surroundings.
Hazardous combustion products	:	Smoke, fumes.
Protective equipment for firefighters	:	Not applicable. Product is not expected to burn.
Fire and explosion conditions	:	This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Scrape up and transfer to appropriate container for disposal. Keep out of water courses.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when

not in use. Precautions also apply to emptied containers. Do not use in confined or poorly ventilated areas. Store in sealed containers in a dry, ventilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

Respiratory protection	:	Not required under normal conditions of use.
Hand protection	:	Protect hands with impervious gloves.
Eye protection	:	Use safety glasses if eye contact is likely.
Protective measures	:	Use professional judgment in the selection, care, and use.Other equipment not normally required.
Engineering measures	:	General ventilation is sufficient.Use local exhaust when the general ventilation is inadequate.

Exposure Limits

Chemical Name	CAS Number	Regulation	Limit	Form
Limestone (Calcium carbonate)	1317-65-3	OSHA PEL: OSHA PEL: ACGIH TWA: ACGIH TWA: OSHA TWA: OSHA TWA:	5 mg/m3 15 mg/m3 3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Graphite intercallation	NJ TSRN# 51721300-5378P	ACGIH TWA: OSHA PEL: OSHA PEL:	2 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Respirable fraction.
Glass oxide	65997-17-3	ACGIH TWA:	5 mg/m3	Inhalable fraction.
Amorphous silica	7631-86-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 0.8 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Pentaerythritol	115-77-5	ACGIH TWA: OSHA PEL: OSHA PEL:	10 mg/m3 5 mg/m3 15 mg/m3	 Respirable fraction. Total dust.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	ACGIH TWA: OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL:	0.05 mg/m3 0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Respirable. Total dust. Total dust. Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Non-sag gunnable paste
Color	:	Red

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Odor	:	Acrylate
pH	:	7.0 - 10.0
Vapour pressure	:	Not available.
Vapor density	:	Heavier than air
Melting point/range	:	32 °F, 0 °C
Freezing point	:	Not available.
Boiling point/range	:	212 °F, 100 °C
Water solubility	:	Miscible
Specific Gravity	:	1.45
% Volatile Weight	:	30 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.

SECTION 11 - TOXICOLOGICAL INFORMATION

Amorphous silica, CAS-No.: 7631-86-9
Acute oral toxicity (LD-50 oral) 22,500 mg/kg (Rat)

Pentaerythritol, CAS-No.: 115-77-5
Acute oral toxicity (LD-50 oral) 25,500 mg/kg (Mouse)

Propylene glycol, CAS-No.: 57-55-6
Acute oral toxicity (LD-50 oral) 30,000 mg/kg (Rat)

Chlorothalonil, CAS-No.: 1897-45-6
Acute oral toxicity (LD-50 oral) 10,000 mg/kg (Rat)
Acute dermal toxicity (LD-50 dermal) 10,000 mg/kg (Albino rat)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:

NOT REGULATED

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SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components	:	Chlorothalonil	1897-45-6
SARA 311/312 Hazards	:	Acute Health Hazard	

OSHA Hazardous Components :

Limestone (Calcium carbonate)	1317-65-3
Graphite intercallation	NJ TSRN# 51721300-5378P
Glass oxide	65997-17-3
Amorphous silica	7631-86-9
Pentaerythritol	115-77-5
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
Chlorothalonil	1897-45-6

OSHA Status: Considered hazardous based on the following criteria:	:	Irritant
OSHA Flammability	:	Not Regulated
Regulatory VOC (less water and exempt solvent)	:	16 g/l
VOC Method 310	:	0 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:

Glass oxide	65997-17-3
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

U.S. State Regulations:

MASS RTK Components :	Limestone (Calcium carbonate)	1317-65-3
	Graphite intercallation	NJ TSRN# 51721300-5378P
	Glass oxide	65997-17-3
	Amorphous silica	7631-86-9
	Pentaerythritol	115-77-5
	Melamine	108-78-1
Penn RTK Components :	Water	7732-18-5
	Acrylic Polymer	NJ TSRN# 51721300-5816P
	Limestone (Calcium carbonate)	1317-65-3
	White mineral oil	8042-47-5
	Amine phosphate	NJ TSRN# 51721300-5352P
	Graphite intercallation	NJ TSRN# 51721300-5378P
	Glass oxide	65997-17-3
	Amorphous silica	7631-86-9
	Pentaerythritol	115-77-5
	Propylene glycol	57-55-6
	Melamine	108-78-1

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NJ RTK Components	:	Water	7732-18-5
		Acrylic Polymer	NJ TSRN# 51721300-5816P
		Limestone (Calcium carbonate)	1317-65-3
		White mineral oil	8042-47-5
		Amine phosphate	NJ TSRN# 51721300-5352P
		Glass oxide	65997-17-3
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:

65997-17-3	Glass oxide
14808-60-7	Crystalline Silica (Quartz)/ Silica Sand
1897-45-6	Chlorothalonil
50-00-0	Formaldehyde
7664-93-9	Sulfuric acid

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	1
Flammability	0
Reactivity	0
PPE	

0 = Minimum
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Legend

ACGIH - American Conference of Governmental Hygienists
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
DOT - Department of Transportation
DSL - Domestic Substance List
EPA - Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
MSHA - Mine Safety Health Administration
NDSL - Non-Domestic Substance List
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
RTK - Right To Know
SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
V - Volume
VOC - Volatile Organic Compound
WHMIS - Workplace Hazardous Materials Information System

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DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

MATERIAL SAFETY DATA SHEET

Product name: **FS-ONE High Performance Intumescent Firestop Sealant**

Description: One-part acrylic-based sealant

Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121

Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
Polyacrylate dispersion	Mixture	NE	NE	NE
Calcium carbonate	001317-65-3	5 mg/m^3 (T)	10 mg/m^3 (T)	NE
Zinc borate	138265-88-0	NE	NE	NE
Ammonium polyphosphate	068333-79-9	NE	NE	NE
Talc	014807-96-6	20 mppcf	2 mg/m^3	NE
Expandable graphite	012777-87-6	5 mg/m^3 (T)	2 mg/m^3 (T)	NE
Ethylene glycol	000107-21-1	NE	C:100 mg/m^3 (A)	NE
Polybutene	009003-29-6	NE	NE	NE
Iron oxide	001309-37-1	10 mg/m^3	5 mg/m^3	NE
Glass filament	065997-17-3	NE	5 mg/m^3 (T)	NE
Silicon dioxide	014808-60-7	0.05 mg/m^3 (T)	0.1 mg/m^3 (T)	NE
Water	007732-18-5	NE	NE	NE

Abbreviations: **PEL** = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **C** = Ceiling. **STEL** = Short Term Exposure Limit. **NE** = None Established. **NA** = Not Applicable. **(T)** indicates "as total dust". **(R)** indicates "as respirable fraction". **(A)** indicates "as an aerosol". **mppcf** = million particles per cubic foot.

PHYSICAL DATA

Appearance:	Red paste.	**Odor:**	Odorless.
Vapor Density: (air = 1)	Not determined.	**Vapor Pressure:**	23mbar @ 20C / 68F
Boiling Point:	Not applicable.	**VOC Content:**	75.0 g/L.
Evaporation Rate:	Not applicable.	**Solubility in Water:**	Soluble.
Specific Gravity:	1.5	**pH:**	Not determined.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Non-flammable.	**Flammable Limits:**	Not applicable.
Extinguishing Media:	Not applicable. Use extinguishing media as appropriate for surrounding fire.		
Special Fire Fighting Procedures:	None known. Use a self-contained breathing apparatus when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed such as oxides of carbon, sulfur and phosphorous.		

REACTIVITY DATA

Stability:	Stable.	**Hazardous Polymerization:**	Will not occur.
Incompatibility:	Strong acids, peroxides, and oxidizing agents.		
Decomposition Products:	Thermal decomposition can yield CO and CO_2.		
Conditions to Avoid:	None known.		

HEALTH HAZARD DATA

Known Hazards:	None known.
Signs and Symptoms of Exposure:	Possibly irritating upon contact with the eyes or upon repeated contact with the skin.
Medical Conditions Aggravated by Exposure:	Eye and skin conditions.
Routes of Exposure:	Dermal.

Carcinogenicity:	IARC classifies crystalline silica (quartz sand) as Group I based upon evidence among workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant. Based upon the nature and intended use of this product, it does not pose an increased cancer risk to workers.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Immediately flush with plenty of water. Call a physician if symptoms occur.
Skin:	Immediately wipe off material and wash with soap and water. Material can adhere to the skin. If material has adhered to the skin, use an abrasive containing hand cleaner. If material does not come off, buff with a pumice stone.
Inhalation:	Move victim to fresh air if discomfort develops. Call a physician if symptoms persist.
Ingestion:	Seek medical attention. Do not induce vomiting unless directed by a physician. If a large quantity was ingested, give 1 to 2 glasses of water to dilute. Never give anything by mouth to an unconscious person.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Not required, however, safety glasses should be worn in most industrial settings.
Skin Protection:	Avoid skin contact. Cloth gloves are suitable for hand protection.
Respiratory Protection:	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air-supplied respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool, dry area preferably between 40º and 77º F. Keep from freezing. Do not store in direct sunlight. Avoid contact with the eyes or skin. Practice good hygiene; i.e. always wash thoroughly after handling and before eating or smoking. For industrial use only. Keep out of reach of children. Follow label/use instructions.
Spill Procedures:	Immediately wipe away spilled material before it hardens. Place in a container for proper disposal in accordance with all applicable local, state, or federal requirements.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 0, Reactivity 0, PPE B
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains < 3% ethylene glycol (CAS 107-21-1) and < 15% zinc borate (re: zinc compounds) which are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	**Technical Service:**	1 800 879 8000
Health / Safety:	1 800 879 6000 Jerry Metcalf (x6704)		
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

Material Safety Data Sheet
The Dow Chemical Company

Product Name: GREAT STUFF (TM) 12OZ Triple Expand Polyurethane Foam Sealant

Issue Date: 01/31/2008

Print Date: 29 May 2009

The Dow Chemical Company encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name

GREAT STUFF (TM) 12OZ Triple Expand Polyurethane Foam Sealant

COMPANY IDENTIFICATION

The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
USA

Customer Information Number: 800-258-2436

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 989-636-4400
Local Emergency Contact: 989-636-4400

2. Hazards Identification

Emergency Overview

Color: Yellow
Physical State: Foam
Odor: Mild
Hazards of product:

DANGER! Flammable gas - May cause flash fire. May cause allergic skin reaction. May cause allergic respiratory reaction. May cause eye irritation. May cause skin irritation. Vapor reduces oxygen available for breathing. May cause anesthetic effects. May cause respiratory tract irritation. Vapors may travel a long distance; ignition and/or flash back may occur. Evacuate area. Keep upwind of spill. Stay out of low areas. Aerosol cans exposed to fire can rupture becoming flaming projectiles. Elevated temperatures can cause hazardous polymerization. Toxic fumes may be released in fire situations. Containers are under high pressure. Avoid temperatures above 49 °C (120 °F).

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause eye irritation. May cause slight temporary corneal injury.
Skin Contact: Prolonged contact may cause moderate skin irritation with local redness. Material may stick to skin causing irritation upon removal. May stain skin.
Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Skin Sensitization: Skin contact may cause an allergic skin reaction. Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.
Inhalation: In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema (fluid in the lungs.) Effects may be delayed. May cause central nervous system depression. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats). Decreased lung function has been associated with overexposure to isocyanates.
Respiratory Sensitization: May cause allergic respiratory response. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.
Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Observations in animals include: Gastrointestinal irritation.
Effects of Repeated Exposure: Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols. Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney. Liver. Bone marrow. Contains a component which is reported to be a weak organophosphate-type cholinesterase inhibitor. Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions.
Cancer Information: Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.
Birth Defects/Developmental Effects: In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

3. Composition Information

Component	CAS #	Amount
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	>= 10.0 - <= 30.0 %
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly	57029-46-6	>= 30.0 - <= 60.0 %
Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol coopolymer	53862-89-8	>= 10.0 - <= 30.0 %
Tris(1-chloro-2-propyl) phosphate	13674-84-5	>= 5.0 - <= 10.0 %
Paraffin waxes and Hydrocarbon waxes, chlorinated	63449-39-8	>= 5.0 - <= 10.0 %
Isobutane	75-28-5	>= 5.0 - <= 10.0 %
Methyl ether	115-10-6	>= 1.0 - <= 5.0 %
Propane	74-98-6	>= 1.0 - <= 5.0 %
4,4' -Methylenediphenyl diisocyanate	101-68-8	>= 5.0 - <= 10.0 %

Note: CAS 101-68-8 is an MDI isomer that is part of CAS 9016-87-9.

4. First-aid measures

Eye Contact: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.
Skin Contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.
Inhalation: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.
Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
Notes to Physician: Maintain adequate ventilation and oxygenation of the patient. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. Although cholinesterase depression has been reported with this material, it is not of benefit in determining exposure and need not be considered in the treatment of persons exposed to the material. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Medical Conditions Aggravated by Exposure: Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).

5. Fire Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. Straight or direct water streams may not be effective to extinguish fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water may not be effective in extinguishing fire. Do not use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Eliminate ignition sources. Move container from fire area if this is possible without hazard. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out.
Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.
Unusual Fire and Explosion Hazards: Contains flammable propellant. Aerosol cans exposed to fire can rupture and become flaming projectiles. Propellant release may result in a fireball. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Dense smoke is produced when product burns.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Isocyanates. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Ground and bond all containers and handling equipment. Isolate area until gas has dispersed. Use non-sparking tools in cleanup operations. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Collect in suitable and properly labeled containers. Absorb with materials such as: Clay. Dirt. Milsorb®. Sand. Sawdust. Vermiculite. See Section 10 for more specific information. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Evacuate area. Only trained and properly protected personnel must be involved in clean-up operations. Keep personnel out of low areas. Keep personnel out of confined or poorly ventilated areas. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. For large spills, warn public of downwind explosion hazard. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. See Section 10 for more specific information. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. Handling and Storage

Handling

General Handling: Keep away from heat, sparks and flame. Avoid contact with eyes. Avoid contact with skin and clothing. Avoid prolonged or repeated contact with skin. Avoid breathing vapor. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. Keep out of reach of children. No smoking, open flames or sources of ignition in handling and storage area. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Contents under pressure. Do not puncture or incinerate container. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Do not enter confined spaces unless adequately ventilated. Never use air pressure for transferring product. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Storage

Minimize sources of ignition, such as static build-up, heat, spark or flame. Store in a dry place. See Section 10 for more specific information.

Shelf life: Use within

12 Months 20 - 30 °C

8. Exposure Controls / Personal Protection

Exposure Limits

Component	List	Type	Value
4,4' -Methylenediphenyl diisocyanate	ACGIH	TWA	0.005 ppm

	OSHA Table Z-1	Ceiling	0.2 mg/m3 0.02 ppm
Methyl ether	WEEL	TWA	1,880 mg/m3 1,000 ppm
Isobutane	ACGIH	TWA	1,000 ppm
Propane	OSHA Table Z-1	PEL	1,800 mg/m3 1,000 ppm
	ACGIH	TWA	1,000 ppm

Personal Protection

Eye/Face Protection: Use safety glasses. Eye wash fountain should be located in immediate work area.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Viton. Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator (air line or self-contained breathing apparatus). For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure.

9. Physical and Chemical Properties

Physical State	Foam
Color	Yellow
Odor	Mild
Flash Point - Closed Cup	-104 °C (-155 °F) *Estimated*
Flammable Limits In Air	**Lower**: No test data available
	Upper: No test data available
Autoignition Temperature	No test data available
Vapor Pressure	1,151 kPa @ 55 °C *Calculated*
Boiling Point (760 mmHg)	Not applicable.
Vapor Density (air = 1)	No test data available
Specific Gravity (H2O = 1)	1.06 *Estimated*

Freezing Point	No test data available
Melting Point	No test data available
Solubility in Water (by weight)	Insoluble
pH	*Not applicable*
Kinematic Viscosity	Not applicable

10. Stability and Reactivity

Stability/Instability

Stable under recommended storage conditions. See Storage, Section 7. Unstable at elevated temperatures.
Conditions to Avoid: Avoid temperatures above 49 °C (120 °F). Elevated temperatures can cause container to vent and/or rupture. Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Avoid contact with: Acids. Alcohols. Amines. Ammonia. Bases. Metal compounds. Strong oxidizers. Products based on diisocyanates like TDI and MDI react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased by stirring or if the other material acts as a solvent. Products based on diisocyanates such as TDI and MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Reaction with water will generate carbon dioxide and heat.

Hazardous Polymerization

Can occur. Elevated temperatures can cause hazardous polymerization.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

11. Toxicological Information

Acute Toxicity

Ingestion
Single dose oral LD50 has not been determined. Estimated LD50, Rat > 10,000 mg/kg
Skin Absorption
The LD50 has not been determined. Estimated LD50, Rabbit > 2,000 mg/kg
Inhalation
The LC50 has not been determined. Estimated LC50, Aerosol, Rat > 0.5 mg/l

Sensitization

Skin
Skin contact may cause an allergic skin reaction. Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.
Respiratory
May cause allergic respiratory response. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Repeated Dose Toxicity

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols. Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney. Liver. Bone marrow. Contains a component which is reported to be a weak organophosphate-type cholinesterase inhibitor. Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure may be headache, dizziness, incoordination, muscle twitching,

tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions.

Chronic Toxicity and Carcinogenicity

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

Developmental Toxicity

In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

Genetic Toxicology

In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

12. Ecological Information

CHEMICAL FATE

Data for Component: **Diphenylmethane Diisocyanate, isomers and homologues**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Data for Component: **Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Data for Component: **Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol coopolymer**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Data for Component: **Tris(1-chloro-2-propyl) phosphate**

Movement & Partitioning

Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is low (Koc between 500 and 2000).

Henry's Law Constant (H): < 1.35E-5 atm*m3/mole; 25 °C Estimated
Partition coefficient, n-octanol/water (log Pow): 2.59 Measured
Partition coefficient, soil organic carbon/water (Koc): 1,300 Estimated
Bioconcentration Factor (BCF): 0.8 - 4.6; common carp (Cyprinus carpio); Measured

Persistence and Degradability

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
4.47E-11 cm3/s	0.24 d	Estimated

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
14 %	28 d	OECD 301E Test

Theoretical Oxygen Demand: 1.17 mg/mg

Data for Component: **Paraffin waxes and Hydrocarbon waxes, chlorinated**

Movement & Partitioning

Expected to be relatively immobile in soil (Koc > 5000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Henry's Law Constant (H): < 1.0E-07 atm*m3/mole; 25 °C Estimated
Partition coefficient, n-octanol/water (log Pow): > 6 Estimated

Persistence and Degradability

Expected to degrade only slowly in the environment.

Data for Component: **Isobutane**

Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).
Henry's Law Constant (H): 1.19E+00 atm*m3/mole; 25 °C Measured
Partition coefficient, n-octanol/water (log Pow): 2.76 Measured
Partition coefficient, soil organic carbon/water (Koc): 35 Estimated
Distribution in Environment: Mackay Level 1 Fugacity Model:

Air	Water.	Biota	Soil	Sediment
100 %	0 %	0 %	0 %	0 %

Persistence and Degradability

Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
2.44E-12 cm3/s	4.4 d	Estimated

Theoretical Oxygen Demand: 3.58 mg/mg

Data for Component: **Methyl ether**

Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).
Henry's Law Constant (H): 9.78E-4 atm*m3/mole; 25 °C Measured
Partition coefficient, n-octanol/water (log Pow): 0.10 Measured
Partition coefficient, soil organic carbon/water (Koc): 1.29 - 14 Estimated

Persistence and Degradability

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.66E-12 cm3/s	6.4 d	Estimated

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
5 %	28 d	OECD 301A Test

Theoretical Oxygen Demand: 2.08 mg/mg

Data for Component: **Propane**

Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).
Henry's Law Constant (H): 7.07E-01 atm*m3/mole; 25 °C Measured
Partition coefficient, n-octanol/water (log Pow): 2.36 Measured
Partition coefficient, soil organic carbon/water (Koc): 24 - 460 Estimated
Distribution in Environment: Mackay Level 1 Fugacity Model:

Air	Water.	Biota	Soil	Sediment
100 %	0 %	0 %	0 %	0 %

Persistence and Degradability

No relevant information found.
Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.27E-12 cm3/s	8.4 d	Estimated

Theoretical Oxygen Demand: 3.64 mg/mg

Data for Component: **4,4' -Methylenediphenyl diisocyanate**

Movement & Partitioning

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Persistence and Degradability

In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

ECOTOXICITY

Data for Component: **Diphenylmethane Diisocyanate, isomers and homologues**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

Toxicity to Soil Dwelling Organisms

LC50, Earthworm Eisenia foetida, adult, 14 d: > 1,000 mg/kg

Data for Component: **Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

Toxicity to Soil Dwelling Organisms

LC50, Earthworm Eisenia foetida, adult, 14 d: > 1,000 mg/kg

Data for Component: **Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol coopolymer**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

Toxicity to Soil Dwelling Organisms

LC50, Earthworm Eisenia foetida, adult, 14 d: > 1,000 mg/kg

Data for Component: **Tris(1-chloro-2-propyl) phosphate**

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, bluegill (Lepomis macrochirus), 96 h: 84 mg/l
Aquatic Invertebrate Acute Toxicity
EC50, water flea Daphnia magna, 48 h, immobilization: 63 mg/l
Aquatic Plant Toxicity
EC50, green alga Selenastrum capricornutum, biomass growth inhibition, 96 h: 47 mg/l
EC50, alga Scenedesmus sp., biomass growth inhibition, 72 h: 45 mg/l
Toxicity to Micro-organisms
EC50, OECD 209 Test; activated sludge, respiration inhibition, 3 h: 784 mg/l

Data for Component: **Paraffin waxes and Hydrocarbon waxes, chlorinated**

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L). Material is very highly toxic to aquatic invertebrates on an acute basis (LC50/EC50 < 0.1 mg/L).

Fish Acute & Prolonged Toxicity
LC50, rainbow trout (Oncorhynchus mykiss), static, 96 h: > 100 mg/l
Aquatic Invertebrate Acute Toxicity
EC50, water flea Daphnia magna, immobilization: 0.037 mg/l

Data for Component: **Isobutane**

No relevant information found.

Data for Component: **Methyl ether**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, guppy (Poecilia reticulata), 96 h: > 4,000 mg/l
Aquatic Invertebrate Acute Toxicity
LC50, water flea Daphnia magna, 48 h: > 4,000 mg/l

Data for Component: **Propane**

No relevant information found.

Data for Component: **4,4' -Methylenediphenyl diisocyanate**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

Toxicity to Soil Dwelling Organisms
LC50, Earthworm Eisenia foetida, adult, 14 d: > 1,000 mg/kg

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. DOW HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Group at 1-800-258-2436 or 1-989-832-1556 (U.S.), or 1-800-331-6451 (Canada) for further details.

14. Transport Information

DOT Non-Bulk

CONSUMER COMMODITY RECLASSIFIED AS ORM-D MATERIAL

DOT Bulk

NOT AVAILABLE IN BULK CONTAINERS

IMDG

Proper Shipping Name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1 **ID Number:** UN1950
EMS Number: F-D,S-U

LIMITED QUANTITY

ICAO/IATA

Proper Shipping Name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1 **ID Number:** UN1950**Cargo Packing Instruction:** 203
Passenger Packing Instruction: 203

LIMITED QUANTITY

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	Yes
Reactive Hazard	No
Sudden Release of Pressure Hazard	Yes

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS #	Amount
4,4' -Methylenediphenyl diisocyanate	101-68-8	>= 5.0 - <= 10.0 %
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	>= 10.0 - <= 30.0 %

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
4,4' -Methylenediphenyl diisocyanate	101-68-8	>= 5.0 - <= 10.0 %
Methyl ether	115-10-6	>= 1.0 - <= 5.0 %
Propane	74-98-6	>= 1.0 - <= 5.0 %
Isobutane	75-28-5	>= 5.0 - <= 10.0 %

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

US. Toxic Substances Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30
CEPA - Domestic Substances List (DSL)
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Recommended Uses and Restrictions
Polyurethane foam.

Revision
Identification Number: 63952 / 1001 / Issue Date 01/31/2008 / Version: 2.0
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

The Dow Chemical Company urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have

obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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OSHA 174, Sept. 1985

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Identity (As Used on Label and List) **MAPP GAS**

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1

Supplier's Name
Bernz-O-matic

Address
Number, Street, City, State and ZIP Code
One BernzOmatic Drive
Medina, NY 14103

Emergency Telephone Number
800-424-9300

Telephone Number for Information
800-654-9011

Date Prepared
June 11, 2008

Signature of Preparer *(Optional)*

SECTION II - Hazardous Ingredients / Identity Information

Hazardous Components *Specific Chemical Identity, Common Name(s)*	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Liquefied Petroleum Gas w/ Methylacetylene	N/A	N/A	N/A	
Liquefied Petroleum Gas CAS NO. 68476-85-7	1000ppm			56.0
Methyl Acetylene-Propadiene CAS NO. 56960-91-9	1000ppm			44.0

NFPA HAZARD RATINGS
Health -2
Flammability -4
Reactivity -2

HMIS RATINGS
Health -0
Flammability -4
Reactivity -2

Notes:

SECTION III - Physical / Chemical Characteristics

Boiling Point -54° F to -10° F

Specific Gravity (H_20 - 1) 0.571

Vapor Pressure (mm Hg) @70° F 97 psig

Melting Point N/A

Vapor Density (AIR=1) 1.48

Evaporation Rate Butyl Acetate -1) N/A

Solubility in Water
Slight

Appearance and Odor
Colorless - unpleasant odor at approx. 100ppm

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Closed Cup -144° F	In air by volume	3.0	11.0

Extinguishing Media Eliminate oxygen source or stop flow of gas. Use water to cool cylinder. Dry Chemical or CO_2 to reduce oxygen.

Special Fire Fighting Procedures
Cool cylinders with water. Keep personnel away.

Unusual Fire and Explosion Hazards Auto ignition temp. 850° F. Keep ignition sources away from cylinder and continue to cool cylinder until gas flow is shut off. Escaping gas from cylinder may be ignited.

SECTION V - Reactivity Data

Stability → Unstable / Stable X

Conditions to Avoid
Do not expose to temperatures above 125° F.

Incompatibility (Materials to Avoid)
Extremely flammable. Avoid uncontrolled contact with oxidizers.

Hazardous Decomposition or Byproducts
N/A

Hazardous Polymerization → May Occur / Will Not Occur X

Conditions to Avoid
N/A

SECTION VI - Health Hazard Data

Routes of Entry →	Inhalation?	Skin?	Ingestion?
	YES	YES	UNLIKELY

Health Hazards (Acute and Chronic)

Asphyxiant. May reduce oxygen required for breathing. Liquid gas may freeze skin.

Carcinogenicity →	NTP?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	NO

Signs and Symptoms of Exposure

Dizziness to unconsciousness if high concentrations of gas replace oxygen for breathing.

Medical Conditions Generally Aggravated by Exposure

N/A

Emergency and First Aid Procedures

Remove person to fresh air. If unconscious, seek medical attention.

Warning

This fuel, and byproducts of combustion of this fuel, contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

SECTION VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Remove all ignition sources. Ventilate area.

Waste Disposal Method

Vent to atmosphere in outdoor area free of all sources of ignition.

Precautions to be Taken in Handling and Storing

Store in well ventilated area away from all ignition sources.
Store at temperatures below 125° F. Store out of direct sunlight.

Other Precautions

N/A

SECTION VIII - Control Measures

Respiratory Protection (Specify Type)

Not required with normal use.

Ventilation →	Local Exhaust	Mechanical (General)	Special	Other
	Advisable when welding.	N/A	N/A	N/A

Protective Gloves	Eye Protection
Advisable when welding.	Use filter shade No. 4 or darker when welding.

Other Protective Clothing or Equipment

N/A

Work / Hygienic Practices

N/A

SECTION IX - Shipping Information

WHMIS Classification: A - Compressed Gas & B1 - Flammable Gas | **Class:** 2.1

DOT	Proper Shipping Name	Hazard Classification	UN. No.
	Methyl Acetylene and Propadiene Mixtures, Stabilized	Flammable Gas	1060

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OSHA 174, Sept. 1985

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Identity (As Used on Label and List)

PROPANE

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1

Supplier's Name
Bernz-O-matic

Address
Number, Street, City, State and ZIP Code

One BernzOmatic Drive
Medina, NY 14103

Emergency Telephone Number
800-424-9300

Telephone Number for Information
800-654-9011

Date Prepared
June 11, 2008

Signature of Preparer *(Optional)*

SECTION II - Hazardous Ingredients / Identity Information

Hazardous Components *Specific Chemical Identity, Common Name(s)*	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
PROPANE CAS #74-98-6	1000PPM	1000PPM	NA	100

NFPA HAZARD RATINGS
Health -1
Flammability -4
Reactivity -0

HMIS RATINGS
Health -0
Flammability -4
Reactivity -0

Note: When propane fuel is burned efficiently, the normal by-products of combustion are CO_2 and H_20. Inefficient burning may add CO to the by-products of combustion.

SECTION III - Physical / Chemical Characteristics

Boiling Point
-44° F

Specific Gravity (H_20 - 1)
Liquid @ 60° F .51

Vapor Pressure (mm Hg)
@ 100° F 197 psig

Melting Point
N/A

Vapor Density (AIR=1)
@ 1 ATM @ 60° F 1.56

Evaporation Rate
Butyl Acetate -1) N/A

Solubility in Water
Not Soluble

Appearance and Odor
Colorless - Rotten Egg Odor

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
-156° F Closed Cup		2.1	9.5

Extinguishing Media
Stop flow of gas or oxygen

Special Fire Fighting Procedures
Use water to cool tanks

Unusual Fire and Explosion Hazards Auto Ignition temp. 842° F Heavier than air (vapor density 1.5). May travel a considerable distance to a source of ignition and flashback.

SECTION V - Reactivity Data

Stability → Unstable / Stable X

Conditions to Avoid
N/A

Incompatibility (Materials to Avoid)
N/A

Hazardous Decomposition or Byproducts
None

Hazardous Polymerization → May Occur / Will Not Occur X

Conditions to Avoid
N/A

SECTION VI - Health Hazard Data

Routes of Entry →	Inhalation?	Skin?	Ingestion?
	YES	YES	NO

Health Hazards (Acute and Chronic)

Contact with liquid propane may cause frost burns.

Carcinogenicity →	NTP?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	N/A

Signs and Symptoms of Exposure

High concentrations may cause headaches and drowsiness.

Medical Conditions Generally Aggravated by Exposure

N/A

Emergency and First Aid Procedures

Remove exposed person from contaminated area.

Warning

This fuel, and byproducts of combustion of this fuel, contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

SECTION VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Remove ignition sources and ventilate area.

Waste Disposal Method

Vent gas to atmosphere in flame free, spark free area outdoors.

Precautions to be Taken in Handling and Storing

Store at temperatures below 120° F in well ventilated, spark free, flame free area.

Other Precautions

None

SECTION VIII - Control Measures

Respiratory Protection (Specify Type)

Not required with normal use.

Ventilation →	Local Exhaust	Mechanical (General)	Special	Other
	N/A	N/A	N/A	N/A

Protective Gloves	Eye Protection
Not required	Not required

Other Protective Clothing or Equipment

Not required

Work / Hygienic Practices

N/A

SECTION IX - Shipping Information

WHMIS Classification: A - Compressed Gas & B1 - Flammable Gas		Class: 2.1	
DOT	**Proper Shipping Name**	**Hazard Classification**	**UN. No.**
	Petroleum Gas, Liquefied	Flammable Gas	1075

3M

Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EPS-300 HEAT SHRINK TUBING
MANUFACTURER: 3M
DIVISION: Electrical Markets Division

ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 03/30/09
Supercedes Date: Initial Issue

Document Group: 26-5669-2

Product Use:

Intended Use: Electrical
Specific Use: Electrical insulation for wires and cables.

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
EVA COPOLYMER	24937-78-8	0 - 40
FLAME RETARDANT	Trade Secret	10 - 35
POLYMER	Trade Secret	10 - 25
ADDITIVE	Trade Secret	5 - 15
POLYMER WITH ETHENE	Trade Secret	5 - 15
ACID POLYMER	Trade Secret	5 - 15
PIGMENT	Trade Secret	1 - 15
INSULATOR	Trade Secret	1 - 10
VULCANIZATION CATALYST	Trade Secret	1 - 10
VULCANIZING AGENT	Trade Secret	1 - 10
BLEACHING AGENT	Trade Secret	1 - 10
RED PIGMENT	Trade Secret	0 - 5
COPOLYMER	25087-34-7	0 - 5
METAL DEACTIVATOR	Trade Secret	0 - 5
ANTIOXIDANT	Trade Secret	0 - 5
UV RESISTER	Trade Secret	0 - 5
LIMESTONE	Trade Secret	0 - 5
PLASTIC	Trade Secret	0 - 5
COLORING AGENT	Trade Secret	0 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: different lengths and diameters and colors of tubing
Odor, Color, Grade: Tubing, various sizes, colors
General Physical Form: Solid
Immediate health, physical, and environmental hazards:

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:
No health effects are expected.

Inhalation:
Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion:
No health effects are expected.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: No need for first aid is anticipated.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	*No Data Available*
Flash Point	*No Data Available*
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
OSHA Flammability Classification:	Not Applicable

5.2 EXTINGUISHING MEDIA
Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: See Hazardous Decomposition section for products of combustion. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable. No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Not applicable.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
Avoid eye contact with vapors, mists, or spray. Avoid skin contact with hot material. Do not breathe vapors. Avoid breathing of fumes. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Wash hands after handling and before eating. Avoid contact with oxidizing agents. For industrial or professional use only.

7.2 STORAGE
Store away from heat. Store in a cool, dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
If exhaust ventilation is not available, use appropriate respiratory protection. Provide appropriate local exhaust when product is heated.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection
Avoid skin contact with hot material. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

8.2.3 Respiratory Protection
Avoid breathing of fumes. Do not breathe vapors.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece air-purifying respirator with organic vapor/acid gas cartridges and P95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	different lengths and diameters and colors of tubing
Odor, Color, Grade:	Tubing, various sizes, colors
General Physical Form:	Solid
Autoignition temperature	*No Data Available*
Flash Point	*No Data Available*
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*
Boiling point	*Not Applicable*
Vapor Density	*Not Applicable*
Vapor Pressure	*Not Applicable*
Specific Gravity	*No Data Available*
Melting point	*No Data Available*
Solubility In Water	*Not Applicable*
Solubility in Water	Nil
Volatile Organic Compounds	*Not Applicable*
Percent volatile	*Not Applicable*
VOC Less H2O & Exempt Solvents	*Not Applicable*
Viscosity	*Not Applicable*

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	Condition
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in the presence of a combustible material in an industrial or commercial facility capable of handling halogenated waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):
80-6102-9452-4, 80-6102-9453-2, 80-6102-9454-0, 80-6102-9455-7, 80-6102-9456-5, 80-6102-9457-3, 80-6102-9458-1, 80-6106-1066-1, 80-6106-1067-9, 80-6106-1068-7, 80-6106-1069-5, 80-6106-4542-8, 80-6106-4633-5, 80-6106-4638-4, 80-6106-4639-2, 80-6106-4640-0, 80-6106-4682-2, 80-6106-4731-7, 80-6106-4733-3, 80-6106-4736-6, 80-6106-4737-4, 80-6106-4738-2, 80-6106-4739-0, 80-6106-4740-8, 80-6106-4741-6, 80-6106-4742-4, 80-6106-4990-9, 80-6106-7605-0, 80-6106-7969-0, 80-6107-5099-6, 80-6107-5100-2, 80-6107-5101-0, 80-6107-5546-6, 80-6107-5547-4, 80-6107-6638-0, 80-6107-6755-2, 80-6107-6810-5, 80-6107-6812-1, 80-6107-6814-7, 80-6107-6816-2, 80-6107-6818-8, 80-6107-6821-2, 80-6107-6823-8, 80-6107-6824-6, 80-6107-6826-1, 80-6107-6827-9, 80-6107-8339-3, 80-6107-8493-8, 80-6107-8494-6, 80-6107-8495-3, 80-6107-8496-1, 80-6107-8497-9, 80-6107-8498-7, 80-6107-8499-5, 80-6107-8566-1, 80-6107-8657-8, 80-6107-8776-6, 80-6107-8777-4, 80-6107-8778-2, 80-6107-8779-0, 80-6107-8780-8, 80-6107-8781-6, 80-6107-8782-4, 80-6108-1934-6, 80-6108-1939-5, 80-6108-1940-3, 80-6108-2005-4, 80-6108-2006-2, 80-6108-2007-', 80-6108-2028-6, 80-6108-2099-7, 80-6108-2284-5, 80-6108-2285-2, 80-6108-2286-0, 80-6108-2343-9, 80-6108-2353-8, 80-6108-2355-3, 80-6108-2434-6, 80-6108-2436-1, 80-6108-2460-1, 80-6108-2479-1, 80-6108-2480-9, 80-6108-2481-7, 80-6108-2482-5, 80-

6108-2484-1, 80-6108-5437-6, 80-6108-5589-4, 80-6108-5652-0, 80-6108-5794-0, 80-6108-5828-6, 80-6108-5829-4, 80-6108-583(2, 80-6108-5831-0, 80-6108-5832-8, 80-6108-5854-2, 80-6109-0504-6, 80-6109-0514-5, 80-6109-0538-4, 80-6109-0623-4, 80-6109- 0692-9, 80-6109-0699-4, 80-6109-0806-5, 80-6109-0872-7, 80-6109-0873-5, 80-6109-0936-0, 80-6109-0937-8, 80-6109-0938-6, 80-6109-0939-4, 80-6109-5522-3, 80-6109-5541-3, 80-6109-5735-1, 80-6109-5736-9, 80-6109-5737-7, 80-6109-5738-5, 80-6109-5739-3, 80-6109-5740-1, 80-6109-5741-9, 80-6109-5742-7, 80-6109-5743-5, 80-6109-5744-3, 80-6109-5903-5, 80-6109-5955-5, 80-6109-5974-6, 80-6110-0197-7, 80-6110-0344-5, 80-6110-0363-5, 80-6110-0437-7, 80-6110-0491-4, 80-6110-0516-8, 80-6110-7138-4, 80-6110-7139-2, 80-6110-7140-0, 80-6110-7141-8, 80-6110-7142-6, 80-6110-7143-4, 80-6110-7144-2, 80-6110-7145-9, 80-6110-7201-0, 80-6110-7202-8, 80-6110-7215-0, 80-6110-7238-2, 80-6110-7270-5, 80-6110-7284-6, 80-6110-7291-1, 80-6110-7292-9, 80-6110-7295-2, 80-6110-7296-0, 80-6110-7297-8, 80-6110-7322-4, 80-6110-7421-4, 80-6110-7434-7, 80-6110-7452-9, 80-6110-7479-2, 80-6110-7480-0, 80-6110-7815-7, 80-6110-7817-3, 80-6110-7818-1, 80-6110-7819-9, 80-6110-7863-7, 80-6110-7864-5, 80-6110-7866-0, 80-6110-7867-8, 80-6110-7869-4, 80-6110-7871-0, 80-6110-7873-6, 80-6110-7874-4, 80-6110-7889-2, 80-6110-7901-5, 80-6110-7904-9, 80-6110-7907-2, 80-6112-6259-5, 80-6112-6430-2, 80-6112-6548-1, 80-6112-6549-9, 80-6112-6550-7, 80-6112-6551-5, 80-6112-6554-9, 80-6112-6568-9, 80-6112-6569-7, 80-6112-6832-9, 80-6114-1946-8, 80-6114-2491-4, 80-6114-2680-2, 80-6114-2727-1, 80-6114-2740-4, 80-6114-2775-0, 80-6114-2776-8, 80-6114-2786-7, 80-6114-2787-5, 80-6114-2788-3, 80-6114-2888-1, 80-6114-2932-7, 80-6114-2933-5, 80-6114-3610-8, 80-6114-3958-1, 80-6114-4055-5, 80-6114-4077-9, 80-6114-4078-7

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
PIGMENT (ANTIMONY COMPOUNDS)	Trade Secret	1 - 15
VULCANIZATION CATALYST (ZINC COMPOUNDS)	Trade Secret	1 - 10

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 1 **Flammability:** 1 **Reactivity:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

No revision information is available.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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3M MSDSs are available at www.3M.com

MATERIAL SAFETY DATA SHEET

Product name: **HIT-HY 20**

Description: Methacrylate resin and hardener. Part A is in the large tube; Part B is in the small one.

Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121

Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:		CAS Number:	TLV:	PEL:	STEL:
Part A:	Urethane Methacrylate Resin	NJ TSRN: 19136100-5001	NE	NE	NE
	Bonding agent	NJ TSRN: 19136100-5003	10 mg/m^3 (N)	NE	NE
	Methacrylate ester	NJ TSRN: 19136100-5005	NE	NE	NE
	Fly ash	068131-74-8	10 mg/m^3 (N)	NE	NE
	Butyric acid ester	NJ TSRN: 19136100-5002	NE	NE	NE
	Synthetic amorphous silica	067762-90-7	2 mg/m^3	NE	NE
Part B:	Fly ash	068131-74-8	10 mg/m^3 (N)	NE	NE
	Dibenzoyl peroxide	000094-36-0	5 mg/m^3	5 mg/m^3	NE
	Amorphous silica	007631-86-9	10 mg/m^3 (N)	20 mppcf	NE
	Dipropylene glycol	025265-71-8	NE	NE	NE
	Polyethylene	009002-88-4	NE	NE	NE
	Water	007732-18-5	NE	NE	NE

Abbreviations: **NJ TSRN** indicates New Jersey Trade Secret Registry Number. **N** indicates "as nuisance dust". **PEL** = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **STEL** = Short Term Exposure Limit. **NE** = None Established. **NA** = Not Applicable. **mppcf** = million particles per cubic foot.

PHYSICAL DATA

Appearance and Odor:	Gray paste. Ester-like odor.	**VOC Content**	37.1 g/l
Boiling Point:	Not determined.	**Vapor Pressure:**	Not determined.
Vapor Density:	Not applicable.	**Odor Threshold:**	Not determined.
Evaporation Rate:	Not determined.	**Solubility in Water:**	Part B is soluble.
Specific Gravity:	Part. A: 1.2; Part. B: 0.9	**pH:**	5 (Part B)

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	> 200° F	**Flammable Limits:**	Not applicable.
Extinguishing Media:	Carbon Dioxide, Dry Chemical, Foam, Water.		
Special Fire Fighting Procedures:	Soak cartons to help prevent the spread of fire. Use a self-contained breathing apparatus when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed.		

REACTIVITY DATA

Stability:	Dibenzoyl peroxide decomposes (non-violently) at 150° F. Ignition does not occur due to the > 5% water content.
Hazardous Polymerization:	Will not occur
Incompatibility:	Strong acids, peroxides, and amines. Do not store in direct sunlight.
Hazardous Decomposition Products:	Thermal decomposition can yield CO and CO_2.
Conditions to Avoid:	Temperature extremes will shorten product shelf life; i.e. below freezing / above 100° F.

HEALTH HAZARD DATA

Known Hazards:	Can cause irritation. Possible sensitization.
Signs and Symptoms of Exposure:	**Eyes:** Can cause irritation. Corneal injury is not expected. **Skin:** Prolonged and repeated contact can cause irritation. An allergic skin reaction (e.g. rash, itching, reddening) can occur with some individuals; e.g. itching, redness, swelling, etc. **Inhalation:** No ill effects expected. Irritation is possible. **Ingestion:** Not a likely route of exposure. Considered to have a low acute oral toxicity.

Routes of Exposure:	Dermal.
Carcinogenicity:	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure:	Eye, skin, and respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush with plenty of water. Call a physician if symptoms occur.
Skin:	Wash with soap and water. Launder contaminated clothing before reuse.
Inhalation:	Move victim to fresh air. Call a physician if symptoms persist.
Ingestion:	Seek medical attention. Do not induce vomiting unless directed by a physician. Never give anything by mouth to an unconscious person.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Safety glasses with side shields recommended.
Skin Protection:	Impermeable (neoprene or rubber) gloves recommended.
Respiratory Protection:	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air-supplied respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool, dry area preferably between 40° and 77° F. Do not store in direct sunlight. Keep away from open flames, heat sources and sparks. Avoid prolonged or repeated contact. Use with adequate ventilation. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children.
Spill Procedures:	Cover with an absorbent material and place in a salvage container for proper disposal. If possible, mix parts A and B and allow product to cure (harden).

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 1, Reactivity 1, PPE B
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Urethane methacrylate resin – USEPA Accession Number 238392. All other chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 10 - 15% Benzoyl peroxide (CAS # 94-36-0), which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	**Technical Service:**	1 800 879 8000
Health / Safety:	1 800 879 6000 Jerry Metcalf (x6704)		
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

MATERIAL SAFETY DATA SHEET

Product name:	**HIT HY 150**
Description:	Methacrylate resin and hardener. Part A is in the large tube; Part B is in the small one.
Supplier:	Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:		CAS Number:	TLV:	PEL:	STEL:
Part A:	Urethane methacrylate resin	NJ TSRN: 19136100-5001	NE	NE	NE
	Methacrylate ester	NJ TSRN: 19136100-5005	NE	NE	NE
	Hydroxypropyl methacrylate	27813-02-1	NE	NE	NE
	Quartz sand	14808-60-7	0.05 mg/m^3 (R)	0.1 mg/m^3 (R)	NE
	Bonding agent	NJ TSRN: 19136100-5003	10 mg/m^3 (N)	NE	NE
	Synthetic amorphous silica	67762-90-7	2 mg/m^3	NE	NE
Part B:	Quartz sand	14808-60-7	0.05 mg/m^3 (R)	0.1 mg/m^3 (R)	NE
	Water	07732-18-5	NE	NE	NE
	Dibenzoyl peroxide	00094-36-0	5 mg/m^3	5 mg/m^3	NE
	Amorphous silica	07631-86-9	10 mg/m^3 (N)	20 mppcf	NE
	Dipropylene glycol	25265-71-8	NE	NE	NE
	Polyethylene	09002-88-4	NE	NE	NE

Abbreviations: **NJ TSRN** indicates New Jersey Trade Secret Registry Number. **(R)** indicates "as respirable dust". **(N)** indicates "as nuisance dust". **PEL** = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **STEL** = Short Term Exposure Limit (15 minute time-weighted average). **NE** = None Established. **mppcf** = million particles per cubic foot.

PHYSICAL DATA

Appearance and Odor:	Gray paste. Ester-like odor.	**VOC Content**	35.7 g/l
Boiling Point:	Approx. 212º F	**Vapor Pressure:**	Not determined
Vapor Density: (air = 1)	Not determined	**Odor Threshold**	Not Determined
Evaporation Rate:	Not applicable	**Solubility in Water:**	Part B is soluble
Specific Gravity:	1.7	**pH:**	6 - 7

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	> 200° F	**Flammable Limits:**	Not applicable
Extinguishing Media:	CO_2, Dry Chemical, Foam, Water		
Special Fire Fighting Procedures:	Soak cartons to help prevent the spread of fire. Use a self-contained breathing apparatus when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed.		

REACTIVITY DATA

Stability:	Dibenzoyl peroxide decomposes (non-violently) at 150º F. Ignition does not occur due to the water content (> 5%).
Hazardous Polymerization:	Will not occur.
Incompatibility:	Strong acids and oxidizing agents. Do not store in direct sunlight.
Decomposition Products:	Thermal decomposition can yield CO, CO_2 and NO_x.
Conditions to Avoid:	Avoid temperature extremes which could shorten the shelf-life of this product; i.e. below freezing and above 100º F. (See handling and storage requirements).

HEALTH HAZARD DATA

Known Hazards:	Eye and skin irritation. Possible sensitizer.
Signs and Symptoms of Exposure:	**Eyes:** can cause irritation. **Skin:** Prolonged and repeated contact can cause irritation. An allergic skin reaction (e.g. rash, itching, reddening) can occur with some individuals. **Inhalation:** Possible irritation. **Ingestion:** Not a likely route of exposure. Considered to have a low acute oral toxicity.
Routes of Exposure:	Contact. Inhalation.
Carcinogenicity:	IARC classifies crystalline silica (quartz sand) as a Gp I carcinogen based upon evidence among

	workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant.
Medical Conditions Aggravated by Exposure:	Eye, skin, and respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush with plenty of water. Call a physician if symptoms occur.
Skin:	Wash with soap and water.
Inhalation:	Move victim to fresh air. Call a physician if symptoms persist.
Ingestion:	Contact a physician immediately. Do not induce vomiting unless directed by a physician.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Safety glasses with side shields.
Skin Protection:	Impermeable gloves recommended.
Respiratory Protection:	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air supplied respirator. If dusts are generated during demolition or removal, wear an appropriate dust mask or respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool, dry area preferably between 40º and 77º F. Do not store in direct sunlight. Keep away from open flames, heat sources and sparks. Avoid prolonged or repeated contact. Use with adequate ventilation. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children.
Spill Procedures:	Take up with an absorbent material and place in a container for proper disposal.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard. 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 1, Reactivity 1, PPE B
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Urethane methacrylate resin – USEPA Accession Number 238392. All other chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 5 - 10% Benzoyl peroxide (CAS #94-36-0) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	**Technical Service:**	1 800 879 8000
Health / Safety:	1 800 879 6000 Jerry Metcalf (x6704)		
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

MATERIAL SAFETY DATA SHEET

Date stamp: 13-Jun-2006 **MSDS Ref. No.:** 054201010 **Revision Number:** 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: TotalKill™ (BRAND) Wasp & Hornet Killer Aerosol
Description: Insecticide

Company
The Scotts Company
14111 Scottslawn Road
Marysville, OH 43041

24-HOUR EMERGENCY TELEPHONE NUMBERS:
CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-937-644-0011

EPA Registration No.: 1021-1775-239
Formula No.: S11988

2. HAZARDS IDENTIFICATION

Labelling
Signal word: CAUTION

Precautionary Statement Harmful if absorbed through the skin or inhaled. Avoid breathing vapors. Avoid contact with eyes, skin, and clothing. Keep out of reach of children.

Potential health effects
Eye contact: Contact with eyes may cause irritation.
Skin contact: Irritation not expected.
Ingestion: Ingestion may cause irritation to mucous membranes.
Inhalation: May irritate respiratory tract tissues.

Aggravated Medical Conditions: Inhalation may aggravate asthma.
Principle routes of exposure: Skin, Eyes, Inhalation
Target organ effects: Irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No	Weight %
Tetramethrin	7696-12-0	0.2
Sumithrin (Phenothrin)	26002-80-2	0.2
Other Ingredients	No CAS#	99.6

Comments: Contains petroleum distillates.

4. FIRST AID MEASURES

Eye contact: Hold eye open and rins slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so be a poison control center or doctor. Do not give anything by mouth to an unconscious person

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferabley by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice

Notes to physician: Aspiration may cause pulmonary oedema and pneumonitis.

5. FIRE-FIGHTING MEASURES

Flammable properties: N.F.P.A. (Code 30B) Level I Aerosol.
Suitable extinguishing media: carbon dioxide (CO2). dry chemical. foam.

5. FIRE-FIGHTING MEASURES

Explosion potential: Closed containers may rupture violently under fire conditions.
Hazardous combustion products: Toxic fumes may be produced.
Specific hazards: No information available.
Fire fighting procedures: Select appropriate method to surround and extinguish fire.
Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear personal protective equipment
Environmental precautions: Prevent product from entering drains
Methods for containment: Control spill with dykes and absorb with inert absorbant material
Methods for cleaning up: Detergent and water.

7. HANDLING AND STORAGE

Handling: Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not use around electrical equipment due to possible electrical shock hazard.

Storage: Store in a cool, dry area away from incompatible materials and heat sources. Do not store at temperatures above 130 F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	ACGIH:	OSHA:
Tetramethrin	Not Listed	Not Listed
Sumithrin (Phenothrin)	Not Listed	Not Listed

Engineering controls Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal Protective Equipment

Eye/face protection: Safety glasses with side shields or goggles.
Skin and body protection: Wear suitable protective clothing if contact is anticipated during manufacturing. Chemical resistant gloves.
Respiratory protection: If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.

General hygiene considerations: Wash hands and face before breaks and immediately after handling the product.. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Aerosol (liquified gases and liquid) **Solubility:** Soluble
Flash point: Does not flash

10. STABILITY AND REACTIVITY

Chemically Stable: Yes
Conditions to avoid: Keep away from heat and ignition sources.
Materials to avoid: Oxidising agents (strong).
Hazardous decomposition products: Toxic fumes and gases may be generated.
Possibility of hazardous reactions: Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50/oral: No information available
Eye effects: Contact with eyes may cause irritation
Skin effects: May cause skin irritation in susceptible persons
Sensitization: No information available

Chronic toxicity
Carcinogenic effects: The table below indicates whether each agency has listed any indgredient as a carcinogen.

Components	NTP:	IARC:	OSHA:
Tetramethrin	Not listed	Not listed	Not listed
Sumithrin (Phenothrin)	Not listed	Not listed	Not listed

Ingestion: Ingestion may cause irritation to mucous membranes.
Inhalation: Possible irritation of the respiratory tract.
Target organ effects: Irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects: No data is available on the product itself. May be toxic to aquatic organisms.
Persistence and degradability: Inherently biodegradable.
Bioaccumulative potential: No information available.
Mobility: Water contaminating.
Aquatic toxicity: Toxicity to fish.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: If partially filled, call the local solid waste agency or 1-800-CLEANUP for disposal instructions. Do not puncture or incinerate container. Do not place product down any indoor or outdoor drain.
Contaminated packaging: If empty, place in trash or offer for recycling if available.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT
Proper shipping name: Consumer Commodity, ORM-D

15. REGULATORY INFORMATION

Components	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Tetramethrin	7696-12-0	Not Listed	Not Listed
Sumithrin (Phenothrin)	26002-80-2	Not Listed	Not Listed

General Information Contact local authorities for disposal of large quantities of product

16. OTHER INFORMATION

NFPA: **Health:** 1 **Flammability:** 4 **Reactivity:** 1

HMIS: **Health:** 1 **Flammability:** 4 **Reactivity:** 1

Hazard Rating: 0=Least; 1-Slight; 2=Moderate; 3=High; 4=Severe

EPA FIFRA Comment: Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved product label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

Additional Information: This information contained herein is, to the best of Scott's knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Scotts shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Scotts shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NUMBER(s): CP8-TB, CP16, CP128, 201-31879, 201-31879-1

PRODUCT DESCRIPTION: ANTI-SIEZE AND CONDUCTIVE COMPOUND PROTECTS AGAINST RUST AND CORROSION

REVISION: 2

DATE PREPARED: April 11, 2006

DOCUMENT NUMBER: MSDS-0025

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: * KOPR-SHIELD®
GENERAL USE: CONDUCTOR TERMINATION COMPOUND AND MIL A-907E ANTI-SIEZE LUBRICANT
PRODUCT DESCRIPTION: ANTI-SIEZE AND CONDUCTIVE COMPOUND, PROTECTS AGAINST RUST AND CORROSION
GENERIC INGREDIENT: PETROLEUM BASED LUBRICATING GREASE WITH COPPER FILLINGS

* TM of JET-LUBE INC.

24 HOUR EMERGENCY TELEPHONE NUMBERS: CHEMTREC (703) 527-3887 / (800) 424-9300
FOR PRODUCT INFORMATION: CALL THOMAS & BETTS; (901) 252-5000 ext. 8324

SECTION 2 HAZARDOUS INGREDIENTS

OSHA HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% BY WT	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA PEL	OTHER LIMITS OF EXPOSURE
PETROLEUM OIL	64742-57-0 64742-62-7	40 – 60	N/A	N/A	10 mg/m^3	OIL MIST TWA - 5 mg/m^3	STEL: 10 mg/m^3
COPPER POWDER	7440-50-8	30 – 40	N/A	N/A	10 mg/m^3	1 mg/m^3	TEL: 2 mg/m^3
ALKYLENE CARBONATE	108-32-7	0 – 1	N/A	N/A	N/A	TWA - 5 mg/m^3	N/A
BENTONE	68953-58-2	2 – 5	N/A	N/A	N/A	N/A	N/A

N/A = NOT AVAILABLE

SECTION 3 HEALTH INFORMATION & PROTECTION

CARCINOGENCITY

NTP? NONE LISTED
IARC MONOGRAPHS? NO EVALUATION
OSHA REGULATED? NOT REGULATED

ROUTES OF ENTRY

EYES? YES
INGESTION? YES
INHALATION? NO
SKIN? YES

EMERGENCY OVERVIEW

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NUMBER(s): CP8-TB, CP16, CP128, 201-31879, 201-31879-1

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REVISION: 2

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HEALTH HAZARDS

ACUTE: REDNESS AND IRRITATION OF THE SKIN. REPEATED SKIN CONTACT FOR PERSONS HYPERSENSITIVE TO PETROLEUM PRODUCTS CAN CAUSE REDNESS AND IRRITATION OF SKIN

CHRONIC: NONE KNOWN

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: MAY CAUSE IRRITATION TO THE EYE(S)

INGESTION: NONE KNOWN

INHALATION: NONE KNOWN

SKIN: MAY IRRITATE THE SKIN

POTENTIAL HEALTH EFFECTS

EYES CONTACT: MAY CAUSE IRRITIATION

INGESTION: MAY CAUSE DIARRHEA

INHALATION: VISCOUS NATURE MAY BLOCK BREATHING PASSAGES IF INHALED

SKIN CONTACT: MAY IRRITATE THE SKIN AFTER PROLONGED PERIODS OF CONTACT

FIRST AID MEASURES

EYES CONTACT: REMOVE CONTACT LENS AND RINSE THE AFFECTED EYE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION

INGESTION: WASH OUT MOUTH IMMEDIATELY. SEEK MEDICAL ATTENTION IMMEDIATELY

INHALATION: CLEAR AIR PASSAGES. IF RESPIRATORY DIFFICULTY CONTINUES, SEEK MEDICAL ATTENTION IMMEDIATELY

SKIN CONTACT: WASH THOROUGHLY WITH HAND CLEANER, FOLLOWED BY SOAP AND WATER. ALL CONTAMINATED CLOTHING SHOULD BE DRY CLEANED BEFORE REUSE. IF REDNESS OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

NONE KNOWN

WORKPLACE EXPOSURE CONTROLS

NONE REQUIRED

ENGINEERING / VENTILATION CONTROLS

NONE REQUIRED

PERSONAL PROTECTION

EYE PROTECTION: SAFETY GLASSES OR GOGGLES, IF APPLIED TO MOVING PARTS IN MOTION

HAND PROTECTION: PROTECTIVE GLOVES FOR HYPERSENSITIVE PERSONS

RESPIRATORY PROTECTION: NONE REQUIRED

SKIN PROTECTION: GLOVES, OVERALLS, APRON AND/OR LONG SLEEVES CLOTHING TO PROTECT THE SKIN

VENTILATION: NONE REQUIRED

WORK/HYGIENIC:

SECTION 4 FIRE & EXPLOSION HAZARDS

AUTO-IGNITION TEMPERATURE: > 680° F (360° C)

EXPLOSION DATA:

EXPLOSIVE PROPERTY: LEL: 0.9% UEL: 7.0%

EXTINGUISHING MEDIA: FOAM, DRY POWDER, HALON, CARBON DIOXIDE, SAND, EARTH AND WATER MIST

UNSUITABLE EXTINGUISHING MEDIA: WATER JET

GENERAL FIRE HAZARDS:

FIRE FIGHTING: USE SELF-CONTAINED BREATHING APPARATUS

FLAMMABILITY CLASSIFICATION:

FLASH POINT: > 560° F (293° C)

RATE OF BURN:

HAZARDOUS COMBUSTION PRODUCTS:

SECTION 5 SPILL CONTROL MEASURES

PERSONAL PROTECTION: WEAR GLOVES & PROTECTIVE OVERALLS

CLEAN-UP PROCEDURES: SCRAPE UP BULK. THEN WIPE UP REMAINDER WITH CLOTH AND PICK UP REMAINING RESIDUE WITH DIATOMACEOUS EARTH TO AVOID A WALKING HAZARD

NEUTRALIZING AGENT: NONE

ENVIRONMENTAL PRECAUTIONS: DO NOT ALLOW IT TO ENTER DRAINS

DISPOSAL: DO NOT INCINERATE. CONTACT WASTE DISPOSAL COMPANY OR LOCAL AUTHORITY FOR ADVICE.

CONTAINER DISPOSAL: PAIL WITHOUT PLASTIC LINER AND PLASTIC LINERS: DO NOT INCINERATE. CONTACT WASTE DISPOSAL COMPANY OR LOCAL AUTHORITY FOR ADVICE

PAILS WITH PLASTIC LINER: PAIL CAN BE DISPOSED OF VIA STANDARD WASTE DISPOSAL SERVICES, RECYCLED OR REUSED.

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NUMBER(s): CP8-TB, CP16, CP128, 201-31879, 201-31879-1

PRODUCT DESCRIPTION: ANTI-SIEZE AND CONDUCTIVE COMPOUND PROTECTS AGAINST RUST AND CORROSION

REVISION: 2

DATE PREPARED: April 11, 2006

DOCUMENT NUMBER: MSDS-0025

SECTION 6 HANDLING & STORAGE

HANDLING PROCEDURES: NO HANDLING PRECAUTIONS NECESSARY

STORAGE PROCEDURES: DO NOT STORE AT ELEVATED TEMPERATURES

LABELING: NONE NEEDED

SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: SEMI-SOLID PASTE

BOILING POINT, °F (°C): > 700° F (370° C)

FLAMMIBILITY: NOT FLAMMABLE AT AMBIENT TEMPERATURES

ODOR: PETROLEUM

PERCENT, VOLATILE BY VOLUME: NIL

PH: NEUTRAL

SOLUBILITY IN WATER 68° F (20° C): NIL

SOFTENING POINT (FINISH) N/A

VAPOR DENSITY (AIR = 1): > 5

VISCOSITY: N/A

AUTO-IGNITION TEMPERATURE: > 680° F (360° C)

COLOR: COPPER

EVAPORATIVE RATE (Butyl Acetate): < 0.01

FREEZING POINT: N/A

MELTING POINT: N/A

OXIDIZING PROPERTIES: NONE

N/A

PERCENT, SOLIDS BY WEIGHT:

PHYSICAL STATE: N/A

SOLUBILITY IN ORGANIC SOLVENT: N/A

SOFTENING POINT (BASE METAL): N/A

SPECIFIC GRAVITY (H_2O = 1): 1.20

VAPOR PRESSURE (mm Hg): < 0.01

VOC CONTENT (lbs/gal): NIL

SECTION 8 REACTIVITY DATA

CHEMICAL STABILITY: CHEMICAL STABILITY UNDER NORMAL CONDITIONS. CONTAINS NO PHOTOREACTIVE AGENTS

CONDITIONS TO AVOID: POWERFUL SOURCE OF IGNITION

INCOMPATIBLE MATERIALS: STRONG INORGANIC AND ORGANIC ACIDS AND OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: BURNING GENERATES SMOKE, AIRBORNE SOOT, HYDROCARBONS AND OXIDES OF CARBON. RESIDUE MAINLY COMPRISED OF SOOT AND METAL OXIDES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 9 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORATION (DOT)

PROPER SHIPPING NAME: NOT REGULATED

I.A.T.A CLASSIFICATION

PROPER SHIPPING NAME: NOT REGULATED

U.S. FEDERAL REGULATIONS

TSCA: THE PRODUCT COMPONENTS ARE ON THE EPA TSCA INVENTORY.

CERCLA: THE PRODUCT IS *NOT* CLASSIFIED AS A HAZARDOUS SUBSTANCE UNDER REGULATIONS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA), 40 CFR §302.

RCRA HAZARD CLASS THE PRODUCT IS *NOT* CLASSIFIED AS A HAZARDOUS WASTE UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT, OR ITS REGULATIONS, 40 CFR §261 et seq.

CLEAN AIR ACT: THE PRODUCT IS NOT PROCESSED WITH OR DOES NOT CONTAIN ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

SARA TITLE III INFORMATION

SECTION 302: N/A

SECTION 311 / 312: THE FOLLOWING COMPONENT(s) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT; NONE

SECTION 313: THE FOLLOWING COMPONENT(s) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT;

HAZARDOUS COMPONENTS	CAS #	% BY WT
COPPER POWDER	7440-66-6	30 – 40

STATE REGULATIONS / RIGHT-TO-KNOW

CALIFORNIA PROPOSITION 65 INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(s) KNOWN TO BE ON THE CA PROP. 65 LIST; NONE

INTERNATIONAL

WHMIS (CANADA): THE CHEMICAL(s) LISTED ARE CONSIDERED CONTROLLED PRODUCT(s): NONE

CANADIAN LABEL CLASSIFICATION REQUIRED ON CONTAINER(s): NONE

SECTION 10 NOTES

TOXILOGICAL INFORMATION

ACUTE TOXICITY: NOT KNOWN

CHRONIC TOXICITY: NONE KNOWN

GENOTOXICITY: NONE KNOWN

EC ANNEX 1 CLASSIFICATION: NOT APPLICABLE

R PHRASES: R22 – HARMFUL IF SWALLOWED

ALLERGENS: NONE KNOWN

CARCINOGENS: NONE

IRRITANCY – SKIN VERY MILD

EC CLASSIFICATION (67 /548 EEC): NO

S PHRASES: NONE APPLICABLE, AS KNOWN

SKIN SENSITIZATION: NOT KNOWN

SUB-ACUTE / SUB-CHRONIC TOXICITY: NOT KNOWN

LC-50: 1.98 g/l, (MYSIDOPSIS BAHIA) BASED ON ASSESSMENT FROM RELATED PRODUCTS.

LD-50: N/A

ECOLOGICAL INFORMATION

NO DATA AVAILABLE

HAZARD RATING SYSTEM

	HMIS	NPFPA	KEY
HEALTH	1	1	4 = SEVERE
FLAMMABILITY	1	1	3 = SERIOUS
REACTIVITY	1	1	2 = MODERATE
			1 = SLIGHT
			0 = MINIMAL

REVISION SUMMARY **2**

SUPERCEDES ISSUE DATE March 31, 2003

SECTION 11 OTHER INFORMATION

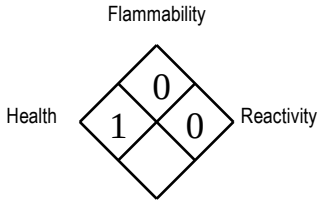
ABBREVIATIONS

N/E = NOT ESTABLISHED
N/A = NOT AVAILABLE

R PHRASES: R22 – HARMFUL IF SWALLOWED
S PHRASES: NONE APPLICABLE, AS KNOWN

T & B CATALOG NUMBERS: CP8-TB, CP16, CP128, 201-31879, 201-31879-1

Document # 6810-004



HMIS Rating

MATERIAL SAFETY DATA SHEET

GENERAL INFORMATION

PRODUCT NAME OR NUMBER (as it appears on label)	CATALOG NUMBER
ClearGlide™ Wire Pulling Lubricant	All "31" Series
MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
IDEAL INDUSTRIES, INC.	**(815) 895-5181**
ADDRESS (Number, Street, City, State, Zip Code)	
Becker Place, Sycamore, IL 60178	
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)	
None	
CHEMICAL DESCRIPTION	FORMULA
Polymer-based Mixture	Proprietary

SECTION I - INGREDIENTS

CAS REGISTRY NO.	%W	CHEMICAL NAME(S)*	Listed as a carcinogen in NTP, I ARC or OSHA 1910(z) (specify)
7732-18-5	<98	Water	No
6440-58-0	<1	DMDM Hydantoin	No
9038-95-3	<5	Oxirane, Methyl-, Polymer With Oxirane, Monobutyl Ether	No
9003-11-6	<1	Amino-Methyl-Propanol	No
25322-68-3	<1	Polyethylene Glycol	No
9003-01-4	<1	Carbomer Thickener	No
68037-64-9	<1	Silicone Glycol Blend	No

SECTION II - PHYSICAL DATA

BOILING POINT	SPECIFIC GRAVITY (H_2O=1)	PERCENT VOLATILE BY VOLUME (%)
212 °F °C	1.09	<98
SOLUBILITY IN WATER	pH =	PERCENT SOLID BY WEIGHT (%)
Infinite	7.0 - 8.0	~5
APPEARANCE AND ODOR		IS MATERIAL: LIQUID SOLID (GEL) GAS PASTE
Clear, colorless gel, slight odor		

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT None method used C.O.C	FLAMMABLE LIMITS	LEL	UEL
		None	None
EXTINGUISHING MEDIA			
Use extinguishing media suitable for surrounding materials.			
SPECIAL FIRE FIGHTING PROCEDURES			
None			
UNUSUAL FIRE AND EXPLOSION HAZARDS			
None			

* None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C. F. R 1910.1200

SECTION IV - HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - Conditions to Avoid None normally expected. Upon prolonged contact, may cause temporary eye discomfort.
THRESHOLD LIMIT VALUE N.E.
PRIMARY ROUTES OF ENTRY Inhalation ☐ Skin Contact ☒ Other (specify)
EMERGENCY FIRST AID PROCEDURES SKIN CONTACT: Wash with soap and water for 15 minutes.
EYE CONTACT: Flush with water for 15 minutes. Inhalation - Move to fresh air.
INGESTION: Administer water or milk. Consult physician or local poison control center.

SECTION V - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Avoid prolonged storage at temperatures exceeding 190 F.
	STABLE	X	
INCOMPATIBILITY (materials to avoid) Avoid strong oxidizers and nitrites.			
HAZARDOUS DECOMPOSTION PRODUCTS: Oxides of carbon, nitrogen and silicone			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID None
	WILL NOT OCCUR	X	

SECTION VI - SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED Wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery.	
WASTE DISPOSAL METHOD Comply with Federal, state or local regulations for solid landfill.	
CERCLA (Superfund) REPORTABLE QUANTITY (in lbs) N/A	
RCRA HAZARDOUS WASTE NO. (40CFR 261.33) N/A	
VOLATILE ORGANIC COMPOUND (VOC) (as packaged, minus water) 17.4 gms / ltr	
[3] Theoretical _____ lb/gal N/A	[3] Analytical _____ lb/gal N/A

SECTION VII - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type) None normally required.		
VENTILATION	LOCAL EXHAUST (Specify Rate) None	SPECIAL None
	MECHANICAL (General) (Specify Rate) Recommended in closed areas.	OTHER None
PROTECTIVE GLOVES (specify type) None normally	EYE PROTECTION (specify type) Safety glasses or splash goggles.	
OTHER PROTECTIVE EQUIPMENT Eye fountain in work area is recommended.		

SECTION VIII - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store at temperatures between 40 - 180 F. Avoid freezing.
OTHER PRECAUTIONS Keep away from children, infants and pets.

SECTION IX - ADDITIONAL INFORMATION

N/A = Not Applicable, N.E. = None Established

THIS MATERIAL SAFETY DATA SHEET PREPARED BY:	
NAME James R. MacMurdo	SIGNATURE 
TITLE Director, Corporate Quality Assurance	
DATE 02/11/2009	

Material Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company **Address: 1061 Cudahy Place (92110)** **P.O. Box 80607** **San Diego, California, USA** **92138 –0607** **Telephone:** **Emergency only: 1-888-324-7596 (PROSAR)** **Information: 1-888-324-7596** **Chemical Spills: 1-800-424-9300 (Chemtrec)** **1-703-527-3887 (International Calls)**	**Chemical Name: Organic Mixture** **Trade Name: WD-40 Aerosol** **Product Use: Cleaner, Lubricant** **MSDS Date Of Preparation: 3/16/07**

2 – Hazards Identification

Emergency Overview:
DANGER! Flammable aerosol. Contents under pressure. Harmful of fatal if swallowed. If swallowed, may be aspirated and cause lung damage. Avoid eye contact. Use with adequate ventilation. Keep away from heat, sparks and all other sources of ignition.

Symptoms of Overexposure:
Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
Eye Contact: Contact may be mildly irritating to eyes. May cause redness and tearing.
Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
Chronic Effects: None expected.
Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

Suspected Cancer Agent:
Yes No X

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Aliphatic Hydrocarbon	64742-47-8 64742-48-9 64742-88-7	45-50
Petroleum Base Oil	64742-65-0	15-25
LVP Aliphatic Hydrocarbon	64742-47-8	12-18
Carbon Dioxide	124-38-9	2-3
Non-Hazardous Ingredients	Mixture	<10

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.
Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.
Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.
Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.
Unusual Fire and Explosion Hazards: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.
Storage: Store in a cool, well-ventilated area, away from incompatible materials Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	100 ppm TWA (ACGIH) 1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV 5 mg/m3 TWA OSHA PEL
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA (OSHA/ACGIH), 30,000 ppm STEL (ACGIH)
Non-Hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product
Engineering Controls: Use in a well-ventilated area.
Personal Protection:
Eye Protection: Avoid eye contact. Always spray away from your face.
Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended
Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:
Eye Protection: Safety goggles recommended where eye contact is possible.
Skin Protection: Wear chemical resistant gloves.
Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.
Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Boiling Point:	323°F (minimum)	Specific Gravity:	0.817 @ 72°F
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	110 PSI @ 70°F	Vapor Density:	Greater than 1
Percent Volatile:	74%	VOC:	412 grams/liter (49.5%)
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	131°F (concentrate) Tag Closed Cup	Flammable Limits: (Solvent Portion)	LEL: 1.1% UE:: 8.9%

10 – Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.
Incompatibilities: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.
None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information_

DOT Surface Shipping Description: Consumer Commodity, ORM-D
IMDG Shipping Description: Un1950, Aerosols, 2.1, LTD QTY

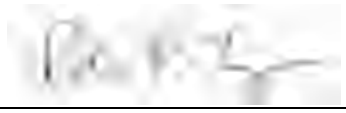
15 – Regulatory Information

U.S. Federal Regulations:
CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
SARA TITLE III:
Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.
VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.
Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification
Canadian WHMIS Classification: Class B-5 (Flammable Aerosol)
This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:
Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Reactivity – 0 (minimal hazard)

SIGNATURE:  TITLE: Director of Global Quality Assurance

REVISION DATE: 3/5/2009 SUPERSEDES: May 2007

MSDS Format : ANSI

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**BEHR® Premium Plus Ext Flat Paint Deep Base No. 4300**
MSDS Manufacturer Number:	4300
Manufacturer Name:	BEHR Process Corporation
Address:	3400 W. Segerstrom Avenue Santa Ana, CA 92704
General Phone Number:	(714) 545-7101
General Fax Number:	(714) 241-1002
Customer Service Phone Number:	(800) 854-0133 ext. 2
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec:	In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Creation Date:	06/26/2006
MSDS Revision Date:	2/20/2009

NFPA

0

HMIS

Health Hazard	1
Fire Hazard	1
REACTIVITY	0
Personal Protection	

* **Chronic Health Effects:**

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Nepheline Syenite	37244-96-5	30 - 60 by weight
Acrylate polymer dispersion	No data	10 - 30 by weight
Non hazardous ingredient(s)	No data	30 - 60 by weight

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:	Irritant.
Potential Health Effects:	
Eye:	May cause irritation.
Skin:	May cause irritation.

Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	No Data
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	1
NFPA Reactivity:	0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EXPOSURE GUIDELINES

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Boiling Point:	No Data
Melting Point:	No Data
Density:	10 - 12 Lbs./gal.
Vapor Density:	Greater than 1 (Air = 1).
pH:	No Data
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	No Data
VOC Content:	Material VOC: 21 gm/l (Includes Water) Coating VOC.: 48 gm/l (Excludes Water)

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acrylate polymer dispersion :

Eye:	No Data
Skin:	No Data
Inhalation:	No Data
Ingestion:	No Data

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT UN Number:	No Data
DOT Hazard Class:	No Data

SECTION 15 - REGULATORY INFORMATION

Nepheline Syenite :

TSCA Inventory Status:	Not listed
Canada DSL:	Listed

Acrylate polymer dispersion :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed

SECTION 16 - ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	1
HMIS Reactivity:	0
HMIS Other:	x
MSDS Creation Date:	06/26/2006
MSDS Revision Date:	2/20/2009
MSDS Revision Notes:	Name change.
MSDS Author:	Actio Corporation
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.
Trademark:	The trademarks, service marks, graphics and logos used on this MSDS are registered or unregistered trademarks of BEHR Process Corporation. All Rights Reserved.

MSDS Format : ANSI

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**Premium Plus Exterior Flat Accent Base No.4670**
MSDS Manufacturer Number:	4670
Manufacturer Name:	BEHR Process Corporation
Address:	3400 W. Segerstrom Avenue Santa Ana, CA 92704
General Phone Number:	(714) 545-7101
General Fax Number:	(714) 241-1002
Customer Service Phone Number:	(800) 854-0133 ext. 2
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec:	In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Creation Date:	01/30/2007
MSDS Revision Date:	2/20/2009

NFPA

0

HMIS

Health Hazard	1
Fire Hazard	1
REACTIVITY	0
Personal Protection	

* **Chronic Health Effects:**

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Non hazardous ingredient(s)	No data	30 - 60 by weight
NJTS 50173NVE	No data	10 - 30 by weight
Titanium dioxide	13463-67-7	5 - 10 by weight
Nepheline Syenite	37244-96-5	10 - 30 by weight
Amorphous silica	7631-86-9	0.1 - 1 by weight

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview: Irritant.

Potential Health Effects:	
Eye:	May cause irritation.
Skin:	May cause irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	No Data
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	1
NFPA Reactivity:	0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing. Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EXPOSURE GUIDELINES

Titanium dioxide :

Guideline ACGIH:	TLV-TWA: 10 mg/m3
Guideline OSHA:	OSHA-TWA: 15 mg/m3

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Boiling Point:	No Data
Melting Point:	No Data
Density:	10 - 12 Lbs./gal.
Vapor Density:	Greater than 1 (Air = 1).
Vapor Pressure:	Greater than 1 (Air = 1).
pH:	No Data
Molecular Formula:	Mixture

Molecular Weight:	Mixture
Flash Point:	No Data
VOC Content:	Material VOC: 20 gm/l (Includes Water) Coating VOC.: 48 gm/l (Excludes Water)

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.
Special Decomposition Products:	Incomplete combustion may produce carbon monoxide and other toxic gases.

SECTION 11 - TOXICOLOGICAL INFORMATION

Titanium dioxide :

RTECS Number:	XR2275000
Skin:	Skin - Rabbit; Standard Draize Test. : 300 ug/3D; (Intermittent) mild. (RTECS)
Ingestion:	Ingestion - Rat TDLo: 60 gm/kg; Gastrointestinal - hypermotility, diarrhea Gastrointestinal - other changes. (RTECS)

Amorphous silica :

RTECS Number:	EU8655000
Eye:	Eye - Rabbit; Standard Draize Test. : 25 mg/24H; mild. (RTECS)
Inhalation:	Inhalation. - Rat LCLo: 2190 mg/m3/4H; Lungs, Thorax, or Respiration - dyspnea (RTECS)
Ingestion:	Ingestion - Rat LDLo: 5 gm/kg; Nutritional and Gross Metabolic - other changes (RTECS)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT UN Number:	No Data
DOT Hazard Class:	No Data

SECTION 15 - REGULATORY INFORMATION

Titanium dioxide :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed
California PROP 65:	WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

Nepheline Syenite :

TSCA Inventory Status:	Not listed
Canada DSL:	Listed

Amorphous silica :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed

SECTION 16 - ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	1
HMIS Reactivity:	0
HMIS Other:	x
MSDS Creation Date:	01/30/2007
MSDS Revision Date:	2/20/2009
MSDS Revision Notes:	Quarterly formula update
MSDS Author:	Actio Corporation
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.
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PRINT EMAIL GLOSSARY

BEHR STAINS•VARNISHES•PAINTS

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Premium Plus Interior Low-VOC Flat Enamel Swiss Coffee #2-1812**
Product Number: 21812
Manufacturer Name: BEHR Process Corporation
Address: 3400 W. Segerstrom Avenue
Santa Ana CA 92704

U.S. Contact Info.:

Business Phone: (714) 545-7101
Technical Service Phone: (800) 854-0133 ext. 2
Business Fax: (714) 241-1002

Canadian Contact Info.:

Business Phone: (800) 661-1591
Technical Service Phone: (800) 661-1591
Business Fax: (800) 387-0019

NFPA

HMIS

HEALTH	1
FIRE	1
REACTIVITY	0
PPE	

For emergencies in the US, call CHEMTREC: 800-424-9300
In Canada, call CANUTEC: (613) 996-6666 (call collect)

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SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Product No. 21812

Chemical Name	CAS#	Lower Percent	Upper Percent
Titanium dioxide	13463-67-7	10	30
Acrylic polymer(s)	No data	10	30
Nepheline Syenite	37244-96-5	5	10
Silica, crystalline - cristobalite	14464-46-1	1	5
Hydrophobically-modified polyether solution	No data	1	5
Ethylene Glycol	107-21-1	1	5
Styrene/acrylic copolymer	No data	1	5
Silica, amorphous, precipitated and gel	112926-00-8	1	5
Aluminum hydroxide (Al(OH)3)	21645-51-2	1	5
2-ethylhexyl benzoate	5444-75-7	1	5
Palygorskite	12174-11-7	0.1	1
Non-hazardous ingredients		30	60

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SECTION 3: HAZARDS IDENTIFICATION

Product No. 21812

Emergency Overview:	Irritant.
Potential Health Effects:	
Eye Contact:	May cause irritation.
Skin Contact:	May cause irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Skin Contact:	Prolonged or repeated contact may cause skin irritation.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Aggravation of Pre-Existing Conditions:	None generally recognized.

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SECTION 4: FIRST AID MEASURES

Product No. 21812

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

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SECTION 5: FIRE FIGHTING MEASURES

Product No. 21812

Flash Point:	No Data
Extinguishing Media:	Use alcohol foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Product No. 21812

Personal Precautions:	Use proper personal protective equipment as listed in section 8.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.

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SECTION 7: HANDLING AND STORAGE

Product No. 21812

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

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SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Product No. 21812

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
Hand Protection Description:	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Ingredient Guidelines	Guideline Type	Guideline Information
Ethylene Glycol		
	ACGIH TLV-STEL	C 100 mg/m3 (Aerosol only)
Silica, amorphous, precipitated and gel		
	OSHA PEL-TWA	20 mg/m3
	ACGIH TLV-TWA	10 mg/m3
Silica, crystalline - cristobalite		
	ACGIH TLV-TWA	0.05 mg/m3 (Respirable)
Titanium dioxide		
	ACGIH TLV-TWA	10 mg/m3
	OSHA PEL-TWA	15 mg/m3

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Product No. 21812

Physical State/Appearance:	Liquid
pH:	8.5 to 9.5
Vapor Density:	Greater than 1 (Air = 1)
Density:	10 - 12 Lbs./gal.
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	No Data
VOC:	Material VOC: 43gm/l (Includes Water)" "Coating VOC: 101 gm/l (Excludes Water)

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SECTION 10: STABILITY AND REACTIVITY

Product No. 21812

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.
Incompatibilities with Other Materials:	Oxidizing agents. Strong acids and alkalis.
Hazardous Polymerization:	Not reported.
Hazardous Decomposition Products:	Incomplete combustion may produce carbon monoxide and other toxic gases.

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SECTION 11: TOXICOLOGICAL INFORMATION

Product No. 21812

Ethylene Glycol

Eye Effect:	Eye - Rabbit; Standard Draize : 500 mg/24H; Mild. Eye - Rabbit; Standard Draize : 1440 mg/6H; Moderate. (RTECS)
Skin Effects:	Skin - Rabbit; Open irritation : 555 mg; Mild. (RTECS)
Ingestion Effects:	Ingestion - Rat LD50: 4700 mg/kg; Details of toxic effects not reported other than lethal dose value. (RTECS)
Inhalation Effects:	Inhalation - Rat LC: >200 mg/m3/4H; Details of toxic effects not reported other than lethal dose value Inhalation - Mouse LC: >200 mg/m3/2H; Details of toxic effects not reported other than lethal dose value (RTECS)

Silica, amorphous, precipitated and gel

Carcinogenicity:	IARC: Group 3: Unclassifiable as to carcinogenicity to humans

Palygorskite

Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans

Silica, crystalline - cristobalite

Carcinogenicity:	IARC: Group 1: Carcinogenic to humans NTP: Reasonably anticipated to be a human carcinogen

Titanium dioxide

Skin Effects:	Skin - Rabbit; Standard Draize : 300 ug/3D; (Intermittent) Mild. (RTECS)
Ingestion Effects:	Ingestion - Rat TDLo: 60 gm/kg; Gastrointestinal - hypermotility, diarrhea Gastrointestinal - other changes. (RTECS)
Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans
Notes	Not all of the toxicological studies for the ingredients contained in this product are displayed. For additional information, please consult the references listed in Section 16 of this MSDS.

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SECTION 12: ECOLOGICAL INFORMATION

Product No. 21812

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

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SECTION 13: DISPOSAL CONSIDERATIONS

Product No. 21812

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

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SECTION 14: TRANSPORT INFORMATION

Product No. 21812

DOT UN Number:	No Data
DOT Hazard Class:	No Data

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SECTION 15: REGULATORY INFORMATION

Product No. 21812

2-ethylhexyl benzoate

TSCA 8(b): Inventory Status:	Listed
Canada DSL:	Listed

Aluminum hydroxide (Al(OH)3)

TSCA 8(b): Inventory Status:	Listed
Canada DSL:	Listed

Ethylene Glycol

TSCA 8(b): Inventory Status:	Listed
State:	Listed in the New Jersey State Right to Know list. Listed in the Pennsylvania Hazardous Subsatnces list.
Canada DSL:	Listed

Nepheline Syenite

TSCA 8(b): Inventory Status:	Not listed
Canada DSL:	Listed

Silica, amorphous, precipitated and gel

TSCA 8(b): Inventory Status:	Not listed
Canada DSL:	Listed

Palygorskite

TSCA 8(b): Inventory Status:	Not listed
Canada DSL:	Not listed

Silica, crystalline - cristobalite

TSCA 8(b): Inventory Status:	Listed
State:	Listed in the New Jersey State Right to Know list. Listed in the Pennsylvania Hazardous Subsatnces list.
Canada DSL:	Listed

Titanium dioxide

TSCA 8(b): Inventory Status:	Listed

State:	Listed in the New Jersey State Right to Know list. Listed in the Pennsylvania Hazardous Subsatnces list.
Canada DSL:	Listed
Proposition 65:	WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

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SECTION 16: ADDITIONAL INFORMATION

Product No. 21812

MSDS Revision Date:	06/26/2006
MSDS Author:	Actio Corporation

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific materials designated. Refer to individual product safety Data sheets when using more than one product in combination with another.

References:

1. OSHA Hazard Communication Standard, 1910.1200 and Z Tables.
2. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS) and Pocket Guide to Chemical Hazards.
3. Sax Dangerous Properties of Industrial Materials. Tenth Edition.
4.Hawleys Condensed Chemical Dictionary, Thirteenth Edition
5. IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, WHO International Research on Cancer, 2004.
6. Industrial Hygiene and Toxicology, by F.A. Patty.
7. National Library of Medicine, Department of Health and Human Services, Hazardous Substances Data Bank (HSDB).
8. National Toxicology Program (NTP) Tenth Report on Carcinogens, 2002.
9. Brethericks Reactive Chemical Hazards Database. Version 2.
10. Gassarett and Doulls Toxicology, The Basic Science of Poisons.
11. The Merck Index: An Encyclopedia of Chemicals and Drugs. Merck and Company. Twelfth Edition 1998.
12. Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environmental and Biological Exposure Indices. TLV Booklet, 2003.

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M A T E R I A L S A F E T Y D A T A S H E E T Rev. 05B

For Coating, Resins, and Related Materials NPCA 1-84

Manufacturer's Name
BENJAMIN MOORE & CO.
51 CHESTNUT RIDGE RD
MONTVALE, NJ 07645

Emergency Telephone No.
800-424-9300 (CHEMTREC)

Date Prepared	Last Rev Date	Information Telephone No.
10-27-05	01-19-01	201-573-9600

For the most up-to-date MSDS information
please visit our website www.benjaminmoore.com/msds/go.html

SECTION I - PRODUCT ID

PRODUCT*: 023, n023
CLASS: WATER THINNED PAINT
NAME: BM FRESH START ALL PURPOSE 100% ACRYLIC PRIMER
COLOR: ALL

** HMIS CODE **
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
PERSONAL PROT:

** SARA TITLE 312 **
ACUTE: N CHRONIC: N FIRE: N PRESSURE: N REACTIVITY: N

For a complete description of HMIS and an explanation of the PERSONAL PROT: code, see Section XX.
*NOTE: In the PRODUCT code a little n can be any capital letter of the alphabet except P or Q.

SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	HAZ	SARA	MAX %	CAS #	TLV	PEL	STEL	CEIL	MM Hg
Titanium Dioxide	Y	N	11.4	013463-67-7	10 mg/M3	15 mg/M3	N/E	N/E	N/A
Kaolin, calcined	Y	N	8.9	092704-41-1	30 mg/M3	N/E	N/E	N/E	N/A
Hydrous Aluminum Silicates	Y	N	6.4	001332-58-7	2 Mg/M3	5 mg/M3	N/E	N/E	N/A
Diatomaceous Earth	Y	N	3.4	061790-53-2	10 mg/M3	5 mg/M3	N/E	N/E	N/A

NOTE: This product contains no reported or suspected carcinogens
Note: This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.
This product may contain small amounts of materials known to the State of California to cause cancer and reproductive harm.

SECTION III PHYSICAL DATA

BOILING RANGE: N/A WT/GALLON: 9.6 to 10.1 %VOL BY VOLUME: 70.1 to 70.6
EVAPORATION RATE: SLOWER THAN ETHER VAPOR DENSITY: HEAVIER THAN AIR

SECTION IV FIRE AND EXPLOSION HAZARD DATA

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED FLASH POINT: > 250 F PMCC
LEL: Not Applicable

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Toxic gases may form when product burns.
Closed containers may burst if exposed to extreme heat or fire.
SPECIAL FIRE FIGHTING PROCEDURES:
Cool exposed containers with water. Use self-contained breathing apparatus.

SECTION V HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - ACUTE:
Inhalation - Causes nose and throat irritation.
Inhalation - Causes lung irritation.
Skin and Eye Contact - Primary irritation.
Ingestion of large amounts could cause serious injury.
EFFECTS OF OVEREXPOSURE - CHRONIC:
None Known
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:
None expected when used in accordance with Safe Handling and Use Information (Section VIII).
Inhalation - Irritating to respiratory tract.
PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION
EMERGENCY AND FIRST AID PROCEDURES :
Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.
Eye Contact - Flush thoroughly with water. Call physician.
Skin Contact - Wash with soap and water.
Ingestion - Drink 1 or 2 glasses of water to dilute.
DO NOT induce vomiting. Call physician.

SECTION VI REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR
CONDITIONS TO AVOID: Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS:
Burning may produce carbon dioxide and carbon monoxide.
INCOMPATABILITY (MATERIALS TO AVOID): None reasonably foreseeable.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Flush with water. Absorb with sawdust or rags.
WASTE DISPOSAL METHOD:
Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

SECTION VIII SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:
Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.
VENTILATION:
Adequate to maintain working atmosphere below T.L.V. and L.E.L. (See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.
PROTECTIVE GLOVES: Waterproof during repeated contact.
EYE PROTECTION : Splash goggles or safety glasses with side shields.
OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.

HYGIENIC PRACTICES:
Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Do not throw or drop containers.
OTHER PRECAUTIONS :
Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.
Close container after each use. Keep out of reach of children. Do not take internally.

SECTION XX

HMIS (Hazardous Materials Identification System)(R) NPCA
HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division
5724 N. Pulaski Rd., Chicago, IL 60646
1-800-621-5808

The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.
PERSONAL PROTECTION: This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation. Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.
Note: There are no SARA reportable materials in this product.

DISCLAIMER

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.
NOTICE: Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-LEAD-FYI.

Material Safety Data Sheet

Revision Date: *24-Jul-2007* **Revision Number:** *1*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **MOORGARD 100% ACRYLIC LOW LUSTRE HOUSE PAINT**
Product Code **N103**
Color All

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 201-573-9600
www.benjaminmoore.com

Emergency Telephone Number(s)
CHEMTREC: 800-424-9300

2. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Titanium dioxide	13463-67-7	30
Silica, crystalline	14808-60-7	25
Zinc oxide	1314-13-2	5
Diatomaceous earth	61790-53-2	5
Silica, mica	12001-26-2	5
Carbon black	1333-86-4	1

3. HAZARDS IDENTIFICATION

Emergency Overview

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.

Appearance liquid **Odor** little or no odor

OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product..

Potential Health Effects

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Effects

Eyes	May cause slight irritation.
Skin	Substance may cause slight skin irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects Repeated contact may cause allergic reactions in very susceptible persons.

Contains: Crystalline Silica which has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions None known

HMIS **Health:** 1* **Flammability:** 0 **Reactivity:** 0 **PPE:** -

HMIS Legend
0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard
* - Chronic Hazard
X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, Benjamin Moore & Co., has choosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

4. FIRST AID MEASURES

General Advice Immediate medical attention is not required. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Skin Contact Wash off immediately with plenty of water, If symptoms persist, call a physician.

Inhalation Move to fresh air.

Ingestion Rinse mouth. Drink plenty of water. Do not induce vomiting.

Notes To Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective Equipment And Precautions For Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No
Flash Point Data	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Flammability Limits In Air	
Lower Explosion Limit	Not applicable
Upper Explosion Limit	Not applicable

NFPA **Health:** 1 **Flammability:** 0 **Instability:** 0 **Special:** Not Applicable

NFPA Legend
0 - Not Hazardous
1 - Slightly
2 - Moderate
3 - High
4 - Severe

The ratings assigned by Benjamin Moore & Co. are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods For Clean-Up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.
Other Information	None known

7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Ensure adequate ventilation.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep in a bonded area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	OSHA
Titanium dioxide	TWA: 10 mg/m^3	PEL 15 mg/m^3 Total dust.
Silica, crystalline	TWA: 0.025 mg/m^3 Respirable fraction.	N/E
Zinc oxide	TWA: 2 mg/m^3 Respirable fraction. 10 mg/m^3 Respirable fraction.	PEL 5 mg/m^3 Fume. PEL 5 mg/m^3 Respirable fraction. PEL 15 mg/m^3 Total dust.
Diatomaceous earth	N/E	N/E
Silica, mica	TWA: 3 mg/m^3 Respirable fraction.	N/E
Carbon black	TWA: 3.5 mg/m^3	PEL 3.5 mg/m^3

Legend
ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits
OSHA - Occupational Safety & Health Administration Exposure Limits
N/E - Not Established

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.
Skin Protection Lightweight protective clothing.
Respiratory Protection No special protective equipment required.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor little or no odor
Density (lbs/gal) 9.63 - 11.42
Specific Gravity 1.16 - 1.37
pH Not available
Viscosity (centistokes) Not available
Evaporation Rate Not available
Vapor Pressure Not available
Vapor Density Not available
Wt. % Solids 41.4 - 58.2
Vol. % Solids 33.0 - 43.3
Wt. % Volatiles 46.1 - 66.4
Vol. % Volatiles 56.7 - 67.0
VOC (g/L) < 50
Boiling Point (°F) 212
Boiling Point (°C) 100
Freezing Point (°F) 32
Freezing Point (°C) 0

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Upper Explosion Limit	Not available
Lower Explosion Limit	Not available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions To Avoid	Prevent from freezing
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None under normal use.
Possibility Of Hazardous Reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product
No information available

Component

Titanium dioxide
LD50 Oral: > 24000 mg/kg (Rat)
LD50 Dermal: > 10000 mg/m³ (Rabbit)
LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Silica, crystalline
LD50 Oral: > 22,500 mg/kg (Rat) vendor data

Zinc oxide
LD50 Oral: > 8437 mg/kg (Rat)
LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

Carbon black
LD50 Oral: > 15400 mg/kg (Rat)
LD50 Dermal: > 3000 mg/kg (Rabbit)

Chronic Toxicity

Carcinogenicity
The information below indicates whether each agency has listed any ingredient as a carcinogen:

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Titanium dioxide		2B Possible carcinogen.		
Silica, crystalline		1 Human carcinogen.	Known carcinogen.	
Diatomaceous earth		3 Classification not possible from current data.		
Carbon black		2B Possible carcinogen.		

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
NTP - National Toxicity Program
OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Product
Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

Component
Acute Toxicity to Fish
No information available

Titanium dioxide
LC50: >1000 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

13. DISPOSAL CONSIDERATIONS

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Should not be released into the environment Dispose of in accordance with federal, state, provincial, and local regulations. Dry, empty containers may be recycled in a can recycling program. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO / IATA Not regulated

IMDG / IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

United States TSCA Yes - All components are listed or exempt.
Canada DSL Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight % (max)
Zinc oxide	1314-13-2	5

This product may contain trace amounts of (other) SARA reportable chemicals. Contact Benjamin Moore & Co. for further information.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

This product may contain trace amounts of (other) HAPs chemicals. Contact Benjamin Moore & Co. for further information.

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Louisiana	Rhode Island
Titanium dioxide	X	X	X		X
Silica, crystalline	X	X	X		
Zinc oxide	X	X	X		X
Diatomaceous earth	X	X	X		X
Silica, mica	X	X	X		X
Carbon black	X	X	X		X

Legend
X - Listed

16. OTHER INFORMATION

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By
Product Stewardship Department
Benjamin Moore & Co.
360 Route 206 - P.O. Box 4000
Flanders, NJ 07836
973-252-2593

Revision Date: 24-Jul-2007
Revision Summary Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

End of MSDS

Material Safety Data Sheet

Revision Date: *24-Jul-2007* **Revision Number:** *1*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **MOORLIFE 100% ACRYLIC FLAT HOUSE PAINT**
Product Code **N105**
Color All

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 201-573-9600
www.benjaminmoore.com

Emergency Telephone Number(s)
CHEMTREC: 800-424-9300

2. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Titanium dioxide	13463-67-7	25
Silica, crystalline	14808-60-7	10
Diatomaceous earth	61790-53-2	5
Zinc oxide	1314-13-2	5
Carbon black	1333-86-4	0.5

3. HAZARDS IDENTIFICATION

Emergency Overview

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.

Appearance liquid **Odor** little or no odor

OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product..

Potential Health Effects

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Effects

Eyes	May cause slight irritation.
Skin	Substance may cause slight skin irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects Repeated contact may cause allergic reactions in very susceptible persons.

Contains: Crystalline Silica which has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions None known

HMIS **Health:** 1* **Flammability:** 0 **Reactivity:** 0 **PPE:** -

HMIS Legend
0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard
* - Chronic Hazard
X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, Benjamin Moore & Co., has choosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

4. FIRST AID MEASURES

General Advice	No hazards which require special first aid measures.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
Notes To Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective Equipment And Precautions For Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No
Flash Point Data	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Flammability Limits In Air	
Lower Explosion Limit	Not applicable
Upper Explosion Limit	Not applicable

NFPA **Health:** 1 **Flammability:** 0 **Instability:** 0 **Special:** Not Applicable

NFPA Legend
0 - Not Hazardous
1 - Slightly
2 - Moderate
3 - High
4 - Severe

The ratings assigned by Benjamin Moore & Co. are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.
Environmental Precautions	Prevent further leakage or spillage if safe to do so.
Methods For Clean-Up	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Other Information	None known

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage	Keep container tightly closed. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Hazardous Components

Chemical Name	ACGIH	OSHA
Titanium dioxide	TWA: 10 mg/m^3	PEL 15 mg/m^3 Total dust.
Silica, crystalline	TWA: 0.025 mg/m^3 Respirable fraction.	N/E
Diatomaceous earth	N/E	N/E
Zinc oxide	TWA: 2 mg/m^3 Respirable fraction. 10 mg/m^3 Respirable fraction.	PEL 5 mg/m^3 Fume. PEL 5 mg/m^3 Respirable fraction. PEL 15 mg/m^3 Total dust.
Carbon black	TWA: 3.5 mg/m^3	PEL 3.5 mg/m^3

Legend
ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits
OSHA - Occupational Safety & Health Administration Exposure Limits
N/E - Not Established

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.
Skin Protection Protective gloves and impervious clothing.
Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene Measures Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor little or no odor
Density (lbs/gal) 10.51 - 12.19
Specific Gravity 1.26 - 1.46
pH Not available
Viscosity (centistokes) Not available
Evaporation Rate Not available
Vapor Pressure Not available
Vapor Density Not available
Wt. % Solids 49.3 - 60.4
Vol. % Solids 35.9 - 42.5
Wt. % Volatiles 45.1 - 63.5
Vol. % Volatiles 57.5 - 64.1
VOC (g/L) < 100
Boiling Point (°F) 212
Boiling Point (°C) 100
Freezing Point (°F) 32
Freezing Point (°C) 0
Flash Point (°F) Not applicable
Flash Point (°C) Not applicable
Flash Point Method Not applicable
Upper Explosion Limit Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Lower Explosion Limit Not available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions To Avoid	Prevent from freezing
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	None under normal use.
Possibility Of Hazardous Reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product
No information available

Component

Titanium dioxide
LD50 Oral: > 24000 mg/kg (Rat)
LD50 Dermal: > 10000 mg/m³ (Rabbit)
LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Silica, crystalline
LD50 Oral: > 22,500 mg/kg (Rat) vendor data

Zinc oxide
LD50 Oral: > 8437 mg/kg (Rat)
LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

Carbon black
LD50 Oral: > 15400 mg/kg (Rat)
LD50 Dermal: > 3000 mg/kg (Rabbit)

Chronic Toxicity

Carcinogenicity
The information below indicates whether each agency has listed any ingredient as a carcinogen:

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Titanium dioxide		2B Possible carcinogen.		
Silica, crystalline		1 Human carcinogen.	Known carcinogen.	

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Diatomaceous earth		3 Classification not possible from current data.		
Carbon black		2B Possible carcinogen.		

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
NTP - National Toxicity Program
OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Product
Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

Component
Acute Toxicity to Fish
No information available

Titanium dioxide
LC50: >1000 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, and local regulations. Dry, empty containers may be recycled in a can recycling program. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO / IATA Not regulated

IMDG / IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

United States TSCA Yes - All components are listed or exempt.
Canada DSL Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight % (max)
Zinc oxide	1314-13-2	5

This product may contain trace amounts of (other) SARA reportable chemicals. Contact Benjamin Moore & Co. for further information.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

This product may contain trace amounts of (other) HAPs chemicals. Contact Benjamin Moore & Co. for further information.

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Louisiana	Rhode Island
Titanium dioxide	X	X	X		X
Silica, crystalline	X	X	X		
Diatomaceous earth	X	X	X		X
Zinc oxide	X	X	X		X
Carbon black	X	X	X		X

Legend
X - Listed

16. OTHER INFORMATION

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By
Product Stewardship Department
Benjamin Moore & Co.
360 Route 206 - P.O. Box 4000
Flanders, NJ 07836
973-252-2593

Revision Date: 24-Jul-2007
Revision Summary Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

End of MSDS

M A T E R I A L S A F E T Y D A T A S H E E T Rev. 02B

For Coating, Resins, and Related Materials NPCA 1-84

Manufacturer's Name
BENJAMIN MOORE & CO.
51 CHESTNUT RIDGE RD
MONTVALE, NJ 07645

Emergency Telephone No.
800-424-9300 (CHEMTREC)

Date Prepared	Last Rev Date	Information Telephone No.
10-13-06	08-10-06	201-573-9600

For the most up-to-date MSDS information
please visit our website www.benjaminmoore.com/msds/go.html

SECTION I - PRODUCT ID

** HMIS CODE **

PRODUCT*: N333 — HEALTH: 1
CLASS: WATER THINNED PAINT — FLAMMABILITY: 0
NAME: REGAL PREMIUM INTERIOR 100% ACRYLIC S.G. FINISH — REACTIVITY: 0
COLOR: ALL — PERSONAL PROT:

** SARA TITLE 312 **

ACUTE: N CHRONIC: N FIRE: N PRESSURE: N REACTIVITY: N

For a complete description of HMIS and an explanation of the PERSONAL PROT: code, see Section XX.

*NOTE: In the PRODUCT code a little n can be any capital letter of the alphabet except P or Q.

SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	HAZ	SARA	MAX %	CAS #	TLV	PEL	STEL	CEIL	MM Hg
Titanium Dioxide	Y	N	30.0	013463-67-7	10 mg/M3	15 mg/M3	N/E	N/E	N/A
Silica, Amorphous	Y	N	5.0	007631-86-9	10 MG/M3	N/E	N/E	N/E	N/A
Hydrous Aluminum Silicates	Y	N	10.0	001332-58-7	2 Mg/M3	5 mg/M3	N/E	N/E	N/A

NOTE: This product contains no reported or suspected carcinogens
Note: This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.
This product may contain small amounts of materials known to the State of California to cause cancer and reproductive harm.

SECTION III PHYSICAL DATA

BOILING RANGE: N/A WT/GALLON: 9.0 to 10.7 %VOL BY VOLUME: 66.1 to 71.0
EVAPORATION RATE: SLOWER THAN ETHER VAPOR DENSITY: HEAVIER THAN AIR

SECTION IV FIRE AND EXPLOSION HAZARD DATA

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED FLASH POINT: > 250 F PMCC
LEL: Not Applicable
EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Toxic gases may form when product burns.

Closed containers may burst if exposed to extreme heat or fire.
SPECIAL FIRE FIGHTING PROCEDURES:
Cool exposed containers with water. Use self-contained breathing apparatus.

SECTION V HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - ACUTE:
Inhalation - Irritation of the respiratory tract.
Skin and Eye Contact - Primary irritation.
Contact - Causes skin irritation.
Ingestion of large amounts could cause serious injury.
EFFECTS OF OVEREXPOSURE - CHRONIC:
Skin Contact - Prolonged or repeated exposure may cause dermatitis.
Chronic lung conditions may be aggravated by exposure to high dust levels.
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:
None expected when used in accordance with Safe Handling and Use Information (Section VIII).
PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION
EMERGENCY AND FIRST AID PROCEDURES :
Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.
Eye Contact - Flush thoroughly with water. Call physician.
Skin Contact - Wash with soap and water.
Ingestion - Drink 1 or 2 glasses of water to dilute.
DO NOT induce vomiting. Call physician.

SECTION VI REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR
CONDITIONS TO AVOID: Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS:
Burning may produce carbon dioxide and carbon monoxide.
INCOMPATABILITY (MATERIALS TO AVOID): None reasonably foreseeable.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Flush with water. Absorb with sawdust or rags.
WASTE DISPOSAL METHOD:
Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

SECTION VIII SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:
Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.
VENTILATION:
Adequate to maintain working atmosphere below T.L.V. and L.E.L. (See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.
PROTECTIVE GLOVES: Waterproof during repeated contact.
EYE PROTECTION : Splash goggles or safety glasses with side shields.
OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.
HYGIENIC PRACTICES:
Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Do not throw or drop containers.
OTHER PRECAUTIONS :
Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.
Close container after each use. Keep out of reach of children. Do not take internally.

SECTION XX

HMIS (Hazardous Materials Identification System)(R) NPCA
HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:
American Labelmark Co., Inc., Labelmaster Division
5724 N. Pulaski Rd., Chicago, IL 60646
1-800-621-5808
The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.
PERSONAL PROTECTION: This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation. Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.
Note: There are no SARA reportable materials in this product.

DISCLAIMER

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.
WARNING: If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

MATERIAL SAFETY DATA SHEET
May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health
Administration. (Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Identity (As Used on Label and List):
PAINT & SUNDRIES CO. FIVE STAR SPRAY ENAMEL, 6314 FLAT BLACK

Section I. - Manufacturer's Information

Manufacturer's Name:
UNITED COATINGS, INC.
Address (No, Street, City, State, & Zip):
2850 Festival Drive

Kankakee IL 60901

Emergency Telephone Number:
800 - 621 - 1000
Telephone Number for Information:
800 - 782 - 7889
Date Prepared: 04/28/93

Section II. - Hazardous Ingredients/Identity Information

Hazardous Components/ CAS No:	OSHA PEL:	ACGIH TLV:	Other Limits:	Percentages:
PROPANE 74986	1000			15
BUTANE 106978		800		15
NAPTHA (PETROLEUM) AROMATIC 64742956	400	50		LESS THAN 5%
BENZENE,METHYL- 108883		100		15
MIXTURE OF C6-C10 ALIPHATIC AND CYCLOALIPHATIC HYDROCARBONS 64742898				LESS THAN 5%
ACETONE 67641	1000	750		LESS THAN 5%
2-PROPANOL, 1-(1,1-DIMETHYLETHOXY)- 57018527				LESS THAN 5%
TALC 14807966				LESS THAN 5%

1333864

LESS THAN 5%

Section III. - Physical/Chemical Characteristics

Boiling Point 133.00 C
Vapor Pressure 2.62 mm Hg @ 20.00 C
Vapor Density (Air = 1) UNK
Vapor Desc MORE THAN 1
VOC Ratio UNK
Solubility in Water:
NA

Specific Gravity 0.8270
Melting Point UNK
Evaporation Rate UNK
Evap Desc ETHER=1, MORE THAN (Butyl Acetate = 1)

Appearance and Odor:
LIQUID, TYPICAL SOLVENT ODOR

Section IV. - Fire and Explosion Hazard Data

Flash Point (Method Used)
40.00 F TCC

Flammable Limits - Lower (LEL) UNK Upper (UEL) UNK

Extinguishing Media:
CARBON DIOXIDE, ALCOHOL FOAM OR DRY CHEMICAL

Special Fire Fighting Procedures:
SCBA FOR FIRE FIGHTING IN ENCLOSED AREAS. WATER SPRAY MAY BE USED TO COOL EXPOSED CONTAINERS AND TO PROTECT PERSONNEL. IN ADVANCED FIRES, MAINTAIN A SAFE DISTANCE FROM SEALED CONTAINERS.

Unusual Fire and Explosion Hazards:
GENERAL HAZARD: EXTREMELY FLAMMABLE, MATERIAL WILL READILY IGNITE AT AMBIENT TEMPERATURES. FLAMMABLE LIQUID, CAN RELEASE VAPORS THAT FOR FLAMMABLE MIXTURES AT TEMPERATURE AT OR ABOVE THE FLASHPOINT.

"EMPTY " CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF.

Section V. - Reactivity Data

Stability: Stable? Y
Conditions to Avoid:
ISOLATE FROM HEAT, SPARKS AND OPEN FLAMES

Incompatibility (Materials to Avoid):
STRONG OXIDIZERS

Hazardous Decomposition or Byproducts:
OXIDES OF CARBON (CO, CO2)

Hazardous Polymerization: May Occur? N
Conditions to Avoid:
NA

Section VI. - Health Hazard Data

Routes of Entry:
Inhalation? Y Skin? Y Ingestion? Y

Considered Carcinogenic By:
NTP? N IARC? N OSHA ? N

Health Hazards (Acute):
MATERIAL IS AN EYE AND SKIN IRRITANT. EXCESSIVE VAPOR INHALATION WILL LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION. HARMFUL OR FATAL IF SWALLOWED.

Health Hazards (Chronic):
MATERIAL MAY DEFAT THE SKIN ON REPEATED EXPOSURE LEADING TO DERMATITIS.

Signs and Symptoms of Exposure:
THE SIGNS OF CENTRAL NERVOUS SYSTEM DEPRESSION BEGIN WITH HEADACHE, DIZZINESS AND APPARENT INTOXICATION, AND PROGRESS THROUGH LOSS OF CONSCIOUSNESS AND POSSIBLE COMPLETE NERVOUS SYSTEM COLLAPSE.

Medical Conditions Generally Aggravated By Exposure:
SKIN CONTACT MAY AGGRAVATE EXISTING DERMATITIS

Emergency and First Aid Procedures:
EYE CONTACT: FLUSH WITH CLEAN, LUKEWARM WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE EYELIDS. OBTAIN MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER. WASH CONTAMINATED CLOTHING THOROUGHLY BEFORE REUSE.

INHALATION: REMOVE TO FRESH AIR. APPLY ARTIFICIAL RESPIRATION OR ADMINISTER OXYGEN, IF NECESSARY. CALL A PHYSICIAN IMMEDIATELY.

INGESTION: KEEP PERSON WARM, QUIET AND GET IMMEDIATE MEDICAL ATTENTION. DO NOT INDUCE VOMITING, BECAUSE ASPIRATION OF MATERIAL INTO THE LUNGS FROM VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

Section VII. - Precautions For Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled:
STOP SPILL AT THE SOURCE, DIKE THE AREA AND CONTAIN THE FLOW. MOP UP OR ABSORB AND PLACE IN SUITABLE CONTAINER. NOTIFY PROPER AUTHORITIES IF AN RQ WAS INVOLVED.

Waste Disposal Method:
AS DIRECTED BY LOCAL AND FEDERAL POLLUTION LAWS.

Precautions to be Taken in Handling and Storing:
GROUND CONTAINERS WHEN POURING. STORE AND USE BELOW 120 DEG. F. AND AWAY FROM DIRECT HEAT AND OPEN FLAME.

Other Precautions:
NA

Section VIII. - Control Measures

Respiratory Protection (Specify Type):
ORGANIC CARTRIDGE TYPE RESPIRATOR IF VENTILATION OR OTHER MECHANICAL MEANS CANNOT KEEP AIR BELOW THE TLV.

VENTILATION
Local Exhaust:
PREFERABLE

Mechanical (General):
ACCEPTABLE

Special:
NA

Other:
NA

Protective Gloves:
CHEM RESISTANT

Eye Protection:
GOGGLES

Other Protective Clothing or Equipment:
CHEMICAL GOGGLES AND APRON ARE RECOMMENDED IF SPLASHING IS POSSIBLE. AN EYE WASH AND SAFETY SHOWER SHOULD BE AVAILABLE.

Work/Hygienic Practices:
AVOID BREATHING VAPOR OR SPRAY MIST. WASH HANDS THOROUGHLY AFTER CONTACT AND BEFORE BREAKS OR MEALS.

Section IX. - Additional Information

Emergency and Supportive Management:

Remove Patient?	Y	Keep an Open Airway?	Y	Monitor Breathing?	Y
Do NOT Induce Vomit?	Y	Dilute with Water?	Y	Call Poison Control?	Y
Decontaminate Patient?	Y	Eye Irrigation?	Y	Skin Irrigation?	Y

Type of Hazard:

Flammable?	Y	Oxidizing?	N	Toxic Gas/Vapor?	N
Harmful Gas/Vapor?	Y	Displaces Oxygen?	Y	Hazardous Dust?	N
Skin Irritation?	Y	Skin Absorption?	Y		

Precautions to Take:

Keep away from Heat?	Y	Avoid Contact with Skin/Eyes?	Y
Ventilation Required?	Y	Avoid Contact with Combustibles?	Y
Do NOT Handle?	N		

Severity:
CALIFORNIA PROPOSTION 65: THIS PRODUCT CONTAINS TOLUENE, CAS NUMBER: 108883 WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE REPRODUCTIVE TOXICITY.

Oral Toxicity:
NA

Eye Exposure:
NA

Section X. - H.M.I.S., N.F.P.A. and D.O.T. Information

HMIS - Health Hazards:
MODERATE HAZARD (2)
TEMPORARY OR MINOR INJURY MAY OCCUR

HMIS - Flammability Hazards:
SERIOUS HAZARD (3)
MATERIALS CAPABLE OF IGNITION UNDER ALMOST ALL NORMAL TEMPERATURE CONDITIONS, INCLUDING FLAMMABLE LIQUIDS WITH FLASH POINTS BELOW 73 DEGRESS F AND BOILING POINTS ABOVE 100 DEGREES F AS WELL AS LIQUIDS WITH FLASH POINTS BETWEEN 73 DEGREES F AND 100 DEGREES F (NFPA CLASS 1B AND 1C)

HMIS - Reactivity Hazards:
MINIMAL HAZARD (0)
MATERIALS THAT ARE NORMALLY STABLE, EVEN UNDER FIRE CONDITIONS, AND WILL NOT REACT WITH WATER.

HMIS - Chronic Hazards:
UNK

HMIS - Protective Equipment:
(H) SPLASH GOGGLES, GLOVES, SYNTHETIC APRON, VAPOR RESPIRATOR

NFPA - Health Hazards:
UNK

NFPA - Flammability Hazards:
UNK

NFPA - Reactivity Hazards:
UNK

NFPA - Special Hazards:
UNK

CHEMICAL EMERGENCY TELEPHONE (CHEMTREC) 1-800-424-9300

THIS PRODUCT DOES NOT CONTAIN OR MANUFACTURED WITH ANY OZONE DEPLETING CHEMICALS.

The information accumulated herein relates only to the specific material identified. United Coatings, Inc. believes that such information is accurate and reliable as of the date of this Material Safety Data Sheet, but no representation, guarantee or warranty, express or implied, is made to the accuracy, reliability, or completeness of the information. United Coatings, Inc. urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

MATERIAL SAFETY DATA SHEET

prepared 08/29/07

HAZARDS IDENTIFICATION (ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract, lungs. Prolonged inhalation may lead to headache, nausea, coughing, difficulty of breathing, severe lung irritation or damage, pneumoconiosis.

Skin contact : Irritation of skin.

Eye contact : Irritation of eyes.

Ingestion : Ingestion may cause mouth and throat irritation, gastro-intestinal disturbances.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, lung disorders, asthma-like conditions.

FIRST-AID MEASURES (ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort. Get medical attention if discomfort or irritation persists.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES (ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may burst if exposed to extreme heat or fire. Easily ignited if allowed to dry. In closed tanks, water or foam may cause frothing or eruption.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide, monomer vapors. Vinyl acetate monomer acrylic monomers. Acetaldehyde.

ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Evacuate all unnecessary personnel. Place collected material in proper container. Spilled material is extremely slippery. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE (ANSI Section 7)

Handling and storage : Store below 100f (38c). Keep from freezing.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection.

EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

Respiratory protection : Where respiratory protection is required, use only NIOSH/ MSHA approved respirators in accordance with OSHA standard 29 CFR 1910.134.

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing. Replace elastomeric protective equipment whenever it becomes swollen, gummy, torn, or shows evidence of barrier loss. Apply a solvent-resistant skin barrier cream to areas of skin that may come into contact with material. If working out-of-doors, apply sunscreen lotion with a high sun block protection factor to skin exposed to sunlight after applying barrier cream.

STABILITY AND REACTIVITY (ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, hydrogen fluoride. Styrene monomer.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, freezing, sparks, open flame, extremes in temperature.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION (ANSI Section 11)

Supplemental health information : No additional effects are anticipated

Carcinogenicity : Treatment related nasal tumors were observed in rats and mice exposed to vinyl acetate via inhalation at 600 ppm for 2 years. In a lifetime inhalation study, exposure to 250 mg/m3 titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : No teratogenic effects are anticipated

ECOLOGICAL INFORMATION (ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

DISPOSAL CONSIDERATIONS (ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION (ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

ICI Paints North America
15885 Sprague Road Strongsville, Ohio 44136
EMERGENCY TELEPHONE NO. (800) 545-2643

EVERMORE INTERIOR LATEX SATIN

EM62XX

Physical Data (ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
EM6211	glidden evermore interior latex enamel satin pure white (base 1)	10.40	40.76	67.71	none	212-212	310	paint ** protect from freezing **
EM6212	glidden evermore interior latex enamel satin base 2	9.35	48.39	72.01	none	212-501	310	paint ** protect from freezing **
EM6213	glidden evermore interior latex enamel satin base 3	9.27	46.13	65.52	none	212-501	310	paint ** protect from freezing **
EM6222	glidden evermore interior latex enamel satin antique white	10.40	40.74	67.66	none	212-212	310	paint ** protect from freezing **
EM6224	glidden evermore interior latex enamel satin white	10.40	40.74	67.66	none	212-212	310	paint ** protect from freezing **

Ingredients Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	EM6211	EM6212	EM6213	EM6222	EM6224
kaolin	clay	1332-58-7	1-5	1-5		1-5	1-5
titanium oxide	titanium dioxide	13463-67-7	10-20	1-5		10-20	10-20
2-propenoic acid, butyl ester, polymer with ethenyl acetate	vinyl acrylic latex	25067-01-0		10-20			
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol	texanol	25265-77-4		1-5	1-5		
nepheline syenite	feldspar-type minerals	37244-96-5		5-10	10-20		
kieselguhr	diatomaceous earth, uncalcined	61790-53-2	1-5			1-5	1-5
water	water	7732-18-5	50-60	60-70	50-60	50-60	50-60
ammonium salt of polycarboxylic acid	polymeric dispersant solution	Sup. Conf.			1-5		
vinyl acetate/acrylic copolymer	vinyl acetate/acrylic copolymer	Sup. Conf.	10-20	10-20		10-20	10-20
acrylic resin	acrylic resin	Sup. Conf.			20-30		

Chemical Hazard Data (ANSI Sections 2, 8, 11, and 15)

		ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC					
Common Name	CAS. No.	8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S					H	M	N	I	O
clay	1332-58-7	2 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
vinyl acrylic latex	25067-01-0	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
texanol	25265-77-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
feldspar-type minerals	37244-96-5	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
diatomaceous earth, uncalcined	61790-53-2	not est.	not est.	not est.	not est.	6 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
polymeric dispersant solution	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
vinyl acetate/acrylic copolymer	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:
C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborn exposure, may result from skin absorption.

n/a=not applicable
not est=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

MATERIAL SAFETY DATA SHEET

prepared 09/23/08

ICI Paints North America
15885 Sprague Road Strongsville, Ohio 44136
EMERGENCY TELEPHONE NO. (800) 545-2643

EVERMORE INTERIOR LATEX SEMI-GLOSS

EM64XX

HAZARDS IDENTIFICATION (ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract, lungs. Prolonged inhalation may lead to mucous membrane irritation, drowsiness, dizziness and/or lightheadedness, headache, nausea, coughing, central nervous system depression, kidney damage, pneumoconiosis.

Skin contact : Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting. Possible sensitization to skin. Skin contact may result in dermal absorption of component(s) of this product which may cause headache, nausea, central nervous system depression.

Eye contact : Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, tearing of eyes, redness of eyes.

Ingestion : Ingestion may cause mouth and throat irritation, dizziness and/or lightheadedness, headache, nausea, vomiting, gastro-intestinal disturbances, severe abdominal pain, abdominal pain, apathy, central nervous system depression, respiratory problems, intoxication, kidney damage, pulmonary edema, loss of consciousness, acute poisoning, respiratory failure, cardiac failure, brain damage.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, lung disorders, kidney disorders.

FIRST-AID MEASURES (ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort. Get medical attention if discomfort or irritation persists.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES (ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may explode when exposed to extreme heat or fire. Vapors are heavier than air and may travel long distances to a source of ignition and flash back. Vapors can form explosive mixtures in air at elevated temperatures. Closed containers may burst if exposed to extreme heat or fire. Easily ignited if allowed to dry. In closed tanks, water or foam may cause frothing or eruption.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide, monomer vapors, toxic gases. Vinyl acetate monomer acrylic monomers. Propionaldehyde, acetaldehyde, oxides of calcium.

ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Spills may be collected with absorbent materials. Evacuate all unnecessary personnel. Place collected material in proper container. Spilled material is extremely slippery. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE (ANSI Section 7)

Handling and storage : Store below 100f (38c). Keep away from heat, sparks and open flame. Keep from freezing.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use.

EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

Respiratory protection : Where respiratory protection is required, use only NIOSH/ MSHA approved respirators in accordance with OSHA standard 29 CFR 1910.134.

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing. Replace elastomeric protective equipment whenever it becomes swollen, gummy, torn, or shows evidence of barrier loss. Apply a solvent-resistant skin barrier cream to areas of skin that may come into contact with material. If working out-of-doors, apply sunscreen lotion with a high sun block protection factor to skin exposed to sunlight after applying barrier cream.

STABILITY AND REACTIVITY (ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, ammonium salts, nitric acid, hydrofluoric acid. Styrene monomer.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, freezing, sparks, open flame, extremes in temperature.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION (ANSI Section 11)

Supplemental health information : No additional effects are anticipated

Carcinogenicity : Treatment related nasal tumors were observed in rats and mice exposed to vinyl acetate via inhalation at 600 ppm for 2 years. The international agency for research on cancer (IARC) has classified carbon black as possibly carcinogenic to humans (group 2b) based on sufficient evidence in animals and inadequate evidence in humans. In a lifetime inhalation study, exposure to 250 mg/m3 titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : Some laboratory test results have shown ethylene glycol to be an animal teratogen. However, an expert panel convened by the national toxicology program's center for the evaluation of risks to human reproduction (cerhr) conducted a review of the scientific literature and concluded that ethylene glycol does not present a significant concern with respect to developmental and reproductive toxicity in humans.

ECOLOGICAL INFORMATION (ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

DISPOSAL CONSIDERATIONS (ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION (ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

Physical Data (ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
EM6411	glidden evermore interior latex enamel semi-gloss -pure white(base 1)	10.47	40.40	66.78	none	212-212	310	paint ** protect from freezing **
EM6412	glidden evermore interior latex enamel semi-gloss - base 2	9.07	47.73	70.94	none	212-501	310	paint ** protect from freezing **
EM6413	glidden evermore interior latex enamel semi-gloss - base 3	9.07	49.48	63.87	none	212-501	110	paint ** protect from freezing **
EM6422	glidden evermore interior latex enamel semi-gloss - antique white	10.47	40.94	66.75	none	212-212	310	paint ** protect from freezing **
EM6424	glidden evermore interior latex enamel semi-gloss - white	10.47	40.68	66.73	none	212-212	310	paint ** protect from freezing **
EM6434	glidden evermore interior latex enamel semi-gloss - black	8.70	247.55	71.27	none	212-501	*210	paint ** protect from freezing **

Ingredients Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	EM6411	EM6412	EM6413	EM6422	EM6424	EM6434
1,2-ethanediol	ethylene glycol	107-21-1						1-5
limestone	limestone	1317-65-3			5-10			
kaolin	clay	1332-58-7	5-10	5-10		5-10	5-10	
carbon black	carbon black	1333-86-4						1-5
titanium oxide	titanium dioxide	13463-67-7	10-20	1-5		10-20	10-20	
2-propenoic acid, butyl ester, polymer with ethenyl acetate	vinyl acrylic latex	25067-01-0		10-20				
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol	texanol	25265-77-4	1-5	1-5	1-5	1-5	1-5	1-5
2-propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate	acrylic polymer	25852-37-3						20-30
1,2-propanediol	propylene glycol	57-55-6						5-10
water	water	7732-18-5	50-60	60-70	50-60	50-60	50-60	60-70
ammonium salt of polycarboxylic acid	polymeric dispersant solution	Sup. Conf.			1-5			
acrylic resin	acrylic resin	Sup. Conf.			30-40			
vinyl acetate/acrylic copolymer	vinyl acetate/acrylic copolymer	Sup. Conf.	10-20	10-20		10-20	10-20	

Chemical Hazard Data (ANSI Sections 2, 8, 11, and 15)

		ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC	H	M	N	I	O
Common Name	CAS. No.	8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S									
ethylene glycol	107-21-1	not est.	not est.	100 mg/m3	not est.	not est.	not est.	not est.	not est.	not est.	n	y	y	y	n	n	n	n
limestone	1317-65-3	10 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
clay	1332-58-7	2 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
carbon black	1333-86-4	3.5 mg/m3	not est.	not est.	not est.	3.5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	y	n
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
vinyl acrylic latex	25067-01-0	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
texanol	25265-77-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
propylene glycol	57-55-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
polymeric dispersant solution	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
vinyl acetate/acrylic copolymer	Sup. Conf.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:

C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborn exposure, may result from skin absorption.

n/a=not applicable
not est=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

MATERIAL SAFETY DATA SHEET

prepared 08/29/07

HAZARDS IDENTIFICATION (ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract. Prolonged inhalation may lead to dizziness and/or lightheadedness, headache, nausea, chest pain, coughing, difficulty of breathing, severe lung irritation or damage, pneumoconiosis.

Skin contact : Irritation of skin. Prolonged or repeated contact can cause dermatitis.

Eye contact : Irritation of eyes.

Ingestion : Ingestion may cause lung inflammation and damage due to aspiration of material into lungs, mouth and throat irritation, nausea, vomiting, diarrhea, gastro-intestinal disturbances.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, asthma-like conditions.

FIRST-AID MEASURES (ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES (ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may burst if exposed to extreme heat or fire.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide, acrylic monomers.

ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Ventilate area. Spills may be collected with absorbent materials. Place collected material in proper container. Spilled material is extremely slippery. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE (ANSI Section 7)

Handling and storage : Store below 100f (38c). Keep from freezing.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection.

EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

Respiratory protection : Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing.

STABILITY AND REACTIVITY (ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers.

Conditions to avoid : Elevated temperatures, freezing.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION (ANSI Section 11)

Supplemental health information : No additional effects are anticipated

Carcinogenicity : Contains crystalline silica which is considered a hazard by inhalation. IARC has classified crystalline silica as carcinogenic to humans (group 1). Crystalline silica is also a known cause of silicosis, a noncancerous lung disease. The national toxicology program (NTP) has classified crystalline silica as a known human carcinogen. In a lifetime inhalation study, exposure to 250 mg/m3 titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : No teratogenic effects are anticipated

ECOLOGICAL INFORMATION (ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

DISPOSAL CONSIDERATIONS (ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION (ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard

ICI Paints North America 15885 Sprague Road Strongsville, Ohio 44136 EMERGENCY TELEPHONE NO. (800) 545-2643

EVERMORE EXTERIOR LATEX SATIN

EM69XX

criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

Physical Data (ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
EM6911	glidden evermore exterior 100% acrlyic latex satin-pure white (base 1)	10.25	44.99	64.12	none	212-212	310	paint ** protect from freezing **
EM6912	glidden evermore exterior 100% acrlyic latex satin-base 2	9.40	47.97	68.22	none	212-212	310	paint ** protect from freezing **
EM6913	glidden evermore exterior 100% acrlyic latex satin-base 3	9.35	49.00	69.10	none	212-212	*310	paint ** protect from freezing **
EM6924	glidden evermore exterior 100% acrlyic latex satin-white	10.14	45.41	64.43	none	212-212	310	paint ** protect from freezing **

Ingredients Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	EM6911	EM6912	EM6913	EM6924
titanium oxide	titanium dioxide	13463-67-7	10-20	1-5		10-20
cristobalite	crystalline silica, cristobalite	14464-46-1			.1-1.0	
2-propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate	acrylic polymer	25852-37-3		20-30		
nepheline syenite	feldspar-type minerals	37244-96-5	1-5	10-20	10-20	5-10
ceramic materials and wares, chemicals	calcined kaolin clay	66402-68-4	1-5			1-5
kieselguhr, soda ash flux-calcined	silica, diatomaceous earth	68855-54-9			.1-1.0	
water	water	7732-18-5	50-60	50-60	50-60	50-60
acrylic resin	acrylic resin	Sup. Conf.	10-20		20-30	10-20
defoamer, oil-based	oil based defoamer	Sup. Conf.		1-5		

Chemical Hazard Data (ANSI Sections 2, 8, 11, and 15)

		ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC	H	M	N	I	O
Common Name	CAS. No.	8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S									
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
crystalline silica, cristobalite	14464-46-1	.025 mg/m3	not est.	not est.	not est.	0.05 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
feldspar-type minerals	37244-96-5	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
calcined kaolin clay	66402-68-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
silica, diatomaceous earth	68855-54-9	10 mg/m3	not est.	not est.	not est.	6 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
oil based defoamer	Sup. Conf.	5 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:

C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborn exposure, may result from skin absorption.

n/a=not applicable
not est=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

MATERIAL SAFETY DATA SHEET

prepared 07/13/07

HAZARDS IDENTIFICATION (ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract. Prolonged inhalation may lead to mucous membrane irritation, dizziness and/or lightheadedness, headache, nausea, coughing, central nervous system depression, difficulty of breathing.

Skin contact : Irritation of skin.

Eye contact : Irritation of eyes. Prolonged or repeated contact can cause conjunctivitis, tearing of eyes, redness of eyes.

Ingestion : Ingestion may cause fatigue, dizziness and/or lightheadedness, headache, nausea, diarrhea, gastro-intestinal disturbances, abdominal pain, intoxication.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, respiratory disorders.

FIRST-AID MEASURES (ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use. If irritation occurs, consult a physician.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES (ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may burst if exposed to extreme heat or fire.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide. Oxides of calcium.

ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Spills may be collected with absorbent materials. Place collected material in proper container. Complete personal protective equipment must be used during cleanup. Large spills - shut off leak if safe to do so. Dike and contain spill. Pump to storage or salvage vessels. Use absorbent to pick up excess residue. Keep salvageable material and rinse water out of sewers and water courses. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE (ANSI Section 7)

Handling and storage : Store below 100f (38c). Keep from freezing. Keep container tightly closed in a well-ventilated area.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection. Empty containers may contain hazardous residues.

EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

Respiratory protection : Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing, boots.

STABILITY AND REACTIVITY (ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, ammonium salts.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, freezing.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION (ANSI Section 11)

Supplemental health information : Contains a chemical that may be absorbed through skin. Notice - reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Other effects of overexposure may include toxicity to liver, kidney, blood.

Carcinogenicity : Contains crystalline silica which is considered a hazard by inhalation. IARC has classified crystalline silica as carcinogenic to humans (group 1). Crystalline silica is also a known cause of silicosis, a noncancerous lung disease. The national toxicology program (NTP) has classified crystalline silica as a known human carcinogen. In a lifetime inhalation study, exposure to 250 mg/m3 titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : No teratogenic effects are anticipated

ECOLOGICAL INFORMATION (ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

DISPOSAL CONSIDERATIONS (ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

ICI Paints North America
15885 Sprague Road Strongsville, Ohio 44136
EMERGENCY TELEPHONE NO. (800) 545-2643

ULTRA-HIDE AQUACRYLIC GRIPPER PRIMER-SEALER

GL3210

REGULATORY INFORMATION (ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

Physical Data (ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
GL3210-1200	glidden gripper interior/exterior stain killer primer/sealer - white	11.12	87.43	53.67	none	212-453	*210	paint ** protect from freezing **

Ingredients Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	GL3210-1200
ethanol, 2-(2-butoxyethoxy)-	diethylene glycol monobutyl ether	112-34-5	1-5
limestone	limestone	1317-65-3	5-10
titanium oxide	titanium dioxide	13463-67-7	10-20
quartz	quartz	14808-60-7	5-10
2-propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate	styrene copolymer	25750-06-5	1-5
water	water	7732-18-5	30-40
oxirane, methyl-, polymer with oxirane	surfactant	9003-11-6	1-5
styrene acrylic copolymer	styrene acrylic copolymer	Sup. Conf.	10-20

Chemical Hazard Data (ANSI Sections 2, 8, 11, and 15)

		ACGIH-TLV				OSHA-PEL				S.R. Std.	S2	S3	CC	H	M	N	I	O
Common Name	CAS. No.	8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S									
diethylene glycol monobutyl ether	112-34-5	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	y	n	y	n	n	n	n
limestone	1317-65-3	10 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
quartz	14808-60-7	.025 mg/m3	not est.	not est.	not est.	0.1 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
surfactant	9003-11-6	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:

C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborn exposure, may result from skin absorption.

n/a=not applicable
not est=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

MSDS Format : ANSI

PDF Copy Print Email

Masterchem Industries LLC

View MSDS : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1(

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**KILZ 2® Latex**
MSDS Manufacturer Number:	2000
Manufacturer Name:	Masterchem Industries LLC
Address:	3135 Old Highway M Imperial, MO 63052-2834
General Phone Number:	(636) 942-2510
General Fax Number:	(636) 942-3663
Customer Service Phone Number:	(800) 325-3552
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec:	In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Creation Date:	06/26/2006
MSDS Revision Date:	2/20/2009

NFPA

	1	
1		0

HMIS

Health Hazard	1
Fire Hazard	1
REACTIVITY	0
Personal Protection	x

* Chronic Health Effects:

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Talc, Magnesium silicate hydrate	14807-96-6	5 - 10 by weight
Nephelne Syenite	37244-96-5	1 - 5 by weight
Non hazardous Ingredient(s)	No data	30 - 60 by weight
Undisclosed/Proprietary	No data	1 - 5 by weight
Styrene resin	No data	30 - 60 by weight
Titanium dioxide	13463-67-7	10 - 30 by weight
Ethylene glycol	107-21-1	1 - 5 by weight

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:	Irritant.
Potential Health Effects:	
Eye:	May cause irritation.
Skin:	May cause irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	No Data
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	1
NFPA Reactivity:	0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, ski and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustibl materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhalin vapor or mist.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA c other recognized standards. Consult with local procedures for selection, training inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apro or coveralls should be used to prevent contact with eyes, skin or clothing.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirato if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EXPOSURE GUIDELINES

Talc, Magnesium silicate hydrate :

Guideline ACGIH:	TLV-TWA: 2 mg/m3 (Respirable)
Guideline OSHA:	OSHA-TWA: 20 mg/m3

Titanium dioxide :

Guideline ACGIH:	TLV-TWA: 10 mg/m3
Guideline OSHA:	OSHA-TWA: 15 mg/m3

Ethylene glycol :

Guideline ACGIH:	TLV-STEL: C 100 mg/m3 (Aerosol only)

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Color:	White
Boiling Point:	No Data
Melting Point:	No Data
Density:	10 - 12 Lbs./gal.
Vapor Density:	Greater than 1 (Air = 1).
pH:	8.5 to 9.5
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	No Data

VOC Content:	Material VOC: 35 gm/l (Includes Water) Coating VOC.: 96 gm/l (Excludes Water)

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION

Talc, Magnesium silicate hydrate :

RTECS Number:	WW2710000
Skin:	Administration onto the skin - Human Standard Draize Test.: 300 ug/3D (Intermittent) (RTECS)

Titanium dioxide :

RTECS Number:	XR2275000
Skin:	Skin - Rabbit; Standard Draize Test. : 300 ug/3D; (Intermittent) mild. (RTECS)
Ingestion:	Ingestion - Rat TDLo: 60 gm/kg; Gastrointestinal - hypermotility, diarrhea Gastrointestinal - other changes. (RTECS)

Ethylene glycol :

RTECS Number:	KW2975000
Eye:	Eye - Rabbit; Standard Draize Test. : 500 mg/24H; mild. Eye - Rabbit; Standard Draize Test. : 1440 mg/6H; Moderate. (RTECS)
Skin:	Skin - Rabbit; Open irritation : 555 mg; mild. (RTECS)
Inhalation:	Inhalation. - Rat LC: >200 mg/m3/4H; Details of toxic effects not reported othe than lethal dose value. Inhalation. - Mouse LC: >200 mg/m3/2H; Details of toxic effects not reported other than lethal dose value. (RTECS)
Ingestion:	Ingestion - Rat LD50: 4700 mg/kg; Details of toxic effects not reported other than lethal dose value.. (RTECS)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT UN Number:	No Data
DOT Hazard Class:	No Data

SECTION 15 - REGULATORY INFORMATION

Talc, Magnesium silicate hydrate :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed

Nepheline Syenite :

TSCA Inventory Status:	Not listed
Canada DSL:	Listed

Titanium dioxide :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed

Ethylene glycol :

TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

SECTION 16 - ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	1
HMIS Reactivity:	0
HMIS Personal Protection:	x
HMIS Other:	x
MSDS Creation Date:	06/26/2006
MSDS Revision Date:	2/20/2009
MSDS Revision Notes:	Quarterly formula update
MSDS Author:	Actio Corporation
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point ou that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.
Trademark:	The trademarks, service marks, graphics and logos used on this MSDS are registered or unregistered trademarks of BEHR Process Corporation. All Rights Reserved.

Material Safety Data Sheet

Date of issue 8 April 2009
Version 16

1 . Product and company identification

Product name : PREMIUM INT. FLAT ULTRA WHITE/BS 1
Code : 72001
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2 . Hazards identification

Emergency overview : WARNING!

MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled.
Ingestion : May be harmful if swallowed.
Skin : No known significant effects or critical hazards.
Eyes : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.
Ingestion : No specific data.
Skin : No specific data.
Eyes : No specific data.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects. If splashed in the eyes, the liquid may cause irritation and reversible damage. Acrylate components of the preparation have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

See toxicological information (section 11)

3 . Composition/information on ingredients

Name	CAS number	%
titanium dioxide	13463-67-7	10 - 30
Nepheline syenite	37244-96-5	1 - 5
cristobalite	14464-46-1	1 - 5
PROPRIETARY	Not available.	1 - 5
Kieselguhr, soda ash flux-calcined	68855-54-9	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.

In case of accidental skin contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of skin.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous combustion products : Decomposition products may include the following materials:
metal oxide/oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store below the following temperature: 32F / 0C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
titanium dioxide	TWA	10 mg/m³	15 mg/m³ TD	10 mg/m³ TD	10 mg/m³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m³ (as Ti)	Not established
Nepheline syenite	TWA	10 MG/M3 TD 3 MG/M3 R	15 mg/m3 TD 5 mg/m3 R 15 mg/m3	10 mg/m³ TD	Not established	Not established

8 . Exposure controls/personal protection

cristobalite	TWA	0.025 mg/m³ R	10 mg/m³ R Z 30 mg/m³ TD Z 250 mppcf R Z	Not established	0.05 mg/m³	Not established
PROPRIETARY	TWA	10 mg/m3	15 MG/M3 5 mg/m3 R	Not established	Not established	Not established
Kieselguhr, soda ash flux-calcined	TWA	Not established	Not established	Not established	10 mg/m³ 3 mg/m³ R	Not established

Key to abbreviations

A	=	Acceptable Maximum Peak	S	=	Potential skin absorption
ACGIH	=	American Conference of Governmental Industrial Hygienists.	SR	=	Respiratory sensitization
C	=	Ceiling Limit	SS	=	Skin sensitization
F	=	Fume	TD	=	Total dust
IPEL	=	Internal Permissible Exposure Limit	TLV	=	Threshold Limit Value
OSHA	=	Occupational Safety and Health Administration.	TWA	=	Time Weighted Average
R	=	Respirable	Z	=	OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Gloves : polyethylene

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	:	Liquid.
Flash point	:	Closed cup: >93.33°C (>200°F)
Color	:	Not available.
Odor	:	Not available.
pH	:	Not available.
Boiling/condensation point	:	37.22 to 37.22°C (99 to 99°F)
Melting/freezing point	:	Not available.
Specific gravity	:	1.39
Density (lbs / gal)	:	11.6
Vapor pressure	:	2.3 kPa (17.5 mm Hg)
Vapor density	:	Not available.
Volatility	:	62% (v/v), 45.18% (w/w)
Odor threshold	:	Not available.
Evaporation rate	:	36 (Butyl acetate. = 1)
Octanol/water partition coefficient	:	Not available.
% Solid. (w/w)	:	54.82

10 . Stability and reactivity

Stability	:	This preparation contains materials which are unstable under the following conditions: strong UV sources free radical initiators peroxides strong alkalis strong acids reactive metals These could cause the product to polymerize exothermically. Unintentional contact with them should be avoided. Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	:	No specific data.
Materials to avoid	:	Reactive or incompatible with the following materials:,acids
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	:	Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Target organs : Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin.

Carcinogenicity

Conclusion/Summary : Not available.

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

11 . Toxicological information

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
titanium dioxide	A4	2B	-	-	-	-
cristobalite	A2	1	-	+	Proven.	-

Mutagenicity

Conclusion/Summary : Not available.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : Not available.

Teratogenicity : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : Not available.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 5.5 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 1 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14 . Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Additional information
UN	None.	Not regulated.	None.	-	-
IMDG	None.	Not regulated.	None.	-	-
DOT	None.	Not regulated.	Not available.	-	-

14 . Transport information

PG* : Packing group

Reportable quantity RQ : CERCLA: Hazardous substances.: No products were found.

15 . Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.

Australia inventory (AICS) : At least one component is not listed.

Canada inventory : At least one component is not listed.

China inventory (IECSC) : Not determined.

Europe inventory : This product contains a component which may restrict import to the notifier and/or to other parties holding a concurrent notification or agreement.

Japan inventory (ENCS) : At least one component is not listed.

Korea inventory (KECI) : At least one component is not listed.

New Zealand : Not determined.

Philippines inventory (PICCS) : At least one component is not listed.

United States

U.S. Federal regulations : TSCA 12(b) annual export notification: No products were found.

TSCA 12(b) one-time export: No products were found.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: cristobalite; titanium dioxide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: cristobalite: Immediate (acute) health hazard, Delayed (chronic) health hazard; titanium dioxide: Immediate (acute) health hazard
CERCLA: Hazardous substances.: No products were found.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 1 **Health** : 1 **Reactivity** : 0

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 1 * **Flammability** : 1 **Physical hazards** : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 1 **Flammability** : 1 **Instability** : 0

16 . Other information

Date of previous issue : **No previous validation.**

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet

Date of issue 16 May 2009
Version 11

1 . Product and company identification

Product name : EXTERIOR FLAT
Code : 73003
Supplier : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

2 . Hazards identification

Emergency overview : WARNING!

CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.
Ingestion : May be harmful if swallowed.
Skin : May cause skin dryness and irritation.
Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
Ingestion : No specific data.
Skin : Adverse symptoms may include the following:
irritation
dryness
cracking
Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications.

2 . Hazards identification

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (section 11)

3 . Composition/information on ingredients

Name	CAS number	%
silica, crystalline - quartz	14808-60-7	10 - 30
titanium dioxide	13463-67-7	5 - 10
Diatomaceous earth	61790-53-2	1 - 5
zinc oxide	1314-13-2	0.5 - 1.5
ethanediol	107-21-1	0.5 - 1.5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store below the following temperature: 32F / 0C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG

8 . Exposure controls/personal protection

silica, crystalline - quartz	TWA	0.025 mg/m³ R	10 mg/m³ R Z 30 mg/m³ TD Z 250 mppcf R Z	Not established	0.1 mg/m³	Not established
titanium dioxide	TWA	10 mg/m³	15 mg/m³ TD	10 mg/m³ TD	10 mg/m³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m³ (as Ti)	Not established
Diatomaceous earth	TWA	Not established	80 mg/m³ Z 20 mppcf Z	10 mg/m³ TD 3 mg/m³ R TD	10 mg/m³	Not established
zinc oxide	TWA	2 mg/m³	5 mg/m³ F 5 mg/m³ R 15 mg/m³ TD	2 mg/m³ R TD	10 mg/m³ 5 mg/m³	Not established
	STEL	10 mg/m³	Not established	10 mg/m³ R TD	10 mg/m³	Not established
ethanediol	STEL	100 mg/m³ C	Not established	100 mg/m³ C	100 mg/m³ C	Not established

Key to abbreviations

A	=	Acceptable Maximum Peak	S	=	Potential skin absorption
ACGIH	=	American Conference of Governmental Industrial Hygienists.	SR	=	Respiratory sensitization
C	=	Ceiling Limit	SS	=	Skin sensitization
F	=	Fume	TD	=	Total dust
IPEL	=	Internal Permissible Exposure Limit	TLV	=	Threshold Limit Value
OSHA	=	Occupational Safety and Health Administration.	TWA	=	Time Weighted Average
R	=	Respirable	Z	=	OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses with side shields.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

8 . Exposure controls/personal protection

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.
Flash point : Closed cup: >93.33°C (>200°F)
Color : Not available.
Odor : Not available.
pH : Not available.
Boiling/condensation point : >37.78°C (>100°F)
Melting/freezing point : Not available.
Specific gravity : 1.29
Density (lbs / gal) : 10.77
Vapor pressure : 2.3 kPa (17.3 mm Hg)
Vapor density : Not available.
Volatility : 67% (v/v), 52.01% (w/w)
Odor threshold : Not available.
Evaporation rate : 34 (Butyl acetate. = 1)
Octanol/water partition coefficient : Not available.
% Solid. (w/w) : 47.99

10 . Stability and reactivity

Stability : Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid : No specific data.
Materials to avoid : Reactive or incompatible with the following materials:,acids
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-
ethanediol	LD50 Oral	Rat	4700 mg/kg	-
	LD50 Dermal	Rabbit	9.53 g/kg	-

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant? : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs : Contains material which causes damage to the following organs: kidneys, lungs, liver, spleen, upper respiratory tract, bone marrow, eye, lens or cornea.
Contains material which may cause damage to the following organs: skin, central nervous system (CNS).

Carcinogenicity

Conclusion/Summary : Not available.

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
silica, crystalline - quartz	A2	1	-	+	Proven.	-
titanium dioxide	A4	2B	-	-	-	-
Diatomaceous earth	-	3	-	-	-	-
zinc oxide	A4	-	-	-	-	-
ethanediol	A4	-	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : Not available.

Teratogenicity : Contains material which may cause birth defects, based on animal data.

Reproductive toxicity

Conclusion/Summary : Not available.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure

12 . Ecological information

titanium dioxide	Acute LC50 5.5 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 1 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
zinc oxide	Acute LC50 1.1 to 2.5 ppm Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
	Acute LC50 98 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
ethanediol	Acute LC50 8050000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Acute LC50 >10000000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Chronic NOEC 6090000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14 . Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Additional information
UN	None.	Not regulated.	None.	-	-
IMDG	None.	Not regulated.	None.	-	-
DOT	None.	Not regulated.	Not available.	-	-

PG* : Packing group

Reportable quantity RQ : CERCLA: Hazardous substances.: ethanediol: 5000 lbs. (2270 kg); zinc oxide;

15 . Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.
Australia inventory (AICS) : At least one component is not listed.
Canada inventory : All components are listed or exempted.
China inventory (IECSC) : All components are listed or exempted.
Europe inventory : All components are listed or exempted.
Japan inventory (ENCS) : All components are listed or exempted.
Korea inventory (KECI) : All components are listed or exempted.
New Zealand : Not determined.
Philippines inventory (PICCS) : Not determined.

United States

U.S. Federal regulations : TSCA 12(b) annual export notification: No products were found.

TSCA 12(b) one-time export: No products were found.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: silica, crystalline - quartz; ethanediol; zinc oxide; titanium dioxide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: silica, crystalline - quartz: Immediate (acute) health hazard, Delayed (chronic) health hazard; ethanediol: Immediate (acute) health hazard, Delayed (chronic) health hazard; zinc oxide: Immediate (acute) health hazard, Delayed (chronic) health hazard; titanium dioxide: Immediate (acute) health hazard

CERCLA: Hazardous substances.: ethanediol: 5000 lbs. (2270 kg); zinc oxide;

SARA 313 : **Form R - Reporting requirements**

Product name	CAS number	Concentration
zinc oxide	1314-13-2	0.5 - 1.5
ethanediol	107-21-1	0.5 - 1.5

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-6: Reactive flammable material Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 1 **Health** : 2 **Reactivity** : 0

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * **Flammability** : 1 **Physical hazards** : 0
(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

16 . Other information

National Fire Protection Association (U.S.A.)

Health : 2 **Flammability** : 1 **Instability** : 0

Date of previous issue : **No previous validation.**

Organization that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Professionsl Oil Based Enamel K-Gallons	Revision Date:	08/04/2006
Identification Number:	K7725402, K7738402, K7744402, K7764402, K7776402, K7779402, K7786402, K7789402, K7792402, 240385, 240384, 240380, 240386, 240387, 240382, 240381, 215964, 215965, 215968		
Product Use/Class:	Topcoat/ Low VOC Alkyd		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Stoddard Solvents	8052-41-3	45.0	100 PPM	N.E.	500 PPM	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Pigment Red 3	2425-85-6	15.0	N.E.	N.E.	N.E.	N.E.
Pigment Yellow 74	6358-31-2	10.0	N.E.	N.E.	N.E.	N.E.
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Xylene	1330-20-7	5.0	100 PPM	150 PPM	100 PPM	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Combustible liquid and vapor. Harmful if swallowed. Causes eye irritation. Vapors irritating to eyes and respiratory tract.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May cause skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. May cause headaches and dizziness. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Reports have associated repeated and prolonged occupational

overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage.
Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hampster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.
Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Govermental Industrial Hygienists.
Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 104 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 22.0 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Keep containers tightly closed.

Special Firefighting Procedures: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Wash hands before eating. Wash thoroughly after handling. Avoid contact with eyes. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product

residues.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep container closed when not in use. Keep away from heat, sparks, flame and sources of ignition.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	212 - 900 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	1.1000
Vapor Pressure:		PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Stoddard Solvents	N.D.	N.D.
Titanium Dioxide	>7500 mg/kg (ORAL, RAT)	N.D.
Pigment Red 3	>2000 mg/kg (ORAL, RAT)	N.D.
Pigment Yellow 74	>15000 mg/kg (ORAL, RAT)	N.D.
Magnesium Silicate	N.D.	TCLo:11mg/m3 inh.
Hydrotreated Light Distillate	N.D.	N.D.
Pigment Black 7	>8000 mg/kg (ORAL, RAT)	N.D.
Xylene	N.D.	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group:	III
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	3	Resp. Guide Page:	128
DOT UN/NA Number:	UN1263		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Xylene	1330-20-7

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3
Tall Oil Alkyd Resin	PROPRIETARY
Alkyd Resin	PROPRIETARY
Long Oil Alkyd Resn	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3
Tall Oil Alkyd Resin	PROPRIETARY
Alkyd Resin	PROPRIETARY
Long Oil Alkyd Resn	PROPRIETARY
Yellow Iron Oxide	51274-00-1

California Proposition 65:

These products contain no known chemicals known by the State of California to cause cancer.

These products contain no known chemicals known by the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B3, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 2 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: ----

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Specialty Coating For Plastic	Revision Date:	06/25/2007
Identification Number:	211338, 211339, 211360, 211361, 211362, 211363, 211364, 211366, 211367, 211368, 243670		
Product Use/Class:	Specialty Coating for Plastic/Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	35.0	500 PPM	750 PPM	750 PPM	N.E.
Liquefied Petroleum Gas	68476-86-8	30.0	1000 PPM	N.E.	1000 PPM	N.E.
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Xylene	1330-20-7	10.0	100 PPM	150 PPM	100 PPM	N.E.
Naphtha	8032-32-4	10.0	300 PPM	N.E.	N.E.	N.E.
Toluene	108-88-3	10.0	50 PPM	150 PPM	200 PPM	300 PPM
Stoddard Solvents	8052-41-3	10.0	100 PPM	N.E.	500 PPM	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 PPM	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 PPM	N.E.	50 PPM	N.E.
Ethylbenzene	100-41-4	5.0	100 PPM	125 PPM	100 PPM	N.E.
Magnesium Silicate	14807-96-6	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
N-Butyl Acetate	123-86-4	5.0	150 PPM	200 PPM	150 PPM	N.E.
Pigment Red 122	980-26-7	1.0	15mg/m3	N.E.	5mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Extremely flammable liquid and vapor. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage.

Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 12.8 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Perforation of the pressurized container may cause bursting of the can. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Wash hands before eating. Wash thoroughly after handling. Avoid breathing vapor or mist. Use only in a

well-ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage: Contents under pressure. Do not expose to heat or store above 120 ° F. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 900 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.8040
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Acetone	N.D.	N.D.
Liquefied Petroleum Gas	N.D.	N.D.
Titanium Dioxide	>7500 mg/kg (ORAL, RAT)	N.D.
Xylene	N.D.	N.D.
Naphtha	>5000 mg/kg (ORAL, RAT)	N.D.
Toluene	N.D.	N.D.
Stoddard Solvents	N.D.	N.D.
Aromatic Hydrocarbon	N.D.	N.D.
1,2,4-Trimethylbenzene	N.D.	18000 mg/m3 (RAT, 4 HR)
Ethylene Glycol Monobutyl Ether	1519 mg/kg (ORAL, MOUSE)	700 PPM (INH 7 Hr, RAT)
Ethylbenzene	3500 mg/kg (ORAL, RAT)	N.D.
Magnesium Silicate	N.D.	TCLo:11mg/m3 inh.
N-Butyl Acetate	13100 mg/kg (ORAL, RAT)	2000 PPM (INH 4 Hr, RAT)
Pigment Red 122	N.D.	N.D.
Pigment Violet 32	>10000 mg/kg (ORAL, RAT)	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosol	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Xylene	1330-20-7
Toluene	108-88-3
1,2,4-Trimethylbenzene	95-63-6
Ethylene Glycol Monobutyl Ether	111-76-2
Ethylbenzene	100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY
Barium Sulfate	7727-43-7

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 4 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: N.A.

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: Painters Touch Aerosol Top Coats

Revision Date: 02/23/2009

Identification Number: 1925830, 1931830, 1941830, 1952830, 1961830, 1962830, 1965830, 1922830, 1926830, 1930830, 1933830, 1938830, 1945830, 1946830, 1949830, 1950830, 1953830, 1963830, 1964830, 1966830, 1974830, 1976830, 1977830, 1979830, 1982830, 1986830, 1992830, 1994830, 1995830, 1996830, 1924830, 1927830, 1934830, 1947830, 1948830, 1951830, 1971830, 1972830, 1973830, 1975830, 1993830, 1970830, 225191, 224356, 224357, 224358, 224359, 240255, 240217, 240268, 239242, 239243, 239244, 239245, 240250, 240251, 240252, 240253, 240254, 240256, 240257, 240258, 240259, 240260, 240262, 240263, 240264, 240265, 240266, 240267, 240269, 240280, 240281, 240282, 240283, 240554, 244895

Product Use/Class: Topcoats/Aerosol

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	40.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Aliphatic Petroleum Distillates	64742-48-9	20.0	400 ppm	N.E.	400 ppm	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Xylene	1330-20-7	15.0	100 ppm	150 ppm	100 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	10.0	25 ppm	N.E.	N.E.	N.E.
Naphtha	8032-32-4	10.0	300 ppm	N.E.	N.E.	N.E.
Stoddard Solvents	8052-41-3	10.0	100 ppm	N.E.	500 ppm	N.E.
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.
Aluminum Flake	7429-90-5	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Calcined Aluminum Silicate	1332-58-7	5.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.811
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Aliphatic Petroleum Distillates	N.E.	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Naphtha	>5000 mg/kg (Rat, Oral)	N.E.
Stoddard Solvents	N.E.	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Aluminum Flake	N.E.	N.E.

Aromatic Hydrocarbon	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Calcined Aluminum Silicate	5000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY
Modified Alkyd	PROPRIETARY
Acrylic Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3
Yellow Iron Oxide	51274-00-1
Iron Oxide	1309-37-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Stops Rust Metallic Aerosol	Revision Date:	12/14/2006
Identification Number:	7250830, 7251830, 7252830, 7253830, 7254830, 7255830, 7256830, 7257830, 7270830, 7271830, 7272830, 7273830, 7274830, 7275830, 7277830, 7278830		
Product Use/Class:	Metallic Topcoats/Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA
Toluene	108-88-3	40.0	50 PPM	150 PPM	200 PPM
Liquefied Petroleum Gas	68476-86-8	35.0	1000 PPM	N.E.	1000 PPM
Acetone	67-64-1	30.0	500 PPM	750 PPM	750 PPM
Xylene	1330-20-7	10.0	100 PPM	150 PPM	100 PPM
Aluminum Flake	7429-90-5	5.0	10 mg/m3	N.E.	15 mg/m3
Propylene Glycol Monomethyl Ether Acetate	108-65-6	5.0	N.E.	N.E.	30 p.p.m. (Supplier recommendation
Ethylbenzene	100-41-4	5.0	100 PPM	125 PPM	100 PPM
Stoddard Solvents	8052-41-3	5.0	100 PPM	N.E.	500 PPM

Section 3 - Hazards Identification

*** Emergency Overview ***: Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Extremely flammable liquid and vapor. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue,

mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.8 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Perforation of the pressurized container may cause bursting of the can. Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Wash hands before eating. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage: Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of

NFPA Class I flammable liquids. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 698 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	
Vapor Pressure:		PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Toluene	N.D.	N.D.
Liquefied Petroleum Gas	N.D.	N.D.
Acetone	N.D.	N.D.
Xylene	N.D.	N.D.
Aluminum Flake	N.D.	N.D.
Propylene Glycol Monomethyl Ether Acetate	>10000 mg/kg (ORAL, RAT)	N.D.
Ethylbenzene	3500 mg/kg (ORAL, RAT)	N.D.
Stoddard Solvents	N.D.	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosol	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Acrylic Resin	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Acrylic Resin	PROPRIETARY
Acrylic Resin	PROPRIETARY

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 4 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: NA

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Specialty Coatings Fluorescent Aerosol	Revision Date:	01/22/2008
Identification Number:	1932830, 1942830, 1954830, 1955830, 1959830		
Product Use/Class:	Fluorescent/Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Liquefied Petroleum Gas	68476-86-8	30.0	1000 PPM	N.E.	1000 PPM	N.E.
Aliphatic Hydrocarbon	64742-89-8	25.0	300 PPM	N.E.	300 PPM	N.E.
Toluene	108-88-3	20.0	50 PPM	150 PPM	200 PPM	300 PPM
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Naphtha	8032-32-4	5.0	300 PPM	N.E.	N.E.	N.E.
Polymer Anchored Green Dye Dispersion	MIXTURE	5.0	N.E.	N.E.	N.E.	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Xylene	1330-20-7	5.0	100 PPM	150 PPM	100 PPM	N.E.
Ethylbenzene	100-41-4	1.0	100 PPM	125 PPM	100 PPM	N.E.
Microcrystalline Silica	14808-60-7	1.0	0.025 mg/m3	N.E.	0.10 mg/m3	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Contents Under Pressure. Extremely flammable liquid and vapor. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue,

mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities. Contains crystalline silica as silicon dioxide. Excessive inhalation of respirable crystalline silica dust may cause lung disease, silicosis or lung cancer. Significant exposure is not anticipated during brush or trowel application or drying. Risk of overexposure depends on the duration and level of exposure to dust from repeated sanding of surfaces, mechanical abrasion or spray mist and actual concentration of crystalline silica in the formula. Crystalline silica is listed as Group 1 "carcinogenic to humans" by the International Agency for Research on Cancer (IARC,) and Group 2, "reasonably anticipated to be a carcinogen" by the National Toxicology Program (NTP)

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.9 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Perforation of the pressurized container may cause bursting of the can. Isolate from heat, electrical equipment, sparks and open flame. Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Use only in a well-ventilated area. Wash hands before eating. Wash thoroughly after handling. Avoid breathing vapor or mist.

Storage: Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use explosion-proof ventilation equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 468 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.8500
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Liquefied Petroleum Gas	N.D.	N.D.
Aliphatic Hydrocarbon	N.D.	N.D.
Toluene	636 mg/kg (Oral, Rat)	49 gm/M3 (Inhalation, Rat)
Magnesium Silicate	N.D.	TCLo:11mg/m3 inh.
Naphtha	>5000 mg/kg (ORAL, RAT)	N.D.
Polymer Anchored Green Dye Dispersion	N.D.	N.D.
Hydrotreated Light Distillate	N.D.	N.D.
Xylene	4300, mg/kg (Oral Rat)	5000 ppm/4hr (Inhalation, Rat)
Ethylbenzene	3500 mg/kg (ORAL, RAT)	N.D.
Microcrystalline Silica	N.D.	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3
Modified Alkyd	PROPRIETARY
Polymer Anchored Orange Dye Dispersion	MIXTURE
Polymer Anchored Yellow Dye Dispersion	MIXTURE
Polymer Anchored Orange Dye Dispersion	MIXTURE
Polymer Anchored Pink Dye Dispersion	MIXTURE

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:
Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: NA

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: Painters Touch Aerosol Top Coats

Revision Date: 02/23/2009

Identification Number: 1925830, 1931830, 1941830, 1952830, 1961830, 1962830, 1965830, 1922830, 1926830, 1930830, 1933830, 1938830, 1945830, 1946830, 1949830, 1950830, 1953830, 1963830, 1964830, 1966830, 1974830, 1976830, 1977830, 1979830, 1982830, 1986830, 1992830, 1994830, 1995830, 1996830, 1924830, 1927830, 1934830, 1947830, 1948830, 1951830, 1971830, 1972830, 1973830, 1975830, 1993830, 1970830, 225191, 224356, 224357, 224358, 224359, 240255, 240217, 240268, 239242, 239243, 239244, 239245, 240250, 240251, 240252, 240253, 240254, 240256, 240257, 240258, 240259, 240260, 240262, 240263, 240264, 240265, 240266, 240267, 240269, 240280, 240281, 240282, 240283, 240554, 244895

Product Use/Class: Topcoats/Aerosol

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	40.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Aliphatic Petroleum Distillates	64742-48-9	20.0	400 ppm	N.E.	400 ppm	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Xylene	1330-20-7	15.0	100 ppm	150 ppm	100 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	10.0	25 ppm	N.E.	N.E.	N.E.
Naphtha	8032-32-4	10.0	300 ppm	N.E.	N.E.	N.E.
Stoddard Solvents	8052-41-3	10.0	100 ppm	N.E.	500 ppm	N.E.
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.
Aluminum Flake	7429-90-5	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Calcined Aluminum Silicate	1332-58-7	5.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.811
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Aliphatic Petroleum Distillates	N.E.	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Naphtha	>5000 mg/kg (Rat, Oral)	N.E.
Stoddard Solvents	N.E.	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Aluminum Flake	N.E.	N.E.

Aromatic Hydrocarbon	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Calcined Aluminum Silicate	5000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY
Modified Alkyd	PROPRIETARY
Acrylic Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3
Yellow Iron Oxide	51274-00-1
Iron Oxide	1309-37-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Stops Rust Enamel Aerosol Top Coats	Revision Date:	04/08/2009
Identification Number:	7733830, 7740830, 7794830, 7721830, 7722830, 7723830, 7727830, 7728830, 7729830, 7731830, 7738830, 7754830, 7755830, 7763830, 7765830, 7768830, 7770830, 7771830, 7775830, 7783830, 7784830, 7786830, 7789830, 7790830, 7796830, 214084, 214085, 214086, 214087, 241234, 241235, 241236, 241237, 241239, 241238, 245896, 245897, 245898, 245899		
Product Use/Class:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	35.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Xylene	1330-20-7	25.0	100 ppm	150 ppm	100 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Magnesium Silicate	14807-96-6	15.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Mineral Spirits	64742-88-7	10.0	100 ppm	N.E.	100 ppm	N.E.
Ethylbenzene	100-41-4	10.0	100 ppm	125 ppm	100 ppm	N.E.
Propylene Carbonate	108-32-7	10.0	N.E.	N.E.	N.E.	N.E.
n-Butyl Acetate	123-86-4	10.0	150 ppm	200 ppm	150 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	5.0	25 ppm	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Aliphatic Hydrocarbon	64742-89-8	5.0	300 ppm	N.E.	300 ppm	N.E.
Pigment Violet 32	12225-08-0	5.0	N.E.	N.E.	N.E.	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F LOWER EXPLOSIVE LIMIT: 0.6 %

(Setaflash) UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	N.E.
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	N.D.	Specific Gravity:	0.838
Vapor Pressure:	N.D.	PH:	N.A.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N.E.

Product LC50: N.E.

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Mineral Spirits	>8 mg/kg (Rat, Oral)	>1400 ppm (Rat, Inhalation, 4Hr)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Propylene Carbonate	5000 mg/kg (Rat, Oral)	N.E.
n-Butyl Acetate	13100 mg/kg (Rat, Oral)	2000 ppm (Rat, Inhalation, 4 Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Aliphatic Hydrocarbon	>5000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Xylene	1330-20-7
Toluene	108-88-3
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Alkyd Resin	66070-60-8

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Alkyd Resin	66070-60-8
Alkyd Resin	66070-60-8
Modified Alkyd Resin	PROPRIETARY
Barium Sulfate	7727-43-7
Yellow Iron Oxide	51274-00-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5 D2A D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: Painters Touch Aerosol Top Coats

Revision Date: 02/23/2009

Identification Number: 1925830, 1931830, 1941830, 1952830, 1961830, 1962830, 1965830, 1922830, 1926830, 1930830, 1933830, 1938830, 1945830, 1946830, 1949830, 1950830, 1953830, 1963830, 1964830, 1966830, 1974830, 1976830, 1977830, 1979830, 1982830, 1986830, 1992830, 1994830, 1995830, 1996830, 1924830, 1927830, 1934830, 1947830, 1948830, 1951830, 1971830, 1972830, 1973830, 1975830, 1993830, 1970830, 225191, 224356, 224357, 224358, 224359, 240255, 240217, 240268, 239242, 239243, 239244, 239245, 240250, 240251, 240252, 240253, 240254, 240256, 240257, 240258, 240259, 240260, 240262, 240263, 240264, 240265, 240266, 240267, 240269, 240280, 240281, 240282, 240283, 240554, 244895

Product Use/Class: Topcoats/Aerosol

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	40.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Aliphatic Petroleum Distillates	64742-48-9	20.0	400 ppm	N.E.	400 ppm	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Xylene	1330-20-7	15.0	100 ppm	150 ppm	100 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	10.0	25 ppm	N.E.	N.E.	N.E.
Naphtha	8032-32-4	10.0	300 ppm	N.E.	N.E.	N.E.
Stoddard Solvents	8052-41-3	10.0	100 ppm	N.E.	500 ppm	N.E.
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.
Aluminum Flake	7429-90-5	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Calcined Aluminum Silicate	1332-58-7	5.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.811
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Aliphatic Petroleum Distillates	N.E.	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Naphtha	>5000 mg/kg (Rat, Oral)	N.E.
Stoddard Solvents	N.E.	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Aluminum Flake	N.E.	N.E.

Aromatic Hydrocarbon	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Calcined Aluminum Silicate	5000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY
Modified Alkyd	PROPRIETARY
Acrylic Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3
Yellow Iron Oxide	51274-00-1
Iron Oxide	1309-37-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Professional Inverted Marking Paint Fluorescent Aerosol	Revision Date:	06/26/2006
Identification Number:	2554838, 2558838, 207464, 239989		
Product Use/Class:	Marking Paint/Aerosol		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Liquefied Petroleum Gas	68476-86-8	30.0	1000 PPM	N.E.	1000 PPM	N.E.
Aliphatic Hydrocarbon	64742-89-8	20.0	300 PPM	N.E.	300 PPM	N.E.
Toluene	108-88-3	15.0	50 PPM	150 PPM	200 PPM	300 PPM
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Polymer Anchored Green Dye Dispersion	MIXTURE	5.0	N.E.	N.E.	N.E.	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Naphtha	8032-32-4	5.0	300 PPM	N.E.	N.E.	N.E.
Xylene	1330-20-7	5.0	100 PPM	150 PPM	100 PPM	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Extremely flammable liquid and vapor. Contents Under Pressure. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous

system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.9 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Use only in a well-ventilated area. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling. Wash hands before eating.

Storage: Contents under pressure. Do not expose to heat or store above 120 ° F. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 468 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	
Vapor Pressure:		PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Liquefied Petroleum Gas	N.D.	N.D.
Aliphatic Hydrocarbon	N.D.	N.D.
Toluene	N.D.	N.D.
Magnesium Silicate	N.D.	TCLo:11mg/m3 inh.
Polymer Anchored Green Dye Dispersion	N.D.	N.D.
Hydrotreated Light Distillate	N.D.	N.D.
Naphtha	>5000 mg/kg (ORAL, RAT)	N.D.
Xylene	N.D.	N.D.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosol	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3
Polymer Anchored Orange Dye Dispersion	MIXTURE
Polymer Anchored Orange Dye Dispersion	MIXTURE
Modified Alkyd	PROPRIETARY

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: NA

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the

responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Stops Rust Enamel Aerosol Top Coats	Revision Date:	04/08/2009
Identification Number:	7733830, 7740830, 7794830, 7721830, 7722830, 7723830, 7727830, 7728830, 7729830, 7731830, 7738830, 7754830, 7755830, 7763830, 7765830, 7768830, 7770830, 7771830, 7775830, 7783830, 7784830, 7786830, 7789830, 7790830, 7796830, 214084, 214085, 214086, 214087, 241234, 241235, 241236, 241237, 241239, 241238, 245896, 245897, 245898, 245899		
Product Use/Class:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	35.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Xylene	1330-20-7	25.0	100 ppm	150 ppm	100 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Magnesium Silicate	14807-96-6	15.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Mineral Spirits	64742-88-7	10.0	100 ppm	N.E.	100 ppm	N.E.
Ethylbenzene	100-41-4	10.0	100 ppm	125 ppm	100 ppm	N.E.
Propylene Carbonate	108-32-7	10.0	N.E.	N.E.	N.E.	N.E.
n-Butyl Acetate	123-86-4	10.0	150 ppm	200 ppm	150 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	5.0	25 ppm	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Aliphatic Hydrocarbon	64742-89-8	5.0	300 ppm	N.E.	300 ppm	N.E.
Pigment Violet 32	12225-08-0	5.0	N.E.	N.E.	N.E.	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F LOWER EXPLOSIVE LIMIT: 0.6 %

(Setaflash) UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	N.E.
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	N.D.	Specific Gravity:	0.838
Vapor Pressure:	N.D.	PH:	N.A.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N.E.

Product LC50: N.E.

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Mineral Spirits	>8 mg/kg (Rat, Oral)	>1400 ppm (Rat, Inhalation, 4Hr)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Propylene Carbonate	5000 mg/kg (Rat, Oral)	N.E.
n-Butyl Acetate	13100 mg/kg (Rat, Oral)	2000 ppm (Rat, Inhalation, 4 Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Aliphatic Hydrocarbon	>5000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Xylene	1330-20-7
Toluene	108-88-3
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Alkyd Resin	66070-60-8

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Alkyd Resin	66070-60-8
Alkyd Resin	66070-60-8
Modified Alkyd Resin	PROPRIETARY
Barium Sulfate	7727-43-7
Yellow Iron Oxide	51274-00-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5 D2A D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust-Oleum Stops Rust Enamel - Brush Topcoats	Revision Date:	04/03/2009
Identification Number:	7723730, 7724502, 7727730, 7733502, 7738502, 7738730, 7747730, 7762730, 7765502, 7765730, 7770502, 7770730, 7771502, 7771730, 7775730, 7776730, 7777502, 7777730, 7779502, 7779504, 7779730, 7784502, 7786502, 7786730, 7790730, 7791730, 7792504, 7792730, 7723502, 7747502, 7755502, 7762502, 7765502, 7775502, 7797502, 7798502, 212729T, 7791502, 7776502, 7790502, 7792502, 7727502, 7789502, 7798502, 7722502, 7763502, 239083, 239084		
Product Use/Class:	Topcoats/Alkyd		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Mineral Spirits	64742-88-7	55.0	100 ppm	N.E.	100 ppm	N.E.
Magnesium Silicate	14807-96-6	25.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Calcined Aluminum Silicate	1332-58-7	20.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Aluminum Oxide	1344-28-1	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Quartz (Crystalline Silica)	14808-60-7	1.0	0.025 mg/m3	N.E.	0.10 mg/m3	N.E.
Ethylbenzene	100-41-4	1.0	100 ppm	125 ppm	100 ppm	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Causes eye irritation. Vapors irritating to eyes and respiratory tract. Combustible liquid and vapor.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May cause skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. May cause headaches and dizziness. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Contains crystalline silica as silicon dioxide. Excessive inhalation of respirable crystalline silica dust may cause lung disease, silicosis or lung cancer. Significant exposure is not anticipated during brush or trowel application or drying. Risk of overexposure depends on the duration and level of exposure to dust from repeated sanding of surfaces, mechanical abrasion or spray mist and actual concentration of crystalline silica in the formula. Crystalline silica is listed as Group 1 "carcinogenic to humans" by the International Agency for Research on Cancer (IARC), and Group 2 "reasonably anticipated to be a carcinogen" by the National Toxicology Program (NTP).

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 104 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 24.6 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Keep containers tightly closed.

Special Firefighting Procedures: Water may be used to cool closed containers to prevent pressure buildup and

possible autoignition or explosion. Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	212 - 415 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	1.047
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Mineral Spirits	>8 mg/kg (Rat, Oral)	>1400 ppm (Rat, Inhalation, 4Hr)
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Calcined Aluminum Silicate	5000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.
Aluminum Oxide	N.E.	N.E.
Quartz (Crystalline Silica)	N.E.	N.E.
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group:	III
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	3	Resp. Guide Page:	128
DOT UN/NA Number:	UN1263		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Ethylbenzene	100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3
Alkyd Resin	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Calcium Carbonate	1317-65-3
Alkyd Resin	PROPRIETARY
Alkyd Resin	PROPRIETARY
Barium Sulfate	7727-43-7
Yellow Iron Oxide	51274-00-1
Pigment Yellow 74	6358-31-2
Pigment Blue 15:2	147-14-8
Pigment Red 170	2786-76-7

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

This product contains no known chemicals known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B3 D2A D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 2 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	STRUST SSPR 6PK GLOSS SUNRISE RED	Revision Date:	10/08/2008
Identification Number:	7762830		
Product Use/Class:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL CEILING
Acetone	67-64-1	30.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	30.0	1000 PPM	N.E.	1000 PPM	N.E.
Xylene	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
N-Butyl Acetate	123-86-4	10.0	150 PPM	200 PPM	150 PPM	N.E.
Ethylbenzene	100-41-4	5.0	100 PPM	125 PPM	100 PPM	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 PPM	N.E.	50 PPM	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e,g.,narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene

in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 12.8 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 399 F	Vapor Density:	Heavier than Air
Odor:	Solvent Like	Odor Threshold:	N.E.
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	N.D.	Specific Gravity:	0.754
Vapor Pressure:	N.D.	PH:	N.A.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N.D.

Product LC50: N.D.

Chemical Name	LD50	LC50
Acetone	N.D.	N.D.
Liquefied Petroleum Gas	N.D.	N.D.
Xylene	4300, mg/kg (Oral Rat)	5000 ppm/4hr (Inhalation, Rat)
N-Butyl Acetate	13100 mg/kg (ORAL, RAT)	2000 PPM (INH 4 Hr, RAT)
Ethylbenzene	3500 mg/kg (Oral, Rat)	N.D.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (ORAL, MOUSE)	700 PPM (INH 7 Hr, RAT)

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Xylene	1330-20-7
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd Resin	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd Resin	PROPRIETARY

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5 D2A D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: Painters Touch Aerosol Top Coats

Revision Date: 02/23/2009

Identification Number: 1925830, 1931830, 1941830, 1952830, 1961830, 1962830, 1965830, 1922830, 1926830, 1930830, 1933830, 1938830, 1945830, 1946830, 1949830, 1950830, 1953830, 1963830, 1964830, 1966830, 1974830, 1976830, 1977830, 1979830, 1982830, 1986830, 1992830, 1994830, 1995830, 1996830, 1924830, 1927830, 1934830, 1947830, 1948830, 1951830, 1971830, 1972830, 1973830, 1975830, 1993830, 1970830, 225191, 224356, 224357, 224358, 224359, 240255, 240217, 240268, 239242, 239243, 239244, 239245, 240250, 240251, 240252, 240253, 240254, 240256, 240257, 240258, 240259, 240260, 240262, 240263, 240264, 240265, 240266, 240267, 240269, 240280, 240281, 240282, 240283, 240554, 244895

Product Use/Class: Topcoats/Aerosol

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Acetone	67-64-1	40.0	500 ppm	750 ppm	750 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	1000 ppm	N.E.	1000 ppm	N.E.
Toluene	108-88-3	25.0	20 ppm	150 ppm	200 ppm	300 ppm
Aliphatic Petroleum Distillates	64742-48-9	20.0	400 ppm	N.E.	400 ppm	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Xylene	1330-20-7	15.0	100 ppm	150 ppm	100 ppm	N.E.
Solvent Naptha, Light Aromatic	64742-95-6	10.0	25 ppm	N.E.	N.E.	N.E.
Naphtha	8032-32-4	10.0	300 ppm	N.E.	N.E.	N.E.
Stoddard Solvents	8052-41-3	10.0	100 ppm	N.E.	500 ppm	N.E.
Magnesium Silicate	14807-96-6	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.
Aluminum Flake	7429-90-5	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 ppm	N.E.	50 ppm	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 ppm	N.E.	N.E.	N.E.
Calcined Aluminum Silicate	1332-58-7	5.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contains Aromatic Distillate, which may cause cancer. Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 999 F	Vapor Density:	Heavier than air
Odor:	Solvent Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H2O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.811
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Aliphatic Petroleum Distillates	N.E.	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Solvent Naptha, Light Aromatic	4700 mg/kg (Rat, Oral)	3670 mg/kg (Rat, Inhalation)
Naphtha	>5000 mg/kg (Rat, Oral)	N.E.
Stoddard Solvents	N.E.	N.E.
Magnesium Silicate	N.E.	TCLo: 11 mg/m3 (Inhalation)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Aluminum Flake	N.E.	N.E.

Aromatic Hydrocarbon	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (Mouse, Oral)	700 ppm (Rat, Inhalation, 7Hr)
1,2,4-Trimethylbenzene	N.E.	18000 mg/m3 (Rat, 4Hr)
Calcined Aluminum Silicate	5000 mg/kg (Rat, Oral)	N.E.
Pigment Black 7	>8000 mg/kg (Rat, Oral)	N.E.
Pigment Violet 32	>10000 mg/kg (Rat, Oral)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosols	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3
Xylene	1330-20-7
Ethylbenzene	100-41-4
Ethylene Glycol Monobutyl Ether	111-76-2
1,2,4-Trimethylbenzene	95-63-6

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Modified Alkyd	PROPRIETARY
Modified Alkyd	PROPRIETARY
Acrylic Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7
Calcium Carbonate	1317-65-3
Yellow Iron Oxide	51274-00-1
Iron Oxide	1309-37-1

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5, D2A, D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

The Valspar Corporation
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID:	**007.0070576**
Product Name:	A/TRD INT EGG ULTWHT
Product Use:	Paint product.
Print date	11/Oct/2005
Revision Date	14/Sep/2005

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090
Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS-No.	Approx. Weight %	Chemical name
PROPRIETARY PIGMENT	20 - 25	PROPRIETARY PIGMENT
CRYSTALLINE SILICA 14808-60-7	1 - 5	QUARTZ (Si02)
ETHYLENE GLYCOL 107-21-1	1 - 5	1,2-Ethanediol
PROPRIETARY ADDITIVE	.1 - 1	PROPRIETARY ADDITIVE

If this section is blank there are no hazardous components per OSHA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:
Inhalation
Ingestion
Skin absorption

Emergency Overview:
This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:
Vapors that are toxic as well as irritating to the respiratory tract may be produced upon heating this material. Causes severe respiratory irritation.

Eye Contact:
May cause moderate eye irritation.

Skin Contact:
None known.

Acute Ingestion:
Irritation of gastrointestinal tract.

Other Effects:
None known

This product contains ingredients that may contribute to the following potential chronic health effects:

Causes changes in nasal membranes and may cause allergic respiratory reactions. May cause disabling, progressive pulmonary fibrosis (silicosis) due to crystalline silica. Prolonged or excessive exposure may cause irritation of the respiratory tract. Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis). Possible birth defects hazard. Contains ingredients which may cause birth defects based on animal data. May cause damage to the nervous system. May cause kidney damage. May cause liver damage.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:
If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention.

Eye Contact:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:
In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:
If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205º F (96° C) TCC/PM
Lower explosive limit:	Not available. %
Upper explosive limit:	Not available. %
Autoignition temperature:	Not available. º F (º C)
Sensitivity to impact:	No.
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:
None known.

Extinguishing media:
Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:
Use water spray to cool nearby containers and structures exposed to fire. Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:
Ventilate area. Remove spills with inert absorbent. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:
Keep container closed when not in use. Keep from freezing. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:
Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:
Appropriate chemical resistant gloves should be worn.To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:
If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation
Required when spraying or applying in confined area.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Common Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
PROPRIETARY PIGMENT	20 - 25	5 mg/m^3 Respirable fraction. 15 mg/m^3 Total dust. Respirable fraction. Listed. Total dust. Listed.		
CRYSTALLINE SILICA 14808-60-7	1 - 5	5 mg/m^3 Respirable fraction. 15 mg/m^3 Total dust. Respirable fraction. Listed. Total dust. Listed. Respirable. Listed.		

ACGIH Threshold Limit Value (TLV's)

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
PROPRIETARY PIGMENT	20 - 25	10 mg/m³ Inhalable particles. 3 mg/m³ Respirable particles.			
CRYSTALLINE SILICA 14808-60-7	1 - 5	10 mg/m³ Inhalable particles. 3 mg/m³ Respirable particles. 0.05 mg/m³ Respirable fraction.			
ETHYLENE GLYCOL 107-21-1	1 - 5			100 mg/m³ Aerosol.	

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	24 mmHG @ 68° F (20º C)
Vapor density (air = 1.0):	7.4
Boiling point:	212° F (100º C)
Solubility in water:	Soluble
Coefficient of water/oil distribution:	Not determined.
Density (lbs per US gallon):	11.24
Specific Gravity	1.35
Evaporation rate (butyl acetate = 1.0):	.4

10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to Avoid:	None known.
Incompatibility:	Avoid water-reactive materials, heat or contact with peroxides or other catalysts.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes. Acrylic monomers.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Mutagens:

Teratogens:

Carcinogens:

Contains crystaline silica. The IARC has determined that crystaline silica inhaled in the form of quartz or cristobablite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystaline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

Common Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - limited human data	IARC Group 2b - sufficient animal data
CRYSTALLINE SILICA 14808-60-7	1 - 5	Monograph 68, 1997; (inhaled in the form of quartz or cristobalite from occupational sources)		
PROPRIETARY ADDITIVE	.1 - 1			Monograph 68, 1997; (long fibres, >5 micrometers)

Common Name CAS-No.	Approx. Weight %	NTP Known carcinogens	NTP Suspect carcinogens	NTP Evidence of carcinogenicity
CRYSTALLINE SILICA 14808-60-7	1 - 5	Known carcinogen.		

Common Name CAS-No.	Approx. Weight %	OSHA Select carcinogens	OSHA Possible select carcinogens	ACGIH Carcinogens
CRYSTALLINE SILICA 14808-60-7	1 - 5			Group A2 Suspected human carcinogen.

If this section is blank, no information is available.

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

49 CFR Hazardous Material Regulations Parts 100-180
The supplier will apply the combustible liquid exception in 49 CFR 173.150(f), limited quantity or "does not sustain combustion" exceptions and consumer commodity rules, when authorized. Please check 49 CFR Parts 100-180 to determine if the use of these exceptions applies to your shipments when re-shipping our products.

International Air Transport Association:
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Maritime Organization:
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Common Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ IN LBS.
ETHYLENE GLYCOL 107-21-1	1 - 5		form R reporting required for 1.0% de minimis concentration	5000

SARA 311/312 Hazard Class:

Acute:	Yes
Chronic:	Yes
Flammability:	No
Reactivity:	No
Sudden Pressure:	No

U.S. STATE REGULATIONS:

Pennsylvania Right To Know:

ETHYLENE GLYCOL	107-21-1
PROPRIETARY PIGMENT	Trade Secret
CRYSTALLINE SILICA	14808-60-7

Additional Non-Hazardous Materials

PROPRIETARY INERT	Trade Secret
SUPPLIER TRADE SECRET	Trade Secret
PROPRIETARY INERT	Trade Secret
WATER	7732-18-5

California Proposition 65:
WARNING: This product contains chemicals known to the State of California to cause cancer.

Rule 66 status of product Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

TSCA Inventory: All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List: All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2
Flammability:	1
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:
OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:
The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

EPS/CCA
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID:	**076.0001914**
Product Name:	T EXT MED YELLOW
Product Use:	Colorant product.
Effective date:	17/Sep/2007
Revision Date:	06/Sep/2007
UN ID Number:	NRPAIN
WHMIS Classification:	D2B Toxic Material D1A Very Toxic Material

Company Identification

EPS/CCA
1400 N. STATE ST
MARENGO, IL 60152
Tech Info Phone: 1-800-729-3311

24-Hour Medical Emergency Phone: 1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS-No.	Approx. Weight %	Chemical Name	CAS Number	Trade Secret Number
ETHYLENE GLYCOL 107-21-1	15 - 20	1,2-Ethanediol	107-21-1	
TALC 14807-96-6	5 - 10	TALC (MG3H2(SI03)4)	14807-96-6	
DIETHYLENE GLYCOL 111-46-6	5 - 10	Diethylene glycol	111-46-6	
PROPRIETARY ADDITIVE	1 - 5	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, phosphate, sodium salt	37340-60-6	
PROPRIETARY ADDITIVE	1 - 5	Butanedioic acid, sulfo-, 1,4-bis(2,6-dimethylheptyl) ester, sodiumsalt	63217-13-0	

If this section is blank there are no hazardous components per OHSA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:
Inhalation
Ingestion
Skin absorption

Emergency Overview:
This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:
Harmful if inhaled. May affect the brain, nervous system, or respiratory system, causing dizziness, headache, nausea or respiratory irritation.

Eye Contact:
May cause moderate eye irritation.

Skin Contact:
May cause moderate skin irritation.

Acute Ingestion:
Irritation of gastrointestinal tract.

Other Effects:
None known

This product contains ingredients that may contribute to the following potential chronic health effects:

Prolonged exposure over TLV may produce pneumoconiosis. Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. May cause eye damage and pain. May cause redness and blistering of skin. Possible birth defects hazard. Contains ingredients which may cause birth defects based on animal data. May cause damage to the nervous system. May cause kidney damage. May cause liver damage.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:
If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Eye Contact:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:
In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:
Get immediate medical attention. If swallowed, contact medical personnel immediately to determine best course of action.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	240º F (116º C) TCC/PM
Lower explosive limit:	Not available. %
Upper explosive limit:	Not available. %
Autoignition temperature:	Not available. º F (º C)
Sensitivity to impact:	No.
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:
None known.

Extinguishing media:
Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:
Use water spray to cool nearby containers and structures exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:
Ventilate area. Avoid breathing of vapors. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 5, "Unusual Fire and Explosion Hazards", for proper container and storage procedures. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:
Keep container closed when not in use.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:
Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:
Appropriate chemical resistant gloves should be worn.To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:
If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation
Required when spraying or applying in confined area.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Common Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TALC 14807-96-6	5 - 10	Respirable. Listed. Total dust. Listed.		

ACGIH Threshold Limit Value (TLV's)

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
ETHYLENE GLYCOL 107-21-1	15 - 20			100 mg/m³ Aerosol.	

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TALC 14807-96-6	5 - 10	2 mg/m³ Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.			

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Odor threshold:	Not available.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	Not determined. mmHG @ 68º F (Not Available. º C)
Vapor density (air = 1.0):	3.7
Boiling point:	387º F (197º C)
Solubility in water:	Soluble
Coefficient of water/oil distribution:	Not determined.
Density (lbs per US gallon):	10.27
Specific Gravity:	1.23
Evaporation rate (butyl acetate = 1.0):	Not determined.

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizers.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Nitrogen compounds.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Common Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
ETHYLENE GLYCOL 107-21-1	15 - 20	Inhalation LC50 Rat : 10876 mg/kg Oral LD50 Rat : 4700 mg/kg Oral LD50 Mouse : 5500 mg/kg Dermal LD50 Rabbit : 9530 uL/kg
DIETHYLENE GLYCOL 111-46-6	5 - 10	Oral LD50 Rat : 12565 mg/kg Oral LD50 Mouse : 23700 mg/kg Dermal LD50 Rabbit : 11890 mg/kg

Mutagens:

Teratogens:

Carcinogens:

Common Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens	NTP Evidence of Carcinogenicity
TALC 14807-96-6	5 - 10			male rat-some evidence; female rat-clear evidence; male mice-no evidence; female mice-no evidence

If this section is blank, no information is available.

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

Canadian Transport of Dangerous Goods
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Air Transport Association:
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Maritime Organization:
Proper Shipping Name: PAINT, NOT REGULATED
Non-Bulk UN ID Number: NRPAIN

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS - Chemical Inventories

TSCA Inventory: All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List: All components of this product are listed on the Domestic Substances List.

Canada National Pollutant Release Inventory:

Common Name CAS-No.	Approx. Weight %	NPRI Status
ETHYLENE GLYCOL 107-21-1	15 - 20	[reporting required]

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

16. OTHER INFORMATION

HMIS Codes

Health:	3
Flammability:	1
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:
OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	17/Sep/2007
Revision Date:	06/Sep/2007

Technical Information:
EPS/CCA
1400 N. State Street
Marengo, IL 60152
Tech Info Phone: 1-800-729-3311

24-Hour Medical Emergency Phone: 1-888-345-5732

Tint

EPS/CCA
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID:	**076.0001947**
Product Name:	S EXT RED
Product Use:	Colorant product.
Effective date:	17/Oct/2007
Revision Date:	06/Sep/2007
UN ID Number:	NRPAIN
WHMIS Classification:	D2B Toxic Material D1A Very Toxic Material

Company Identification

EPS/CCA
1400 N. STATE ST
MARENGO, IL 60152

Tech Info Phone:	1-800-729-3311
24-Hour Medical Emergency Phone:	1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS-No.	Approx. Weight %	Chemical Name	CAS Number	Trade Secret Number
TALC, MAGNESIUM SILICATE HYDRATE 14807-96-6	25 - 30	TALC (MG3H2(SI03)4)	14807-96-6	
ETHYLENE GLYCOL 107-21-1	20 - 25	1,2-Ethanediol	107-21-1	
DIETHYLENE GLYCOL 111-46-6	5 - 10	Diethylene glycol	111-46-6	
PROPRIETARY ADDITIVE	1 - 5	.alpha.-(Dodecylphenyl)-.omega.-hydroxy-poly(oxy-1,2-ethanediyl)	9014-92-0	

If this section is blank there are no hazardous components per OHSA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:
Inhalation
Ingestion
Skin absorption

Emergency Overview:
This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:
May cause irritation of the respiratory tract. May irritate the lungs.

Eye Contact:
May cause moderate eye irritation. May cause delayed eye irritation.

Skin Contact:
May cause moderate skin irritation.

Acute Ingestion:
Irritation of gastrointestinal tract.

Other Effects:
None known

This product contains ingredients that may contribute to the following potential chronic health effects:

May cause dermatitis. Possible birth defects hazard. Contains ingredients which may cause birth defects based on animal data. May cause damage to the nervous system. May cause kidney damage. May cause liver damage.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:
If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention.

Eye Contact:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:
In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:
If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	240º F (116º C) TCC/PM
Lower explosive limit:	Not available. %
Upper explosive limit:	Not available. %
Autoignition temperature:	Not available. ° F (º C)
Sensitivity to impact:	No.
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:
None known.

Extinguishing media:
Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:
Use water spray to cool nearby containers and structures exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:
Ventilate area. Avoid breathing of vapors. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 5, "Unusual Fire and Explosion Hazards", for proper container and storage procedures. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:
Keep container closed when not in use.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:
Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:
Appropriate chemical resistant gloves should be worn.To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:
If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation
Required when spraying or applying in confined area.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Common Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TALC, MAGNESIUM SILICATE HYDRATE 14807-96-6	25 - 30	Respirable. Listed. Total dust. Listed.		

ACGIH Threshold Limit Value (TLV's)

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TALC, MAGNESIUM SILICATE HYDRATE 14807-96-6	25 - 30	2 mg/m³ Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.			
ETHYLENE GLYCOL 107-21-1	20 - 25			100 mg/m³ Aerosol.	

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Odor threshold:	Not available.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	Not determined. mmHG @ 68º F (Not Available. º C)
Vapor density (air = 1.0):	Not determined.
Boiling point:	Not available. º F (No information availableº C)
Solubility in water:	Soluble
Coefficient of water/oil distribution:	Not determined.
Density (lbs per US gallon):	11.05
Specific Gravity:	1.32
Evaporation rate (butyl acetate = 1.0):	Not determined.

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizers.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Common Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
ETHYLENE GLYCOL 107-21-1	20 - 25	Inhalation LC50 Rat : 10876 mg/kg Oral LD50 Rat : 4700 mg/kg Oral LD50 Mouse : 5500 mg/kg Dermal LD50 Rabbit : 9530 uL/kg
DIETHYLENE GLYCOL 111-46-6	5 - 10	Oral LD50 Rat : 12565 mg/kg Oral LD50 Mouse : 23700 mg/kg Dermal LD50 Rabbit : 11890 mg/kg
PROPRIETARY ADDITIVE	1 - 5	Oral LD50 Rat : 1870 uL/kg Dermal LD50 Rabbit : 1110 uL/kg

Mutagens:

Teratogens:

Carcinogens:

Common Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens	NTP Evidence of Carcinogenicity
TALC, MAGNESIUM SILICATE HYDRATE 14807-96-6	25 - 30			male rat-some evidence; female rat-clear evidence; male mice-no evidence; female mice-no evidence

If this section is blank, no information is available.

12. ECOLOGICAL DATA

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

Canadian Transport of Dangerous Goods
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Air Transport Association:
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Maritime Organization:
Proper Shipping Name: PAINT, NOT REGULATED
Non-Bulk UN ID Number: NRPAIN

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS - Chemical Inventories

TSCA Inventory: All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List: All components of this product are listed on the Domestic Substances List.

Canada National Pollutant Release Inventory:

Common Name CAS-No.	Approx. Weight %	NPRI Status
ETHYLENE GLYCOL 107-21-1	20 - 25	[reporting required]

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

HMIS Codes

Health:	2
Flammability:	1
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

16. OTHER INFORMATION

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	17/Oct/2007
Revision Date:	06/Sep/2007

Technical Information:

EPS/CCA
1400 N. State Street
Marengo, IL 60152

Tech Info Phone:	1-800-729-3311
24-Hour Medical Emergency Phone:	1-888-345-5732

EPS/CCA
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID:	**076.0001913**
Product Name:	AXN EXT YELLOW
Product Use:	Colorant product.
Effective date:	17/Sep/2007
Revision Date:	06/Sep/2007
UN ID Number:	NRPAIN
WHMIS Classification:	D2B Toxic Material D1A Very Toxic Material

Company Identification

EPS/CCA
1400 N. STATE ST
MARENGO, IL 60152
Tech Info Phone: 1-800-729-3311

24-Hour Medical Emergency Phone: 1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS-No.	Approx. Weight %	Chemical Name	CAS Number	Trade Secret Number
TALC 14807-96-6	25 - 30	TALC (MG3H2(SI03)4)	14807-96-6	
ETHYLENE GLYCOL 107-21-1	20 - 25	1,2-Ethanediol	107-21-1	
DIETHYLENE GLYCOL 111-46-6	5 - 10	Diethylene glycol	111-46-6	
PROPRIETARY ADDITIVE	5 - 10	Ethylene oxide-Nonylphenol polymer	9016-45-9	

If this section is blank there are no hazardous components per OHSA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:
Inhalation
Ingestion
Skin absorption

Emergency Overview:
This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:
May cause irritation of the respiratory tract. May cause mucous membrane irritation. May irritate the lungs. May irritate mouth, nose, and throat.

Eye Contact:
Corneal Injury/eye damage.

Skin Contact:
May cause moderate skin irritation.

Acute Ingestion:
Irritation of gastrointestinal tract.

Other Effects:
None known

This product contains ingredients that may contribute to the following potential chronic health effects:

Prolonged exposure over TLV may produce pneumoconiosis. May cause eye damage and pain. Possible birth defects hazard. Contains ingredients which may cause birth defects based on animal data. May cause damage to the nervous system. May cause kidney damage. May cause liver damage.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:
If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Eye Contact:
In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:
In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:
Get immediate medical attention. If swallowed, contact medical personnel immediately to determine best course of action.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	240º F (116º C) TCC/PM
Lower explosive limit:	Not available. %
Upper explosive limit:	Not available. %
Autoignition temperature:	Not available. º F (º C)
Sensitivity to impact:	No.
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:
None known.

Extinguishing media:
Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:
Use water spray to cool nearby containers and structures exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:
Ventilate area. Avoid breathing of vapors. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 5, "Unusual Fire and Explosion Hazards", for proper container and storage procedures. Avoid all personal contact.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:
Keep container closed when not in use.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:
Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:
Appropriate chemical resistant gloves should be worn.To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:
If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation
Required when spraying or applying in confined area.

Exposure Guldelines

OSHA Permissible Exposure Limits (PEL's)

Common Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TALC 14807-96-6	25 - 30	Respirable. Listed. Total dust. Listed.		

ACGIH Threshold Limit Value (TLV's)

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TALC 14807-96-6	25 - 30	2 mg/m³ Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.			
ETHYLENE GLYCOL 107-21-1	20 - 25			100 mg/m³ Aerosol.	

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Odor threshold:	Not available.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	24 mmHG @ 68º F (Not Available. º C)
Vapor density (air = 1.0):	3.7
Boiling point:	212º F (100º C)
Solubility in water:	Soluble
Coefficient of water/oil distribution:	Not determined.
Density (lbs per US gallon):	11.14
Specific Gravity:	1.34
Evaporation rate (butyl acetate = 1.0):	.4

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizers.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Nitrogen compounds.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Common Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
ETHYLENE GLYCOL 107-21-1	20 - 25	Inhalation LC50 Rat : 10876 mg/kg Oral LD50 Rat : 4700 mg/kg Oral LD50 Mouse : 5500 mg/kg Dermal LD50 Rabbit : 9530 uL/kg
DIETHYLENE GLYCOL 111-46-6	5 - 10	Oral LD50 Rat : 12565 mg/kg Oral LD50 Mouse : 23700 mg/kg Dermal LD50 Rabbit : 11890 mg/kg
PROPRIETARY ADDITIVE	5 - 10	MD0900000:Glycols, polyethylene, mono(nonylphenyl) ether (10/1/97) Oral LD50 Rat : 1310 mg/kg Oral LD50 Mouse : >50 gm/kg Dermal LD50 Rabbit : 2 mL/kg

Mutagens:

Teratogens:

Carcinogens:

Common Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens	NTP Evidence of Carcinogenicity
TALC 14807-96-6	25 - 30			male rat-some evidence; female rat-clear evidence; male mice-no evidence; female mice-no evidence

If this section is blank, no information is available.

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

Canadian Transport of Dangerous Goods
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Air Transport Association:
Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Maritime Organization:
Proper Shipping Name: PAINT, NOT REGULATED
Non-Bulk UN ID Number: NRPAIN

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS - Chemical Inventories

TSCA Inventory: All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List: All components of this product are listed on the Domestic Substances List.

Canada National Pollutant Release Inventory:

Common Name CAS-No.	Approx. Weight %	NPRI Status
ETHYLENE GLYCOL 107-21-1	20 - 25	[reporting required]
PROPRIETARY ADDITIVE	5 - 10	[reporting required]

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

HMIS Codes
Health: 3
Flammability: 1
Reactivity: 1
PPE: X - See Section 8 for Personal Protective Equipment (PPE).

16. OTHER INFORMATION

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. EPS/CCA. assumes no obligation or liability for use of this information. NOTICE: EPS/CCA MAKES NO WARRANTIES WITH RESPECT TO THIS PRODUCT, EXPRESS OR IMPLIED. EPS/CCA DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. EPS/CCA WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	17/Sep/2007
Revision Date:	06/Sep/2007

Technical Information:

EPS/CCA
1400 N. State Street
Marengo, IL 60152

Tech Info Phone:	1-800-729-3311
24-Hour Medical Emergency Phone:	1-888-345-5732

Material Safety Data Sheet

24 Hour Emergency Phone Numbers:
Medical: 1-800-327-3874
1-513-558-5111
Transportation:
1-800-535-5053
1-352-323-3500

NOTE: National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
Esta hoja de datos de la seguridad de los materiales está disponible en francés canadiense y en español a su solicitud.
Los Datos de Serguridad del Producto pueden obtenerse en Espanol si lo riquiere.

Product Name: PAINTERS PUTTY 53
Product UPC Number: 7079812240, 7079812242, 7079812244
Product Use/Class: PAINTERS PUTTY
Manufacturer: **DAP Inc.**
2400 Boston Street Suite 200
Baltimore, MD 21224-4723
888-327-8477 (non-emergency matters)

Revision Date: 04/18/2005
Supercedes: 12/28/1999
MSDS Number: 00010407001

Section 2 - Composition / Information On Ingredients

Chemical Name	CASRN	WT%	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Calcium carbonate	1317-65-3	60-100	10 MGM3	N.E.	N.E.	5 MGM3	N.E.	N.E.	No
Titanium dioxide	13463-67-7	0.5-1.5	10 MGM3	N.E.	N.E.	15 MGM3	N.E.	N.E.	No
Silica, crystalline	14808-60-7	0.5-1.5	0.05 MGM3	N.E.	N.E.	(10 ÷ % SiO2) / 2 MGM3	N.E.	N.E.	No

Exposure Notes:

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices

Section 3 - Hazards Identification

Emergency Overview: CAUTION! Prolonged or repeated contact with skin may cause irritation.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: None known.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact with skin may cause irritation.

Effects Of Overexposure - Inhalation: None known.

Effects Of Overexposure - Ingestion: None known.

Effects Of Overexposure - Chronic Hazards: Prolonged and repeated skin contact may cause irritation and possibly dermatitis.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption

Medical Conditions which May be Aggravated by Exposure: None known.

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing.

First Aid - Inhalation: If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If continued breathing difficulty is experienced, get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

Note to Physician: None.

COMMENTS: Call Medical Emergency at 1-800-327-3874 if any irritation or complication arise from any of the above routes of entry.

Section 5 - Fire Fighting Measures

Flash Point, F: Greater than 200
Method: (Seta Closed Cup)

Lower Explosive Limit, %: Not Established
Upper Explosive Limit, %: Not Established

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

Unusual Fire And Explosion Hazards: No special protective measures against fire required.

Special Firefighting Procedures: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. Use absorbent material or scrape up dried material and place in container.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. While dry sanding, use ofa NIOSH-approved dust mask is recommended. Removal of this product after use will result in the generation of Dust. If dry-sanded, exposure to dust may result in the build-up of material in eyes, ears, nose, and mouth which may cause irritation. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Avoid contact with eyes.

Storage: Close container after each use. Store containers away from excessive heat and freezing. Do not store at temperatures above 120 degrees F. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Good general ventilation should be sufficient to control airborne levels. Ensure adequate ventilation, especially in confined areas. Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits. Wet sanding is recommended to avoid generation of dust.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Rubber gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

Section 9 - Physical And Chemical Properties

Boiling Range:	Not Established	**Vapor Density:**	Not Established
Odor:	Musty	**Odor Threshold:**	Not Established
Appearance:	White	**Evaporation Rate:**	Not Established
Solubility in H2O:	Not Established	**Specific Gravity:**	Not Established
Freeze Point:	Not Established	**pH:**	Not Applicable
Vapor Pressure:	Not Established	**Viscosity:**	Not Established
Physical State:	Paste		

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Incompatible with strong bases and oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established

Product LC50: Not Established

None

Carcinogenicity:

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP	WT%
13463-67-7	Titanium dioxide	-----	-----	Classification not possible from current data.	-----	0.5-1.5
14808-60-7	Silica, crystalline	Suspected human carcinogen.	-----	-----	Known carcinogen.	0.5-1.5

Significant Data with Possible Relevance to Humans: None

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): None

Section 14 - Transportation Information

DOT Proper Shipping Name: Not Regulated

Packing Group: N.A.

DOT Technical Name: N.A.

Hazard Subclass: N.A.

DOT Hazard Class: N.A.

DOT UN/NA Number: None

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

None

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

U.S. State Regulations:

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number	WT%
Oil	TSRN-618608-5071P	10-15

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number	WT%
Oil	Proprietary	10-15

California Proposition 65:

Warning: The following ingredients present in the product are known to the State of California to cause cancer:

Chemical Name	CAS Number	Definition	Date Listed	WT%
Silica, crystalline	14808-60-7	Carcinogenic.	Listed: October 1, 1988	0.5-1.5

Warning: The following ingredients present in the product are known to the State of California to cause birth defects or other reproductive harm:

None

Section 16 - Other Information

HMIS Ratings:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 0.0 LB/GAL: 0.0 WT%: 0.0

REASON FOR REVISION: Periodic Update

Legend:

N.A. – Not Applicable
N.E. – Not Established
N.D. – Not Determined
VOC – Volatile Organic Compound
PEL – Permissible Exposure Limit
TLV – Threshold Limit Value
STEL – Short Term Exposure Limit
LD50 – Lethal Dose 50
F – Degree Fahrenheit
MSDS – Material Safety Data Sheet
ACGIH – American Conference of Governmental Industrial Hygienists
SARA – Superfund Amendments and Reauthorization Act of 1986
NJRTK – New Jersey Right-to-Know Law
OSHA – Occupational Safety and Health Administration
HMIS – Hazardous Materials Identification System
NTP – National Toxicology Program
CEIL – Ceiling Exposure Limit
LC50 – Lethal Concentration 50
C – Degree Celcius
CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>

MATERIAL SAFETY DATA SHEET

61-600
02 00

DATE OF PREPARATION
Feb 28, 2009

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
61-600
PRODUCT NAME
KOOL SEAL MAX® White Acrylic Patching Cement
MANUFACTURER'S NAME
KST COATINGS
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(888) 321-5665
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
2	**12001-26-2**	**Mica**		
		ACGIH TLV	3 mg/m3 as Resp. Dust	
		OSHA PEL	3 mg/m3 as Resp. Dust	
38	**471-34-1**	**Calcium Carbonate**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	15 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	
0.9	**13463-67-7**	**Titanium Dioxide**		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.
EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	1*
Flammability	0
Reactivity	0

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.
CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
SKIN: Wash affected area thoroughly with soap and water.
INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL	FLAMMABILITY CLASSIFICATION
Not Applicable	N.A.	N.A.	Not Applicable

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	11.35 lb/gal	1359 g/l
SPECIFIC GRAVITY	1.37	
BOILING POINT	212 - 213° F	100 - 100° C
MELTING POINT	Not Available	
VOLATILE VOLUME	49%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
pH	9.0	

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

0.05lb/gal	6g/l	Less Water and Federally Exempt Solvents
0.02lb/gal	3g/l	Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

CAS No.	Ingredient Name			
12001-26-2	**Mica**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
471-34-1	**Calcium Carbonate**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
13463-67-7	**Titanium Dioxide**			
		LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

Not Regulated for Transportation.

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Carbendazim 10 lb RQ

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 *(40 CFR 372.65C)* SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Material Safety Data Sheet

Section 1 General Information

Manufacturer:
Zinsser and Company, Inc.
173 Belmont Drive
Somerset, NJ 08875
(732) 469-8100

Emergency Telephone: Chemtrec (800) 424-9300 **Date: July 19, 2007**

Product Name: **PrimeCoat2**

Codes: **01811**

Section 2 Hazardous Ingredients

Hazardous Component	CAS#	OSHA PEL	ACGIH TLV
Ethylene Glycol	107-21-1	N/E	100 mg/m^3 (C)
Limestone	1317-65-3	15 mg/m^3 * 5 mg/m^3 **	10 mg/m^3
Kaolin	1332-58-7	15 mg/m^3 * 5 mg/m^3 **	2 mg/m^3 **
Talc	14807-96-6	20 mppcf	2 Mg/m^3
Titanium Dioxide	13463-67-7	15 mg/m^3 *	10 mg/m^3

* Total Dust ** Respirable Dust Fraction C = Ceiling Value

Section 3 Hazard Identification

Emergency Overview: This material is water based paint primer. It is a stable, non-flammable, white flowable liquid with a flash point above 200° Fahrenheit.

Primary Routes of Exposure:

Skin Contact
Eye Contact

Potential Acute Health Effects:

Eye: May cause slight eye irritation.

Skin: May cause slight skin irritation in certain individuals. However, absorption through skin contact is not considered to be a significant route of exposure.

Ingestion: May cause gastrointestinal irritation, however ingestion is not considered a significant route of exposure.

Inhalation: May cause respiratory tract irritation, however inhalation not considered a significant route of exposure.

Potential Chronic Health Effects: None known.

(See also Sections 4, 8, and 11for related information)

Section 4 First Aid Measures

Eye contact: Flush eye with water for 15 minutes. If symptoms persist, consult a physician.

Skin contact: Wash with soap and water. If symptoms occur, consult a physician.

Ingestion: Swallowing less than an ounce is not expected to cause significant harm. For larger amounts, do not induce vomiting, give one or two glasses of water to drink and call a physician or poison control center.

Inhalation: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of vapor, remove person to fresh air. Seek medical attention if symptoms develop.

Note to Physician: Treat symptomatically. This material is basically non-toxic. A small quantity (approx. one-tablespoon) is unlikely to cause harm.

Section 5 Fire Fighting Measures

Flash Point (method)**:** > 200° F

Extinguishing Media: Foam, Alcohol Foam, CO_2 Dry Chemical, Water Fog.

Protection of Firefighters: No special protection required. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire and Explosion Hazards: This liquid material will not burn. However, the dried paint film may burn in a fire.

Section 6 Accidental Release Measures

Clean Up Methods: Keep unnecessary people away. Contain spills with inert material (sand, earth, etc.) and transfer to containers for recovery or disposal. Keep spill out of sewer and open bodies of water. Floors may be slippery; care should be exercised to avoid falls.

(See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

Section 7 Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing.

Storage: Keep from freezing. Keep container closed when not in use.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: If exposure conditions warrant, use local exhaust ventilation or general dilution ventilation to reduce vapor concentrations.

Personal Protective Equipment (PPE):

Eye Protection: Wear safety glasses, goggles, or face shield to prevent eye contact.

Skin Protection: Wear gloves to prevent prolonged skin contact.

Respiratory Protection: None required under normal intended use conditions. In areas of poor ventilation, if vapor exposure causes discomfort, or if applicable workplace exposure limits are exceeded wear a NIOSH approved respirator with organic vapor cartridges when working with the liquid material. Where dust exposure may exceed applicable workplace exposure limits due to sanding the dried primer film, wear a NIOSH approved respirator with P-100 filters.

Protective Clothing: For brief contact, no special precautions other than clean body-covering clothing should be needed. When prolonged or frequent, repeated contact with the material could occur, use protective clothing that is impervious to this material (such as tyvek®).

General Hygiene Practices: Wash after handling. Prevent Eye contact. Avoid prolonged skin and inhalation contact. Wash thoroughly before handling food.

Section 9 Physical Data

Appearance: White emulsion.

Odor: Acrylic like odor.

Physical State: Liquid

pH: 9.0 – 10.0

Boiling Point: Approximately 212° F

Melting/Freezing Point: Approx. 32° F

Vapor Pressure: N/D

Vapor Density: N/D

Viscosity: 90- 95 KU

Solubility in Water: Dilutable in water.

Specific Gravity (water = 1)**:** 1.4

Density: 11.6 lb/gal

VOC Content: ≤ 100 g/l

Section 10 Stability and Reactivity

Stability: This material is stable, not reactive.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None known.

Conditions to Avoid: None known.

Incompatibility: None known.

Section 11 Toxicological Information

Carcinocenicity: This material is not considered a carcinogen by IARC or NTP and is not regulated as a carcinogen by OSHA.

(See also Section 15 for related information)

Section 12 Ecological Information

Chemical Fate and Effects: No data available.

Section 13 Disposal Considerations

RCRA Hazardous Waste: No

Recommended Waste Disposal Method: This material is not considered hazardous waste under Federal Hazardous Waste Regulations (40CFR 261). However, state and local requirements for waste disposal may be more restrictive or otherwise differ from federal regulations. Chemical additions, processing or otherwise altering this material may render the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Consult all applicable federal, state, and local regulations regarding the proper disposal of this material.

Section 14 Transportation Information

Regulated by the US DOT: No. This product is considered Non Hazardous by DOT.

Section 15 Regulatory Information

CERCLA:

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

Chemical Name	CAS#	Maximum Concentration (Wt. %)
Ethylene Glycol	107-21-1	3%

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

Chemical Name	CAS#	Maximum Concentration (Wt. %)
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

Chemical Name	CAS# or Chemical Category	Maximum Concentration (Wt. %)
Ethylene Glycol	107-21-1	3%
Zinc Compounds	N 982	1%

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product does not contain any chemicals that require export notification under Section 12(b) of the TSCA regulation.

Section 16 Other Information

Legend: **N/A**: Not Applicable
N/D: Not Determined
N/E: Not Established
N/R: Not Required
STEL: Short Term Exposure Limit
C: OSHA Ceiling Value
PPM: Parts Per Million
PPB: Parts Per Billion
PEL: Permissible Exposure Limit
TLV: Threshold Limit Value
TWA: Time Weighted Average
mg/m^3: Milligrams per cubic Meter
mppcf: Million particles per cubic foot of air.
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration (US Dept. of Labor)
RCRA: Resource Conservation and recovery Act
SARA: Superfund Amendment and Reauthorization Act
TSCA: Toxic Substance Control Act
FHSA: Federal Hazardous Substance Act

Prepared By: Zinsser Regulatory Compliance Dept.
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Disclaimer: Zinsser Company, Inc. believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these

materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

Material Safety Data Sheets

A Material Safety Data Sheet (MSDS) is a fact sheet that lists the characteristics and hazards of a specific hazardous industrial material. MSDSs tell how to handle, store, and ship the material safely and in accordance with regulations. They also give emergency and first aid procedures for dealing with injuries, fires, leaks, spills, and other incidents involving the material. Praxair MSDSs also provide additional information such as ratings under various hazard identification systems, listing by certain states, and valve connection data.

Under the OSHA Hazard Communication Standard, manufacturers of hazardous materials must prepare and make available an MSDS for each hazardous material sold. In addition, those purchasing these materials must maintain a file of MSDSs in the work place so they are available to their employees.

Precautionary information on the safe handling of gases listed in this catalog is provided on Material Safety Data Sheets (MSDS), which are issued to customers for each product sold.

We strongly urge you to read and thoroughly understand the information contained in the applicable MSDS before using any of the gases in this catalog.

We also suggest you obtain and read Praxair's pamphlets "CONDENSED SAFETY INFORMATION, Compressed Gases and Cryogenic Liquids" (Form P-12-237), and 'GUIDELINES for Handling Compressed Gas Cylinders and Liquid Containers" (Form P-14-153).
Copies of MSDS's and the pamphlets can be obtained thru your Sales Representative, by calling Praxair at 1-800-PRAXAIR or visiting our website at www.praxair.com/msds.

Personal Protective Equipment

The type of personal protective equipment required at a particular location depends on the products handled at that location. For personal protective equipment recommendations, read the MSDS for each product handled at your location. Personal protective equipment, available from local safety equipment suppliers, should be selected in accordance with standards established by OSHA or NIOSH.

Receiving Cylinders and Containers

External Inspection

Personnel responsible for receiving cylinders and containers should perform an external inspection on all packages before moving them to the point of use or to the storage area. Basic guidelines for performing this inspection are as follows:

- Read the cylinder labels to be sure that the gas is what you ordered and that you understand the hazards associated with the product. Remember, the label is the only means of identifying the product in the cylinder. Never identify the product by the color of the cylinder.
- Check the TC/DOT cylinder markings to be sure you understand the pressures contained in the cylinders.
- Thoroughly inspect the cylinders for any obvious damage. The cylinder surface should be clean and free from defects such as cuts, gouges, burns and obvious dents. Such damage could weaken the cylinder metal, creating a danger of failure, or it could make the cylinder unstable and more likely to tip over. Make sure the cylinder stands steady on its base and does not wobble.
- Cylinders with neck threads should have a cap in place over the valve. Remove the cap by hand. Never use a screwdriver, crowbar, or other leverage device to remove the cap. You could accidentally open the valve or damage it.
- Check the cylinder valve to be sure it is not bent or damaged. A damaged valve could leak or fail, or it might not make a tight connection when the cylinder is placed into use. Make sure the valve is free of dirt and oil, which could contaminate the gas. Dirt particles propelled in a high- velocity gas stream could cause a spark, igniting a flammable gas. Oil and grease can react with oxygen and other oxidizers, causing an explosion.
- If any cylinder is received with missing or unreadable labels and markings; visible damage; an unstable base; a missing cap; or a bent, damaged, or dirty valve, do not use the cylinder. Contact your supplier and ask for instructions.

Testing for Leaks

After completing the external inspection, proceed as follows:

- Test the cylinder valve for leaks using the leak test method approved by your employer. If you detect leakage, follow your employer's procedures for handling leaking cylinders.

NOTE: It is normal for cryogenic liquid containers to vent through their relief valves to relieve excess pressure build up due to heat leak. This venting is not a leak.

- If no leakage is detected, secure the cylinder valve cap in place before moving the cylinder to the point of use or to the storage area.

GENERAL SAFETY INFORMATION

Moving Cylinders and Containers

Cylinders and containers must always be moved carefully. Mishandling that results in a damaged valve or ruptured cylinder can expose personnel to the hazards associated with these gases. In addition, most gas cylinders are heavy and bulky. A cylinder striking someone or pinching a finger, toe, or other extremity is a common cause of injury. For these reasons, all cylinder handlers must always wear certain minimum personal protective equipment prescribed by OSHA:

- Gloves to protect the hands against common pinching injuries.
- Safety glasses to protect the eyes against injuries associated with pressure release.
- Safety shoes with metatarsal supports to protect against foot injuries from falling cylinders.

Before moving a cylinder to the storage area or point of use or before returning the cylinder to the supplier, ensure the following:

- The outlet valve is fully closed.
- The outlet valve dust plug or pressure cap is on tight for cylinders equipped with these protection devices.
- The valve protection cap is properly secured in place on cylinders with neck threads.

NOTE: Valve caps must always be in place while moving or transporting cylinders or when they are in storage.

While moving full or empty cylinders,

- Always use carts or hand trucks designed for this purpose.
- Never drop cylinders or allow them to strike each other violently.
- Never lift cylinders by the cap or with a lifting magnet.

After moving a cylinder to its point of use, secure the cylinder in place. Use cylinder stands, clamps, or other securing devices recommended by your supplier.

Storing Cylinders and Containers

Storage of compressed gas cylinders and cryogenic liquid containers is governed by codes of the National Fire Protection Association (NFPA). Local codes may also apply. Know and obey codes governing storage at your location.

Safe Practices

In general, store cylinders so they can't be easily toppled over. Remember, danger exists not only from accidental release of gas by cylinders damaged in a fall but also from their striking someone and causing injury. Store cylinders upright in compact groups, interlocking them so that each cylinder physically contacts those around it. Do not stand cylinders loosely or in a haphazard manner. A single cylinder that topples over can create a domino effect causing other cylinders to fall. Single cylinders should be secured in place or on a cylinder cart so they can't be readily knocked over.

Keep stored cylinders out of high traffic areas. Do not store them near the edges of platforms. Avoid storage in areas where there are activities that could damage or contaminate the cylinders. Electric arc welding can destroy the integrity of cylinder metal if a welder carelessly strikes an arc on a cylinder. Overhead hoists can drip oil or grease on cylinders, contaminating them. Never store cylinders with flammable materials.

Specific Guidelines

The compressed gases and cryogenic liquids presented on the following pages are organized in product categories having similar health hazards and storage requirements. These categories are as follows:

- Nonflammable, Non-corrosive, Low Toxicity (Table 1)
- Flammable, Non-corrosive, Low Toxicity (Table 2)
- Flammable, Corrosive, and/or Toxic (Table 3)
- Toxic and/or Corrosive, Nonflammable (Table 4)
- Spontaneously Flammable (Table 5)
- Toxic (Table 6)

Table 1

Nonflammable, Non-corrosive, Low Toxicity Store these products in well-ventilated areas or in covered outdoors areas, keeping them off the ground and away from radiant heat sources. Cylinder temperatures should not exceed 125°F (52°C).	Air Argon Banana Gas 32 Carbon Dioxide Clinical Blood Gas Mixtures P-5 Electron Capture Mixture Electron Capture Mixture, 8.5% Hydrogen/Helium Halocarbon 14 Halocarbon 22 Halocarbon 23	Halocarbon 116 Halocarbon 218 Halocarbon 134A Helium Krypton Neon Nitrogen Nitrous Oxide Oxygen Sulfur Hexafluoride Xenon	**Note:** Nonflammable, Non-corrosive, Low Toxicity products listed in Table 1 can be safely stored together with Toxic and/or Corrosive, Nonflammable products listed in Table 4.

Table 2

Flammable, Non-corrosive, Low Toxicity Store these products in well-ventilated areas equipped with electrical equipment in accordance with Article 500 of the National Electrical Code. These products may also be stored in covered outdoor areas, but keep them off the ground and away from radiant heat sources. Keep all ignition sources and combustible materials out of the storage area. Cylinder temperature should not exceed 125°F (52°C).	Acetylene Butane Deuterium Ethane Ethylene Hexane 1-Hexene Hydrogen	Isobutane Isobutylene Methane Propane Propylene Toluene Xylenes(o-,m-,p-)	**Note:** Flammable, Non-corrosive, Low Toxicity products listed in Table 2 can be safely stored together with Flammable, Corrosive, and /or Toxic products listed in Table 3.

Table 3

Flammable, Corrosive, And/Or Toxic Store these products in well-ventilated areas equipped with electrical equipment in accordance with Article 500 of the National Electrical Code. These products may also be stored in covered outdoor areas, but keep them off the ground and away from radiant heat sources. Keep all ignition sources and combustible materials out of the storage area. Cylinder temperature should not exceed 125°F (52°C).	1,3-Butadiene Carbon Monoxide Carboxide, 10% Ethylene Oxide – 90% Carbon Dioxide Mixture Dichlorosilane Dimethylamine Ethyl Chloride	Ethylene Oxide Hydrogen Sulfide Methyl Bromide Methyl Chloride Monomethylamine TEOS Trichlorosilane Trimethylamine	**Note:** Flammable, Corrosive, and/or Toxic products listed in Table 3 can be safely stored together with Flammable, Non-corrosive, Low Toxicity products listed in Table 2.

GENERAL SAFETY INFORMATION

Table 4

Toxic And/Or Corrosive, Nonflammable Store these products in well-ventilated areas or in covered outdoor areas, but keep them off the ground and away from radiant heat sources. Cylinder temperature should not exceed 125°F (52°C).	Ammonia Boron Trichloride Boron Trifluoride Boron[11] Trifluoride Chlorine Hydrogen Bromide Hydrogen Chloride Sulfur Dioxide Hydrogen Fluoride Nitrogen Trifluoride Nitrous Oxide Phosphorous Pentafluoride Silicon Tetrachloride	**Note:** Toxic and/or Corrosive, Nonflammable products listed in Table 4 can be safely stored together with Nonflammable, Non-Corrosive, Low Toxicity products listed in Table 1.

Table 5

Spontaneously Flammable Store these products in well-ventilated areas or in covered outdoor areas, but keep it off the ground and away from radiant heat sources. Keep combustible materials out of the storage area. Cylinder temperatures should not exceed 125°F (52°C).	Disilane Silane Trimethylboron	**WARNING:** Do not store Spontaneously Flammable products with products in any other hazard category.

Table 6

Toxic These products are very toxic. The slightest exposure to these products can kill. Preferably, store these toxic gases outdoors in a fenced-in area that has been locked and posted. This area must be covered with the cylinders kept off the ground and away from radiant heat sources. If stored indoors, toxic gas cylinders must be kept in well-ventilated areas. In addition to being toxic, arsine, diborane, and phosphine are also flammable. The storage area for flammable toxic gases should have electrical equipment conforming to Article 500 of the National Electrical Code. Space all ignition sources and combustible materials out of storage areas.	Arsine Chlorine Trifluoride Diborane Diethyltelluride-Hydrogen Mixtures Germane Germanium Tetraflouride Hydrogen Selenide Nitric Oxide Nitrogen Dioxide Phosphine Tungsten Hexafluoride	**WARNING:** Do not store Toxic products with products in any other hazard category.

Opening and Closing Valves

Observing a few simple rules when opening and closing valves can prevent damage to valves and equipment and add years of useful service life to the valves. The proper way to open any cylinder valve is to first crack the valve, then open it slowly by turning the handle or stem counterclockwise (see Figure 1). This allows equipment to gradually adjust to full pressure. Stop turning as soon as there is any resistance. Turning the valve handle or stem too far in the open position can jam the stem causing damage and leaks and preventing later closure. Likewise, overtightening when closing a valve can damage or permanently distort the seat and result in leakage. Typical closing torques are as follows:

Packed Stem Valve	30 to 40 ft-lb
Diaphragm Seal Valve	85 to 96 in-lb
Pressure Seal Valve	60 to 85 in-lb
Pin-Indexed Valve	20 to 25 in-lb

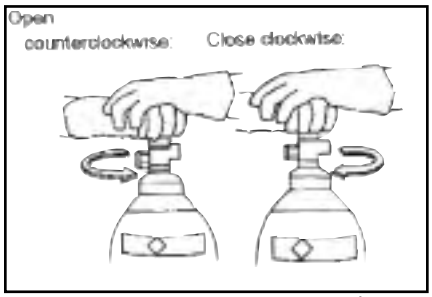

Figure 1

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY PVC REGULAR CLEAR CEMENT
Product No: 31012, 31013, 31014, 31015, 31016, 31958, 31959, 31960, 31961
Product Use: Cement for PVC Plastic Pipe
Formula: PVC Resin in Solvent Solution
Synonyms: PVC Plastic Pipe Cement
Firm Name & Mailing Address: OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. http://www.oatey.com
Oatey Phone Number: (216) 267-7100 or (800) 321-9532
Emergency Phone Numbers: For Emergency First Aid call 1-877-740-5015. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.
Prepared By: Technical Director
Preparation Date: November 11, 2008

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	% wt:	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA:	OTHER:
Methyl Ethyl Ketone	10 - 60%	78-93-3	200 ppm 300 ppm STEL	200 ppm	None
Tetrahydrofuran	20 - 50%	109-99-9	50 ppm(skin) 100 ppm STEL	200 ppm	25 ppm (Mfg)
PVC Resin (Non-hazardous)	10 - 18%	9002-86-2	10 mg/m3	15 mg/m3	None
Acetone	0 - 20%	67-64-1	500 ppm 750 ppm STEL	1000 ppm	None
Cyclohexanone	2 - 15%	108-94-1	20 ppm(skin)	25 ppm	None

OSHA Hazard Classification: Flammable, irritant, organ effects

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview:
Clear liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

SECTION 4 FIRST AID PROCEDURES

CALL 1-877-740-5015 or 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method:	14 - 23 Degrees F. (-10 to -5 Degrees C) / CCCFP
Flammability:	LEL = 1.8 % Volume, UEL = 11.8 % Volume
Extinguishing Media:	Use dry chemical, CO2, or foam to extinguish fire. Cool fire exposed container with water. Water may be ineffective as an extinguishing agent.
Special Fire Fighting Procedure:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored
Unusual Fire and Explosion Hazards:	Extremely flammable liquid. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:	Remove all sources of ignition and ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 12 for disposal information.

SECTION 7 HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.
Storage:	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Other:	"Empty" containers retain product residue and can be hazardous. Follow all MSDS precautions in handling empty containers. Do not cut or weld on or near empty or full containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Open doors & windows. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.
Respiratory Protection:	For operations where the exposure limit may be exceeded, a NIOSH approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.
Skin Protection:	Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.
Eye Protection:	Safety glasses with side shields or safety goggles.
Other:	Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	151 Degrees F / 66 Degrees C
Melting Point:	N/A
Vapor Pressure:	145 mmHg @ 20 Degrees C
Vapor Density:	(Air = 1) 2.5
Volatile Components:	84-88%
Solubility In Water:	Negligible
pH:	N/A
Specific Gravity:	0.90 +/- 0.015
Evaporation Rate:	(BUAC = 1) = 5.5 - 8.0
Appearance:	Clear Liquid
Odor:	Ether-like odor
Will Dissolve In:	Tetrahydrofuran
Material Is:	Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	Avoid heat, sparks, flames and other sources of ignition.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.
Incompatibility/ Materials To Avoid:	Oxidizing agents, alkalies, amines, ammonia, acids, chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. May attack plastic, resins and rubber.
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause mucous membrane and respiratory irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness. May cause kidney, liver and lung damage.

Skin: May cause irritation with redness, itching and pain. Methyl ethyl ketone and cyclohexanone may be absorbed through the skin causing effects similar to those listed under inhalation.

Eye: Vapors may cause irritation. Direct contact may cause irritation with redness, stinging and tearing of the eyes. May cause eye damage.

Ingestion: Swallowing may cause abdominal pain, nausea, vomiting and diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver damage.

Chronic Toxicity: Prolonged or repeated overexposure cause dermatitis and damage to the kidney, liver, lungs and central nervous system.

Toxicity Data:

Acetone:	Oral rat LD50: 5,800 mg/kg Inhalation rat LC50: 50,100 mg/m3/8 hours
Cyclohexanone:	Oral rat LD50: 1,620 mg/kg Inhalation rat LC50: 8,000 ppm/4 hours Skin rabbit LD50: 1 mL/kg
Tetrahydrofuran:	Oral rat LD50: 1,650 mg/kg Inhalation rat LC50: 21,000 ppm/3 hours
Methyl Ethyl Ketone:	Oral rat LD50: 2,737 mg/kg Inhalation rat LC50: 23,500 mg/m3/8 hours Skin rabbit LD50: 6,480 mg/kg

Sensitization: None of the components are known to cause sensitization.

Carcinogenicity: None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to Tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these

findings for human health are unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as “A3,” Confirmed Animal Carcinogens with Unknown Relevance to Humans.

Mutagenicity: Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.

Reproductive Toxicity: Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran have been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.

Medical Conditions Aggravated By Exposure: Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

SECTION 12 ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms.
Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l.
Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.
Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.
Acetone: 96 hour LC50 for fish is greater than 100 mg/L.

VOC Information: This product emits VOC's (volatile organic compounds) in its use. Make sure that use of this product complies with local VOC emission regulations, where they exist.

VOC Level: Maximum 600 g/L per SCAQMD Test Method 316A.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with current local, state and federal regulations.

RCRA Hazardous Waste Number: U002, U057, U159, U213

EPA Hazardous Waste ID Number: D001, D035, F003, F005

EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

SECTION 14 TRANSPORT INFORMATION

DOT	Less than 1 Liter (0.3 gal)	Greater than 1 Liter (0.3 gal)
UN/NA Number:	None	UN1133
Proper Shipping Name:	Consumer Commodity	Adhesives
Hazard Class:	ORM-D	3
Packing Group:	None	PGII
Hazard Labels:	None	Flammable Liquid
IMDG		
UN Number:	UN1133	UN1133
Proper Shipping Name:	Adhesives	Adhesives
Hazard Class:	3	3
Packing Group:	II	II
Label:	None (Limited Quantities are excepted from labeling)	Class 3 (Flammable Liquid)
Flashpoint (deg C)	-10 to -5 Degrees C	-10 to -5 Degrees C

2008 North American Emergency Response Guidebook Number: 127

SECTION 15 REGULATORY INFORMATION

Hazard Category for Section 311/312: Acute Health, Chronic Health, Flammable

Section 302 Extremely Hazardous Substances (TPQ): This product does not contain chemicals regulated under SARA Section 302.

Section 313 Toxic Chemicals: This product does not contain chemicals subject to SARA Title III Section 313 Reporting requirements.

CERCLA 103 Reportable Quantity:	Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (50% maximum) of 1,000 lbs, is 2,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
California Proposition 65:	This product contains trace amounts of chemicals known to the State of California to cause cancer. Under normal use conditions, exposure to these chemicals at levels above the State of California “No Significant Risk Level” (NSRL) are unlikely. Oatey Strongly encourages the use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 to minimize exposure to these chemicals.
TSCA Inventory:	All of the components of this product are listed on the TSCA inventory.
Canadian WHIMS Classification:	Class B, Division 2; Class D, Division 2, Subdivision B. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDs contains all the information required by the CPR.

SECTION 16 OTHER INFORMATION

NFPA and HMIS

NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 Special: None

HMIS Hazard Signal: Health: 2* Flammability: 3 Reactivity: 1 PPE: G

Disclaimer:

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY PVC RAIN-R-SHINE BLUE CEMENT
Product No.: 30890, 30891, 30893, 30894, 30895, 31954, 31955, 31956, 31957
Product Use: Cement for PVC Plastic Pipe
Formula: PVC Resin in Solvent Solution
Synonyms: PVC Plastic Pipe Cement
Firm Name & Mailing Address: OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. http://www.oatey.com
Oatey Phone Number: (216) 267-7100 or (800) 321-9532.
Emergency Phone Numbers: For Emergency First Aid call 1-877-740-5015. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.
Prepared By: Technical Department
Preparation Date: November 11, 2008

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	%:wt/wt	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA:	OTHER:
Tetrahydrofuran	30 - 60%	109-99-9	50 ppm(skin) 100 ppm STEL	200 ppm	25 ppm (Mfg)
Methyl Ethyl Ketone	10 - 30%	78-93-3	200 ppm 300 ppm STEL	200 ppm	None
PVC Resin (Non-hazardous)	10 - 30%	9002-86-2	10 mg/m3	15 mg/m3	None
Acetone	10 - 30%	67-64-1	500 ppm 750 ppm	1000 ppm	None
Cyclohexanone	7 - 13%	108-94-1	20 ppm(skin) 50 ppm STEL	50 ppm	None
Amorphous Fumed Silica (Non-hazardous)	1 - 5%	112945-52-5	10 mg/m3	None Established	None

OSHA Hazard Classification: Flammable, irritant, organ effects

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview:
Blue liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

SECTION 4 FIRST AID MEASURES

CALL 1-877-740-5015 or 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method:	14 - 23 Degrees F. (-10 to -5 Degrees C) / CCCFP
Flammability:	LEL = 1.8 % Volume, UEL = 11.8 % Volume
Extinguishing Media:	Use dry chemical, CO2, or foam to extinguish fire. Cool fire exposed container with water. Water may be ineffective as an extinguishing agent.
Special Fire Fighting Procedure:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored
Unusual Fire and Explosion Hazards:	Extremely flammable liquid. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:	Remove all sources of ignition and ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 13 for disposal information.

SECTION 7 HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.
Storage:	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Other:	"Empty" containers retain product residue and can be hazardous. Follow all MSDS precautions in handling empty containers. Do not cut or weld on or near empty or full containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Open doors & windows. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.
Respiratory Protection:	For operations where the exposure limit may be exceeded, a NIOSH approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.
Skin Protection:	Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

Eye Protection: Safety glasses with side shields or safety goggles.

Other: Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	151 Degrees F / 66 Degrees C
Melting Point:	Not applicable
Vapor Pressure:	145 mmHg @ 20 Degrees C
Vapor Density:	(Air = 1) 2.5
Volatile Components:	80-84%
Solubility In Water:	Negligible
pH:	Not applicable
Specific Gravity:	0.93 +/- 0.02 @ 20 Degrees C
Evaporation Rate:	(BUAC = 1) = 5.5 - 8.0
Appearance:	Blue Liquid
Odor:	Ether-Like
Will Dissolve In:	Tetrahydrofuran
Material Is:	Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	Avoid heat, sparks, flames and other sources of ignition.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.
Incompatibility/ Materials To Avoid:	Oxidizing agents, alkalis, amines, ammonia, acids, chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. May attack plastic, resins and rubber.
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation:	Vapors or mists may cause mucous membrane and respiratory irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness. May cause kidney, liver and lung damage.
Skin:	May cause irritation with redness, itching and pain. Methyl ethyl ketone and cyclohexanone may be absorbed through the skin causing effects similar to those listed under inhalation.
Eye:	Vapors may cause irritation. Direct contact may cause irritation with redness, stinging and tearing of the eyes. May cause eye damage.
Ingestion:	Swallowing may cause abdominal pain, nausea, vomiting and diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver damage.
Chronic Toxicity:	Prolonged or repeated overexposure cause dermatitis and damage to the kidney, liver, lungs and central nervous system.

Toxicity Data:

Acetone:	Oral rat LD50: 5,800 mg/kg Inhalation rat LC50: 50,100 mg/m3/8 hours
Cyclohexanone:	Oral rat LD50: 1,620 mg/kg Inhalation rat LC50: 8,000 ppm/4 hours Skin rabbit LD50: 1 mL/kg
Tetrahydrofuran:	Oral rat LD50: 1,650 mg/kg Inhalation rat LC50: 21,000 ppm/3 hours
Methyl Ethyl Ketone:	Oral rat LD50: 2,737 mg/kg Inhalation rat LC50: 23,500 mg/m3/8 hours Skin rabbit LD50: 6,480 mg/kg

Sensitization: None of the components are known to cause sensitization.

Carcinogenicity:	None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as “A3,” Confirmed Animal Carcinogens with Unknown Relevance to Humans.
Mutagenicity:	Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.
Reproductive Toxicity:	Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran has been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.
Medical Conditions Aggravated By Exposure:	Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

SECTION 12 ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms.
Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l.
Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.
Acetone: 96 hour LC50 for fish is greater than 100 mg/L.
Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.

VOC Information:	This product emits VOC's (volatile organic compounds) in its use. Make sure that use of this product complies with local VOC emission regulations, where they exist.
VOC Level:	Maximum 650 g/L per SCAQMD Test Method 316A.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with current local, state and federal regulations.

RCRA Hazardous Waste Number: U002, U057, U159, U213
EPA Hazardous Waste ID Number: D001, D035, F003, F005
EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

SECTION 14 TRANSPORT INFORMATION

DOT	Less than 1 Liter (0.3 gal)	Greater than 1 Liter (0.3 gal)
UN/NA Number:	None	UN1133
Proper Shipping Name:	Consumer Commodity	Adhesives
Hazard Class:	ORM-D	3
Packing Group:	None	PGII
Hazard Labels:	None	Flammable Liquid
IMDG		
UN Number:	UN1133	UN1133
Proper Shipping Name:	Adhesives	Adhesives
Hazard Class:	3	3
Packing Group:	II	II
Label:	None (Limited Quantities are excepted from labeling)	Class 3 (Flammable Liquid)
Flashpoint (deg C)	-10 to -5 Degrees C	-10 to -5 Degrees C

2008 North American Emergency Response Guidebook Number: 127

SECTION 15 REGULATORY INFORMATION

Hazard Category for Section 311/312:	Acute Health, Chronic Health, Flammable
Section 302 Extremely Hazardous Substances (TPQ):	This product does not contain chemicals regulated under SARA Section 302.
Section 313 Toxic Chemicals:	This product does not contain chemicals subject to SARA Title III Section 313 Reporting requirements.
CERCLA 103 Reportable Quantity:	Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (60% maximum) of 1,000 lbs, is 1,667 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
California Proposition 65:	This product contains trace amounts of chemicals known to the State of California to cause cancer. Under normal use conditions, exposure to these chemicals at levels above the State of California “No Significant Risk Level” (NSRL) are unlikely. Oatey Strongly encourages the use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 to minimize exposure to these chemicals.
TSCA Inventory:	All of the components of this product are listed on the TSCA inventory.
Canadian WHIMS Classification:	Class B, Division 2; Class D, Division 2, Subdivision B; Class D, Division 2, Subdivision A. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16 OTHER INFORMATION

NFPA and HMIS:

NFPA Hazard Signal:	Health: 2	Flammability: 3	Reactivity: 1	Special: None
HMIS Hazard Signal:	Health: 2*	Flammability: 3	Reactivity: 1	PPE: G

Disclaimer:
The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

MATERIAL SAFETY DATA SHEET

MSDS 0115

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
PVC Electrical Conduit Cement 633

PRODUCT CODES
55603, 55605, 55607, 55609, 55625, 55627, 55629

CHEMICAL FAMILY
Organic

USE
PVC Solvent Cement

HMIS CODES

Health	3
Flammability	3
Reactivity	1
PPI	B

MANUFACTURER'S NAME
The RectorSeal Corporation
2601 Spenwick Drive
Houston, Texas 77055 USA

EMERGENCY TELEPHONE NO.
Chemtrec 24 Hours
(800) 424-9300

VALIDATION DATE
September 26, 2008

TECHNICAL SERVICE TELEPHONE NO.
(800) 231-3345

REVISION DATE
September 26, 2008

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT			UNITS
35	78-93-3	Methyl Ethyl Ketone			
			ACGIH TLV	200	ppm
			OSHA PEL	200	ppm
			STEL	300	ppm
20-60	109-99-9	Tetrahydrofuran			
			ACGIH TLV	50	ppm
			OSHA PEL	200	ppm
			STEL	250	ppm
20-60	108-94-1	Cyclohexanone			
			ACGIH TLV	20	ppm (skin)
			OSHA PEL	50	ppm

Section 3 -- HAZARDS IDENTIFICATION

SUMMARY OF ACUTE HAZARDS

Overexposure may cause coughing, shortness of breath, dizziness, central nervous system depression, intoxication and collapse. It may cause irritation to the respiratory tract and to other mucous membranes.

ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

INHALATION

Overexposure may cause coughing, shortness of breath, dizziness, central nervous system depression, intoxication and collapse. It may cause irritation to the respiratorytract and to other mucous membranes.

EYE CONTACT

Severely irritating. If not removed promptly, will injure eye tissue, which can result in permanent damage.

SKIN CONTACT

Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity.

INGESTION

Low order of toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

SUMMARY OF CHRONIC HAZARDS

Repeated or prolonged exposure may cause signs of central nervous system depression and respiratory irritation. This material has been shown to induce tumors in laboratory animals.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

Section 4 -- FIRST AID MEASURES

If INHALED:	If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
If on SKIN:	Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing.
If in EYES:	Immediately flush with large amounts of water for at least 15 minutes. Get prompt medical attention.
If SWALLOWED:	If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
6 F (-14 C) SETA CC	2%	11.8%

EXTINGUSING MEDIA

Foam, dry chemical, carbon dioxide or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible - moderate flash point. Vapors heavier than air and may travel along the ground or to low spots

at considerable distances to a source of ignition resulting in potential flashback. Burning liquid may float on water. Heat may build up pressure and rupture containers.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Use absorbent materials to prevent footing hazard and to contain. Ventilate area with natural or explosion-proof, forced air ventilation. Avoid flushing into sewers, drains, waterways, and soil. Wear protective clothing and respiratory protection during cleanup.

Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames. If transferring this material to other containers, ground all containers to avoid static electricity buildup and discharge which may ignite flammable vapors.

OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues and vapors; treat as if full and observe all products precautions. Do not reuse empty containers. KEEP OUT OF REACH OF CHILDREN.

Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators.

VENTILATION - LOCAL EXHAUST: Acceptable

SPECIAL: Explosion-proof equipment.

MECHANICAL (GENERAL): Preferable

OTHER: N/A

PROTECTIVE GLOVES: Wear rubber gloves.

EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls recommended.

WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	151 F (66 C) @ 760mm Hg
SPECIFIC GRAVITY (H20 = 1):	0.96
VAPOR PRESSURE (mm Hg):	140 @ 68 F (20 C)
MELTING POINT:	N/A
VAPOR DENSITY (AIR = 1):	2.5
EVAPORATION RATE (ETHYL ACETATE = 1):	6

APPEARANCE/ODOR: Clear or Gray Liquid/Pungent Odor
SOLUBILITY IN WATER: 62%

Section 10 -- STABILITY AND REACTIVITY

STABILITY: Can form potentially explosive peroxides upon long standing in air.
CONDITIONS TO AVOID: Heat, sparks, open flames, and strong oxidizing, acidic and basic conditions.
INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizers, acids and bases.
HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2, HCl and fragmented hydrocarbons.
HAZARDOUS POLYMERIZATION: Will not occur.

Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS

No ingredients in this product is an IARC, NTP or OSHA Lister carcinogen. Tetrahydrofuran - The National Toxicology Program has reported that exposures of mice and rats to THF vapor levels up to 1800 ppm 6hr/day, 5 days/week for their lifetime caused an incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health are unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF.

TOXICOLOGY DATA
Ingredient Name

Methyl Ethyl Ketone
Oral-Rat LD50:2737 mg/kg
Inhalation-Rat LC50:23,500 mg/m3/8H
Tetrahydrofuran
Oral-Rat LD50:1650 mg/kg
Inhalation-Rat LC50:21,000 ppm/3H
Cyclohexanone
Oral-Rat LD50:1535 mg/kg
Inhalation-Rat LC50:8000 ppm/4H

Section 12 -- Ecological Information

ECOLOGICAL DATA
Ingredient Name

Methyl Ethyl Ketone
Food Chain Concentration Potential: None
WATERFOWL TOXICITY: N/A
BOD: 214%
AQUATIC TOXICITY: 5640 mg/l/48 hr/bluegill/TLm/fresh water

Tetrahydrofuran
Food Chain Concentration Potential: None
WATERFOWL TOXICITY: N/A
BOD: N/A
AQUATIC TOXICITY: N/A

Cyclohexanone
Food Chain Concentration Potential: None
WATERFOWL TOXICITY: N/A
BOD: N/A
AQUATIC TOXICITY: N/A

Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in approved, controlled incineration facility in accordance with all local, state and federal regulations.
Disposal Method: Incineration

Section 14 -- TRANSPORTATION INFORMATION

DOT: Adhesives, Class 3, UN 1133, PG II, ERG#127.
Quarts and less: Consumer Commodity, ORM-D
OCEAN (IMDG): Adhesives, Class 3, UN 1133, PG II, IMDG#3174, EMS#3-05, MFAG#330
Quarts and less: Adhesives, Class 3, UN 1133, PG II, Limited Quantities or Ltd Qty
AIR (IATA): Adhesives, Class 3, UN 1133, PG II, ERG#127
WHMIS (CANADA): Class B-2

Section 15 -- REGULATORY INFORMATION

REGULATORY DATA
Ingredient Name

Methyl Ethyl Ketone

SARA 313	Yes
TSCA Inventory	Yes
CERCLA RQ	5,000 lb.
RCRA Code	U159

Tetrahydrofuran

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	1,000 lb.
RCRA Code	U213

Cyclohexanone

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	5,000 lb.

RCRA Code U057

Section 16 -- OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY PURPLE PRIMER – NSF LISTED
Product No.: 30755, 30756, 30757, 30758, 30759, 30927
Product Use: Primer for PVC and CPVC Plastic Pipe
Formula: See Section 2
Synonyms: Plastic Pipe Primer
Firm Name & Mailing Address: OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. http://www.oatey.com
Oatey Phone Number: (216) 267-7100 or (800) 321-9532
Emergency Phone Numbers: For Emergency First Aid call 1-877-740-5015. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.
Prepared By: Technical Department
Preparation Date: December 11, 2008

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	%wt/wt:	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA:	OTHER:
Methyl Ethyl Ketone	25 - 80%	78-93-3	200 ppm 300 ppm STEL	200 ppm	None
Acetone	0 – 40%	67-64-1	500 ppm 750 ppm STEL	1000 ppm	None
Tetrahydrofuran	5 - 30%	109-99-9	50 ppm (skin) 100 ppm STEL	200 ppm	25 ppm (Mfg)
Cyclohexanone	10 - 20%	108-94-1	20 ppm(skin) 50 ppm STEL	50 ppm	None

OSHA Hazard Classification: Flammable, irritant, organ effects

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview:
Purple liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

SECTION 4 FIRST AID MEASURES

CALL 1-877-740-5015 or 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method: 14 - 23 Degrees F. (-10 to -5 Degrees C) / CCCFP
Flammability: LEL = 1.8 % Volume, UEL = 11.8 % Volume
Extinguishing Media: Use dry chemical, CO2, or foam to extinguish fire. Cool fire exposed container with water. Water may be ineffective as an

	extinguishing agent.
Special Fire Fighting Procedure:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored
Unusual Fire and Explosion Hazards:	Extremely flammable liquid. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:	Remove all sources of ignition and ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 13 for disposal information.

SECTION 7 HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.
Storage:	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Other:	"Empty" containers retain product residue and can be hazardous. Follow all MSDS precautions in handling empty containers. Do not cut or weld on or near empty or full containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Open doors & windows. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.
Respiratory Protection:	For operations where the exposure limit may be exceeded, a NIOSH approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.
Skin Protection:	Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.
Eye Protection:	Safety glasses with side shields or safety goggles.
Other:	Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	151 Degrees F / 66 Degrees C
Melting Point:	Not applicable
Vapor Pressure:	145 mmHg @ 20 Degrees C

Vapor Density:	(Air = 1) 2.5
Volatile Components:	99.96%
Solubility In Water:	Negligible
pH:	Not applicable
Specific Gravity:	0.84 +/- 0.02 @ 20 Degrees C
Evaporation Rate:	(BUAC = 1) = 5.5 - 8.0
Appearance:	Purple Liquid
Odor:	Ether-Like
Will Dissolve In:	Tetrahydrofuran
Material Is:	Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	Avoid heat, sparks, flames and other sources of ignition.
Hazardous Decomposition Products:	Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.
Incompatibility/ Materials To Avoid:	Oxidizing agents, alkalis, amines, ammonia, acids, chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. May attack plastic, resins and rubber.
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation:	Vapors or mists may cause mucous membrane and respiratory irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness. May cause kidney, liver and lung damage.
Skin:	May cause irritation with redness, itching and pain. Methyl ethyl ketone and cyclohexanone may be absorbed through the skin causing effects similar to those listed under inhalation.
Eye:	Vapors may cause irritation. Direct contact may cause irritation with redness, stinging and tearing of the eyes. May cause eye damage.
Ingestion:	Swallowing may cause abdominal pain, nausea, vomiting and diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver damage.
Chronic Toxicity:	Prolonged or repeated overexposure cause dermatitis and damage to the kidney, liver, lungs and central nervous system.

Toxicity Data:

Acetone:	Oral rat LD50: 5,800 mg/kg Inhalation rat LC50: 50,100 mg/m3/8 hours
Cyclohexanone:	Oral rat LD50: 1,620 mg/kg Inhalation rat LC50: 8,000 ppm/4 hours Skin rabbit LD50: 1 mL/kg
Tetrahydrofuran:	Oral rat LD50: 1,650 mg/kg Inhalation rat LC50: 21,000 ppm/3 hours
Methyl Ethyl Ketone:	Oral rat LD50: 2,737 mg/kg Inhalation rat LC50: 23,500 mg/m3/8 hours Skin rabbit LD50: 6,480 mg/kg

Sensitization:	None of the components are known to cause sensitization.
Carcinogenicity:	None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as “A3,” Confirmed Animal Carcinogens with Unknown Relevance to Humans.

Mutagenicity:	Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.
Reproductive Toxicity:	Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran has been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.
Medical Conditions Aggravated By Exposure:	Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

SECTION 12 ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms.
Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l.
Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.
Acetone: 96 hour LC50 for fish is greater than 100 mg/L.
Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.

VOC Information:	This product emits VOC's (volatile organic compounds) in its use. Make sure that use of this product complies with local VOC emission regulations, where they exist.
VOC Level:	Maximum 750 g/L per SCAQMD Test Method 316A.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with current local, state and federal regulations.
RCRA Hazardous Waste Number: U002, U057, U159, U213
EPA Hazardous Waste ID Number: D001, D035, F003, F005
EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

SECTION 14 TRANSPORT INFORMATION

DOT	Less than 1 Liter (0.3 gal)	Greater than 1 Liter (0.3 gal)
UN/NA Number:	None	UN1993
Proper Shipping Name:	Consumer Commodity	Flammable Liquid, NOS (Methyl Ethyl Ketone, Cyclohexanone)
Hazard Class:	ORM-D	3
Packing Group:	None	PGII
Hazard Labels:	None	Flammable Liquid
IMDG		
UN Number:	UN1993	UN1993
Proper Shipping Name:	Flammable Liquid, NOS (Limited Quantity)	Flammable Liquid, NOS (Methyl Ethyl Ketone, Cyclohexanone)
Hazard Class:	3	3
Packing Group:	II	II
Label:	None (Limited Quantities are excepted from labeling)	Class 3 (Flammable Liquid)
Flashpoint (deg C)	-10 to -5 Degrees C	-10 to -5 Degrees C

2008 North American Emergency Response Guidebook Number: 127

SECTION 15 REGULATORY INFORMATION

Hazard Category for Section 311/312:	Acute Health, Chronic Health, Flammable
Section 302 Extremely Hazardous Substances (TPQ):	This product does not contain chemicals regulated under SARA Section 302.
Section 313 Toxic Chemicals:	This product does not contain chemicals subject to SARA Title III Section 313 Reporting requirements.
CERCLA 103 Reportable	Spills of this product over the RQ (reportable

Quantity:	quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (30% maximum) of 1,000 lbs, is 3,333 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
California Proposition 65:	This product does not contain any chemicals subject To California Proposition 65 regulation.
TSCA Inventory:	All of the components of this product are listed on the TSCA inventory.
Canadian WHIMS Classification:	Class B, Division 2; Class D, Division 2, Subdivision B; Class D, Division 2, Subdivision A. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16 OTHER INFORMATION

NFPA and HMIS:

NFPA Hazard Signal:	Health: 2	Flammability: 3	Reactivity: 1	Special: None
HMIS Hazard Signal:	Health: 2*	Flammability: 3	Reactivity: 1	PPE: G

Disclaimer:
The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

Material Safety Data Sheet

24 HR. CHEMTREC EMERGENCY #: 1-800-424-9300

HAZARD RATING			
4 - EXTREME 3 - HIGH 2 - MODERATE 1 - SLIGHT 0 - INSIGNIFICANT	Health	Fire 2 2 0 Special	Reactivity

SECTION 1 - PRODUCT IDENTIFICATION

IDENTITY: Alumin-R

#298

DATE: 5/28/03

MANUFACTURER:

Karnak Corporation
330 Central Ave.
Clark, NJ 07066 U.S.A.

Telephone #: 1-732-388-0300

24 HR CHEMTREC EMERGENCY NUMBER 1-800-424-9300
(OUTSIDE THE U.S AND CANADA 1-202-483-7616)

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

Components	CAS#	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Asphalt	8052-42-4	50-90	N.E.	0.5mg/m^3	5mg/m^3 (NIOSH)
Aromatic Petroleum Distillates	64742-95-6	10-50	100 ppm	NE	None
Styrene Block Copolymer	9003-55-8	10-25	N/A	N/A	N/A
Aluminum Pigment	7429-90-5	5-15	5mg/m^3	10mg/m^3	N/A
Diatomaceous Earth	68855-54-9	2-10	5mg/m^3	10mg/m^3	N/A
Synthetic Amorphous Silica	63231-67-4	0-2	10mg/m^3	10mg/m^3	N/A
Calcium Silicate	13983-17-0	0-10	5mg/m^3	3mg/m^3	N/A

PEL = Permissible Exposure Limits
TLV = Threshold Limit Value
N.E. = Not Established
N.A. = Not Applicable.

OSHA = Occupational Safety and Health Administration
ACGIH = American Conference of Governmental Industrial Hygienists
NIOSH = National Institute for Occupational Safety and Health

SECTION 3 - HAZARDS IDENTIFICATION

Combustible liquid and Vapor

Potential Health Effects:

Fumes from product can be unpleasant, may cause nausea, headache and irritating to eyes, skin, and respiratory tract.

SECTION 4 - FIRST AID MEASURES

Eye Contact: If this product comes in contact with eyes**,** Flush eye with plenty of water for at least 15 minutes and seek medical attention.

Skin Contact: If this product comes in contact with skin, remove material with mineral oil, then wash with soap and plenty of water.

Inhalation: If respiratory discomfort occurs, remove to fresh air. If discomfort continues, administer oxygen and get medical attention.

Ingestion: If swallowed, do not induce vomiting. Get medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point (PMCC): 104°F Minimum

Dust Explosivity Limits: Not Applicable.

Extinguishing Media: Carbon dioxide (CO_2), foam, or dry chemical. Water may be used to Cool containers exposed to heat.

Fire Fighting Instructions: Minimize breathing vapors, gases or fumes of decomposition products. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Unusual Fire Hazards: When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Eliminate sources of ignition, and ventilate the area. Add sand or earth or absorb spill with suitable absorbent material and place in a closed container.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

SECTION 7 - HANDLING AND STORAGE

Vapors are heavier than air and may travel along the ground or be moved by ventilation to locations distant from the point of material handling. To prevent fumes from entering buildings or confined areas, close all air intake sources near the material handling or the work area. To prevent ignition, avoid smoking, keep away from heat, open flames and sources of static or electrical sparking. Use explosion proof motors and equipment. Tank trucks or other containers should be grounded and/or bonded when the material is transferred.

Avoid prolonged or repeated inhalation of vapors or spray mists. Avoid prolonged or repeated skin contact. Adhere to good hygienic practices. Avoid open flames. Use with adequate ventilation.

Store in a cool, dry place, out of direct sunlight and away from heat, sparks, and flame.

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Use supplied-air respirator in confined areas or with vapors in high concentrations.

Ventilation: Local Exhaust: In enclosed areas. Special: None
Mechanical: In enclosed areas. Other: None
Eye Protection: Safety glasses or face shield for liquid material.
Protective Gloves: Solvent impervious gloves.
Other Protective Clothing Equipment: Long sleeves and impervious clothing to protect against splashing.
Work/Hygienic Practices: See Section 7.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Silver liquid. Mild petroleum odor		
Vapor Pressure:	3		
Boiling Point:	300-350^{o}F	**Evaporation Rate (Butyl Acetate=1)@ 77°F:**	**0.2**
Melting Point (R & B):	N/A	**Vapor Density (Air = 1):**	>4
Solubility in water:	Insoluble.	**Flash Point (PMCC):**	104°F min.
Specific Gravity (H_2O=1):	1.06		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	**Keep away from heat, spark, open flames.** Auto-ignition temperature unknown.
Incompatibility (Materials to Avoid):	May react with strong oxidizing materials.
Hazardous Decomposition or Byproducts:	Combustion: carbon dioxide (CO_2), carbon monoxide (CO), nitrogen oxides, smoke, and fumes.
Hazardous Polymerization:	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product may cause respiratory irritation, headache, dizziness, nausea and vomiting. Prolonged or repeated contact with skin may cause dermatitis.

Carginogenicity: NTP?: No IARC Monographs?: No OSHA Regulated?: No

SECTION 12 - ECOLOGICAL INFORMATION

EPA Hazard Classification Code:

Acute Hazard: ____ Chronic Hazard: ____ Fire Hazard: ____ Pressure Hazard: ____

Reactive Hazard: ____ Not Applicable: X

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

DOT Shipping Name:	Cutback
DOT Label Information:	Combustible Liquid
DOT Hazard Class:	Non-Hazardous (Ground transport only)
DOT Packing Group:	N/A

SECTION 15 - REGULATORY INFORMATION

SARA TITLE III - EPA Regulation 40 CFR 302 (CERCLA Section 102); CFR 355 (SARA Section 301-304); CFR 372 (SARA Section 311-313) - NOT APPLICABLE.

This product contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372

1,2,4 – Trimethylbenzene	CAS# 95-63-6	Weight% 0-16
Xylene	CAS# 1330-20-7	Weight% 0-0.3
Cumene	CAS# 98-82-8	Weight% 0-0.1

EPA HAZARD CLASSIFICATION CODE: Acute Hazard/Chronic Hazard/Fire Hazard/Pressure Hazard/Reactive Hazard - NOT APPLICABLE.

TSCA, CANADIAN DSL: Yes

SECTION 16 - OTHER INFORMATION

Revision Statement:
This Material Safety Data Sheet has been revised to follow the ANSI Z400.1 standard.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

ATTN Jim

CENTURY INDUSTRIES CORPORATION

171
PRODUCT CODE #

Asphalt Flashing Cement
PRODUCT NAME
(Used on label and pricing list)

MATERIAL SAFETY DATA SHEET

SECTION 1

Manufacturer's Name	Century Industries Corporation		
Address	5331 State Route 7	Other Information Calls	330-457-2367
City, State, and ZIP	New Waterford, Ohio 44445	Emergency Telephone #	800-955-8443
Signature of Person Responsible for Preparation (Optional)		Date Prepared	July 14, 1989

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Components (chemical & common names)	% Optional	TVL (units) Threshold Limit Value
Petroleum Asphalt	60-80%	5 mg/M3
Mineral Spirits	20-40%	300 ppm

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	320°	Specific Gravity (H20=1)	N/A
Vapor Pressure (mm Hg)	12	Percent Volatile By Volume (%)	25 - 50
Vapor Density (Air=1)	N/A	Evaporation Rate (Water =1)	N/A
Solubility in Water	Not Soluble	Appearance and Odor	Dark Brown/Black Petroleum odor

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point	103°F T CC Combustible	Method Used	Flammable Limits in Air % by Volume	Lower 0.8 / Upper
Extinguisher Media	CO2 Dry Chemical		Autoignition Temperature	

Special Fire Fighting Procedures: Treat as fuel fire.

Unusual Fire and Explosion Hazards: N/A

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability	Unstable	Stable	Conditions to Avoid	Keep away from heat, sparks and open flame.

Incompatability (Materials to Avoid): Water and oxidizing material.

Hazardous Decomposition Products:

Hazardous Polymerization		Conditions to Avoid
May Occur	Will not Occur	

SECTION 6 - HEALTH HAZARD DATA

Threshold Limit Value
Effects of Overexposure

Acute Overexposure: N/A
Cronic Overexposure:

Emergency and First Aid Procedures

Inhalation: Asphalt fume-5mg/m3
Mineral spirits-300 pm

Skin: Prolonged or repeated skin contact may cause mild irritation.

Eyes: N/A

Ingestion: N/A

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Steps to be taken in case Material is Released or Spilled: Keep away from heat, sparks and open flame.

Dike spills with sand bags or earth.

Waste Disposal Methods (Consult federal, state, and local regulations): Contain all material and dispose of in drums following all federal, state and local regulations.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type)

Ventilation	Local Exhaust	Mechanical (General)	X	Special	Other

Protective Gloves: Yes

Eye Protection: Face shield if splashing.

Other Protective Clothing or Equipment: Long sleeved shirt and long trousers.

Work/Hygienic Practices

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storage: Store in dry, cool area.

Other Precautions: Keep from freezing. Always read label and follow directions carefully. Keep away from children.

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability	Unstable	Stable	Conditions to Avoid	Keep away from heat, sparks and open flame.

Incompatability (Materials to Avoid): Water and oxidizing material.

Hazardous Decomposition Products:

Hazardous Polymerization		Conditions to Avoid
May Occur	Will not Occur	

SECTION 6 - HEALTH HAZARD DATA

Threshold Limit Value
Effects of Overexposure

Acute Overexposure:
Cronic Overexposure: N/A

Emergency and First Aid Procedures

Inhalation: Asphalt fume-5mg/m3
Mineral spirits-300 pm

Skin: Prolonged or repeated skin contact may cause mild irritation.

Eyes: N/A

Ingestion: N/A

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Steps to be taken in case Material is Released or Spilled: Keep away from heat, sparks and open flame.

Dike spills with sand bags or earth.

Waste Disposal Methods (Consult federal, state, and local regulations): Contain all material and dispose of in drums following all federal, state and local regulations.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type)

Ventilation	Local Exhaust	Mechanical (General)	X	Special	Other

Protective Gloves: Yes

Eye Protection: Face shield if splashing.

Other Protective Clothing or Equipment: Long sleeved shirt and long trousers.

Work/Hygienic Practices:

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storage: Store in dry, cool area.

Other Precautions: Keep from freezing. Always read label and follow directions carefully. Keep away from children.

The information, data, and recommendations contained herein are believed to be accurate. However, we make no warranty of any kind

Material Safety Data Sheet

24 HR. CHEMTREC EMERGENCY #: 1-800-424-9300
(OUTSIDE THE U.S. & CANADA: 1-202-483-7616)

HAZARD RATING			
4 - EXTREME 3 - HIGH 2 - MODERATE 1 - SLIGHT 0 - INSIGNIFICANT	Health	Fire: 2 Special	Reactivity: 0

SECTION 1 - PRODUCT IDENTIFICATION

IDENTITY: Asphalt Cements / Coatings – AF

13AF, 16AF, 18AF, 19AF, 71AF, 78AF, 79AF, 83AF
86AF, 155AF, 160, 197AF, 198AF

DATE: June 9, 2003
Revision: 3

MANUFACTURER:

Karnak Corporation
330 Central Ave.
Clark, NJ 07066 U.S.A.

Telephone #: 1-732-388-0300

24 HR CHEMTREC EMERGENCY NUMBER 1-800-424-9300
(OUTSIDE THE U.S AND CANADA 1-202-483-7616)

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

Components	CAS#	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Asphalt	8052-42-4	30-80	N.E.	5mg/m^3	5mg/m^3 (NIOSH)
Aliphatic hydrocarbons	8052-41-3	3-40	100 ppm	100 ppm	350mg/m^3 (NIOSH)
Amorphous Alumina Silicates	93763-70-3	0-20	15mg/m^3	10mg/m^3	N/A
Attapulgite Clay	12174-11-7	0-20	N/A	5mg/m^3	N/A
Cellulose Fibers	9004-34-6	0-15	5mg/m^3	5mg/m^3	N/A
Polymers	9003-55-8	0-20	N/A	N/A	N/A
Cationic Salt	28701-67-9	0-3	N/A	N/A	N/A

PEL = Permissible Exposure Limits
TLV = Threshold Limit Value
N.E. = Not Established
N.A. = Not Applicable

OSHA = Occupational Safety and Health Administration
ACGIH = American Conference of Governmental Industrial Hygienists
NIOSH = National Institute for Occupational Safety and Health

SECTION 3 - HAZARDS IDENTIFICATION

Combustible liquid and Vapor

Potential Health Effects:

Fumes from product can be unpleasant, may cause nausea, headache and irritating to eyes, skin, and respiratory tract.

SECTION 4 - FIRST AID MEASURES

Eye Contact: If this product comes in contact with eyes**,** Flush eye with plenty of water for at least 15 minutes and seek medical attention.

Skin Contact: If this product comes in contact with skin, remove material with mineral oil, then wash with soap and plenty of water.

Inhalation: If respiratory discomfort occurs, remove to fresh air. If discomfort continues, administer oxygen and get medical attention.

Ingestion: If swallowed, do not induce vomiting. Get medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point (PMCC): 104°F Minimum

Dust Explosivity Limits: Not Applicable.

Extinguishing Media: Carbon dioxide (CO_2), foam, or dry chemical. Water may be used to Cool containers exposed to heat.

Fire Fighting Instructions: Minimize breathing vapors, gases or fumes of decomposition products. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Unusual Fire Hazards: When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Eliminate sources of ignition, and ventilate the area. Add sand or earth or absorb spill with suitable absorbent material and place in a closed container.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

SECTION 7 - HANDLING AND STORAGE

Vapors are heavier than air and may travel along the ground or be moved by ventilation to locations distant from the point of material handling. To prevent fumes from entering buildings or confined areas, close all air intake sources near the material handling or the work area. To prevent ignition, avoid smoking, keep away from heat, open flames and sources of static or electrical sparking. Use explosion proof motors and equipment. Tank trucks or other containers should be grounded and/or bonded when the material is transferred.

Avoid prolonged or repeated inhalation of vapors or spray mists. Avoid prolonged or repeated skin contact. Adhere to good hygienic practices. Avoid open flames. Use with adequate ventilation.

Store in a cool, dry place, out of direct sunlight and away from heat, sparks, and flame.

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Use supplied-air respirator in confined areas or with vapors in high concentrations.

Ventilation: Local Exhaust: In enclosed areas. Special: None
Mechanical: In enclosed areas. Other: None
Eye Protection: Safety glasses or face shield for liquid material.
Protective Gloves: Solvent impervious gloves.
Other Protective Clothing Equipment: Long sleeves and impervious clothing to protect against splashing.
Work/Hygienic Practices: See Section 7.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Dark liquid. Mild petroleum odor		
Vapor Pressure:	3		
Boiling Point:	300-350^{o}F	**Evaporation Rate (Butyl Acetate=1)@ 77°F:**	**0.2**
Melting Point (R & B):	N/A	**Vapor Density (Air = 1):**	>4
Solubility in water:	Insoluble.	**Flash Point (PMCC):**	104°F min.
Specific Gravity (H_2O=1):	0.8 – 0.99		

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Keep away from heat, spark, open flames.
Auto-ignition temperature unknown.

Incompatibility (Materials to Avoid): May react with strong oxidizing materials.

Hazardous Decomposition or Byproducts: Combustion: carbon dioxide (CO_2), carbon monoxide (CO), nitrogen oxides, smoke, and fumes.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product may cause respiratory irritation, headache, dizziness, nausea and vomiting. Prolonged or repeated contact with skin may cause dermatitis.

Carginogenicity: NTP?: No IARC Monographs?: No OSHA Regulated?: No

SECTION 12 - ECOLOGICAL INFORMATION

EPA Hazard Classification Code:

Acute Hazard: ____ Chronic Hazard: ____ Fire Hazard: ____ Pressure Hazard: ____

Reactive Hazard: ____ Not Applicable: X

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

DOT Shipping Name:	Asphalt Cements / Coatings
DOT Label Information:	Combustible Liquid
DOT Hazard Class:	Non-Hazardous (Ground transport only)
DOT Packing Group:	N/A (Ground transport only)

SECTION 15 - REGULATORY INFORMATION

SARA TITLE III - EPA Regulation 40 CFR 302 (CERCLA Section 102); CFR 355 (SARA Section 301-304); CFR 372 (SARA Section 311-313) - NOT APPLICABLE.

This product contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372

1,2,4 – Trimethylbenzene CAS# 95-63-6 Weight% 0-2

EPA HAZARD CLASSIFICATION CODE: Acute Hazard/Chronic Hazard/Fire Hazard/Pressure Hazard/Reactive Hazard - NOT APPLICABLE.

TSCA, CANADIAN DSL: Yes

SECTION 16 - OTHER INFORMATION

Revision Statement:
This Material Safety Data Sheet has been revised to follow the ANSI Z400.1 standard.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name:	Rust Reformer	Revision Date:	08/28/2007
Identification Number:	225222, 7830402, 7830630, 7830730		
Product Use/Class:	Rust Converter/Special Purpose		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
TANNIC ACID	1401-55-4	5.0	N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Use ventilation necessary to keep exposures below recommended exposure limits, if any.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: Low hazard for usual industrial handling or commercial handling by trained personnel. High gas, vapor, mist or dust concentrations may be harmful if inhaled.

Effects Of Overexposure - Ingestion: Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: No Information.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

First Aid - Ingestion: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 212. F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.9 %
UPPER EXPLOSIVE LIMIT : 22.7 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F.

Special Firefighting Procedures: Water may be used to cool closed containers to prevent buildup of steam.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Wash hands before eating. Wash thoroughly after handling. Avoid contact with eyes.

Storage: Keep from freezing. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use gloves to prevent prolonged skin contact.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	212 - 503 F	Vapor Density:	Heavier than air
Odor:	Ammonia Like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in H2O:	Soluble		
Freeze Point:	ND	Specific Gravity:	1.3000
Vapor Pressure:	ND	PH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid contact with strong acid and strong bases.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

Chemical Name	LD50	LC50
TANNIC ACID	5g/kg rat	

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	Not Regulated	Resp. Guide Page:	---
DOT UN/NA Number:	---		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

CHRONIC HEALTH HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

None known

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name	CAS Number
Water	7732-18-5
Acrylic Vinylidene Chloride Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7
Amorphous Fumed Silica	112945-52-5

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS Number
Water	7732-18-5
Acrylic Vinylidene Chloride Copolymer	PROPRIETARY
Barium Sulfate	7727-43-7

California Proposition 65:

These products contain no known chemicals known by the State of California to cause cancer.

These products contain no known chemicals known by the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 0 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/l: <50.

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.