MATERIAL SAFETY DATA SHEET

H.M.I.S. RATING	
Health	2
Flammability	2
Reactivity	0
Protective Equip.	

PRODUCT NAME: TROPICAL - #410 QUICK DRY PRIMER
PRODUCT CODE: TM410

========== SECTION I - MANUFACTURER IDENTIFICATION ==========

FLORIDA PLANT	CALIFORNIA PLANT	TEXAS PLANT
Address: 1904 S.W. 31ST Ave. Hallandale Beach, FL 33009	**Address:** 14435 Macaw Street La Mirada, California 90638	**Address**: 1225 Brai Drive - P.O. Box 5335 Port Arthur, Texas 77640
E-mail: info-fl@tropicalroofingproducts.com	**E-mail:** info-ca@tropicalroofingproducts.com	**E-mail:** info-tx@tropicalroofingproducts.com
Information Phone #: (800) 432-2855	**Information Phone #:** (877) 827-2622	**Information Phone #:** (866) 727-0091
Emergency Phone #: (800) 424-9300	**Emergency Phone #:** (800) 424-9300	**Emergency Phone #:** (800) 424-9300

DATE PREPARED: June 8, 2005
DATE REVISED: August 22, 2012
PRIMARY CONTACT: Technical Services
E-MAIL FOR ABOVE: technical@tropicalroofingproducts.com

========== SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION ==========

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS OSHA PEL	ACGIH TLV	OTHER	VAPOR PRESSURE mm Hg @ TEMP	
PETROLEUM ASPHALT/BASE ASPHALT	8052-42-4	N/E	.5MG/M3	5MG/M3	3.0	68F
AROMATIC HYDROCARBON/AROMATIC 100	64742-95-6	100PPM	100PPM	N/A	1.0	68F
STODDARD SOLVENT/MINERAL SPIRITS	8052-41-3	100PPM	100PPM	N/A	3.4	68F

There are no S.A.R.A. Section 313 ingredients in this material in excess of de minimis amounts. Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

Generally, the above ingredients that do not possess a vapor pressure are pigments and are only hazardous as airborne particles when the coating begins to degrade.

The HMIS (Hazardous Materials Identification System) codes at the upper right area of this page are recognized by OSHA. The PERSONAL PROTECTION code is left blank on Tropical Roofing Products MSDSs as it depends on application technique and workplace ventilation. Please read all other sections of this MSDS before deciding on the appropriate protective equipment and beginning work.

========== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS ==========

BOILING POINT: 315 Deg F
VAPOR DENSITY: HEAVIER THAN AIR
COATING V.O.C.: 2.40 LB/GL (288 GR/LT)
MATERIAL V.O.C.: 2.40 LB/GL (288 GR/LT)
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: Dark colored liquid with solvent odor.
SPECIFIC GRAVITY (H2O=1): 1.0
EVAPORATION RATE: SLOWER THAN ETHER

========== SECTION IV - FIRE AND EXPLOSION HAZARD DATA ==========

FLASH POINT: 106 Deg F **METHOD USED:** T.C.C.
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 0.7% **UPPER:** 6.0%

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES
Water may be ineffective in extinguishing fire. Use self-contained breathing apparatus.
Do not use water stream on burning liquid. If water is used to cool containers near fire, fog nozzles are preferred.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode when exposed to extreme heat or fire. Material may splatter if exposed to extreme heat.
Decomposition of burning material may cause toxic gases to form, which may include carbon dioxide and carbon monoxide.

========== SECTION V - REACTIVITY DATA ==========

STABILITY: **STABLE**

CONDITIONS TO AVOID
Elevated temperatures and build up of vapors. Heat, sparks and open flame. Avoid free fall.

INCOMPATIBILITY (MATERIALS TO AVOID)
Oxidizers, acids and bases.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
Burning or decomposing film may give off carbon dioxide and or carbon monoxide.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

========== SECTION VI - HEALTH HAZARD DATA ==========

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Breathing difficulty, lightheadedness, headache, dizziness and nausea. Irritation to the nose, throat and lungs.
Prolonged inhalation may lead to mucous membrane irritation, central nervous system depression, and unconsciousness.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Irritation and watering of the eyes.
Prolonged or repeated contact can cause blurred vision and corneal injury.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Irritation of skin, redness and possible swelling.
Prolonged or repeated contact can cause dermatitis, defatting. Can be absorbed through skin.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Choking difficulty in breathing, gastrointestinal irritation, nausea and vomiting.
Nervous system depression, which can include drowsiness, dizziness, loss of coordination and fatigue.

HEALTH HAZARDS (ACUTE AND CHRONIC)
Breathing difficulty, headache, dizziness, nausea and irritation to the respiratory tract. Causes eye and skin irritation.
Irritation of the digestive tract and nervous system depression.
Prolonged and repeated overexposure may cause permanent brain and or nervous system damage. Can cause dermatitis.
Sanding dust inhalation may cause lung damage. Intentional misuse through inhalation may be harmful or fatal.

CARCINOGENICITY: NTP? NO **IARC MONOGRAPHS?** NO **OSHA REGULATED?** NO
This product may contain trace amounts of crystalline silica, which is considered a hazard by inhalation that can cause silicosis.
Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

========== SECTION VI - HEALTH HAZARD DATA (CONTINUED) ==========

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
Ingredients in this product are reported to aggravate preexisting eye, skin, respiratory, kidney and liver disorders.

EMERGENCY AND FIRST AID PROCEDURES
Eye contact: Flush with large quantities of water for at least 15 minutes. Seek immediate medical attention.
Inhalation: Remove to fresh air. Administer oxygen if necessary. Seek immediate medical attention.
Skin contact: Wash thoroughly with soap and water. If irritation persists, get medical attention.
Ingestion: Do not induce vomiting. Drink 1 or 2 glasses of water to dilute. Obtain medical attention immediately.

========== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE ==========

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Avoid contact and breathing of vapors. Ventilate area. Remove ignition sources. Dike and absorb with absorbent material.
Use nonsparking tools to return material to container. Prevent material from entering sewers or open bodies of water.

WASTE DISPOSAL METHOD
Do not incinerate closed containers.
Dispose of in accordance with Federal, State and Local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep out of reach of children. Do not take internally. Avoid contact with eyes and prolonged contact with skin.
When storing, close tightly, keep upright, away from fire and high temperatures. Transfer to approved containers with complete and appropriate labeling. Avoid freefall and ground containers when transferring. Do not cut or weld empty drum.
Remove contaminated clothing and launder before reuse. Remove contaminated shoes and thoroughly dry before reuse. Wash skin thoroughly with soap and water after contact.

OTHER PRECAUTIONS
Warning! If you scrape, sand or remove an old coating, 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 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 onto www.epa.gov/lead.

========== SECTION VIII - CONTROL MEASURES ==========

RESPIRATORY PROTECTION
Use only with adequate ventilation. Provide adequate fresh air entry. If not wear the proper respiratory protection.
If ventilation is inadequate use an organic vapor/particulate respirator approved by NIOSH/MSHA for spray/mist vapors.
When sanding a dried coating film use a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated.

VENTILATION
Local exhaust preferable. If venting, discharge exhaust away from ignition sources.
If in confined areas, use mechanical ventilation to keep vapor concentration under permissible TLV and LEL.

PROTECTIVE GLOVES
Solvent impermeable rubber gloves required during repeated contact.

EYE PROTECTION
Splash resistant and spray mist protection required. Use splash goggles or safety glasses with side shields.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Clothing adequate to protect skin. Remove and wash before reuse.
Eye wash, safety shower.

WORK/HYGIENIC PRACTICES
Normal industrial hygienic practices should be followed. Wash hands before eating, smoking or using the washroom.

========== SECTION IX - TRANSPORTATION DATA ==========

DOT

Non-Bulk Not Regulated (Combustible liquid Non-Bulk)

IMDG

IMDG Code 2.3.2.5 - exempted from marking, labeling and testing of packages

========== SECTION X - STATE ADDENDUM ==========

Ingredient	CAS Number	Notes
MINERAL SPIRITS	8052-41-3	A Washington State Permissible Exposure for Air Contaminants material
MINERAL SPIRITS	8052-41-3	A Massachusetts Hazardous Substance List material
MINERAL SPIRITS	8052-41-3	A Minnesota Hazardous Substance List material
MINERAL SPIRITS	8052-41-3	A Pennsylvania Hazardous Substance List material
MINERAL SPIRITS	8052-41-3	A Florida Toxic Substance List material
MINERAL SPIRITS	8052-41-3	A New Jersey RTK Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Massachusetts Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Minnesota Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Pennsylvania Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Washington State Permissible Exposure for Air Contaminants material
PETROLEUM ASPHALT	8052-42-4	A Florida Toxic Substance List material
PETROLEUM ASPHALT	8052-42-4	Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.
AROMATIC 100	64742-95-6	See current Material Safety Data Sheet

========== SECTION XI - DISCLAIMER ==========

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.

Safety Data Sheet

Tropical Roofing Products
TRP-1

Revision Date 19-Sep-2016
Supersedes Date: No information available
Version 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name TRP-1 Ultra Seal Multi Purpose Adhesive Sealant
Product Code TRP-1

Product(s) Covered See section 16 for more information

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use Adhesives, sealants.
Uses Advised Against No information available

1.3. Details of the Supplier of the Safety Data Sheet

Company Name
Tropical Roofing Products
11818 SW 31st Avenue
Hallandale, FL 33009
Phone: +1 (800) 535-6947 (Domestic Toll Free)
Fax: +1 (954) 963-2033
Email: technical@tropicalroofingproducts.com

1.4. Emergency Telephone Number

Emergency Telephone Telephone: 1-800-227-0332
(Outside U.S.) 1-703-527-3887

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

Skin sensitization	Category 1

2.2. Label Elements

EMERGENCY OVERVIEW

WARNING

Hazard statements
May cause an allergic skin reaction

Appearance Paste	Physical State Solid	Odor Odorless

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response
Specific treatment (see first aid measures on this label)
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage
Not applicable

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)
Not applicable

Unknown Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other Information

May be harmful if swallowed. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
This product is a mixture. Health hazard information is based on its components.

3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Limestone	1317-65-3	30 - 60
Polypropylene glycol	25322-69-4	5 - 10
Carbonic acid, calcium salt (1:1)	471-34-1	1 - 5
Titanium dioxide	13463-67-7	1 - 5
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine	1760-24-3	0.1 - 1
Quartz	14808-60-7	0.1 - 1
Carbon black	1333-86-4	0.1 - 1
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General Advice Remove contaminated clothing and shoes. If medical advice is needed, have product container or label at hand.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Hold eyelids apart and consult an physician.

Skin Contact	Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. If swallowed, rinse mouth with water (only if the person is conscious).
Self-protection of the First Aider	First aider: Pay attention to self-protection.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

4.4. Reference to Other Sections

Reference to Other Sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 11: TOXICOLOGY INFORMATION

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media
Carbon dioxide (CO2). Extinguishing powder. Water spray or fog. Alcohol resistant foam.

Unsuitable Extinguishing Media
Full water jet.

5.2. Special Hazards Arising from the Substance or Mixture

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

5.3. Advice for Firefighters

Protective Equipment and Precautions for Firefighters
In case of fire: Wear self-contained breathing apparatus. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protection equipment. Avoid contact with skin, eyes or clothing.

6.2. Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Do not allow to enter

into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and Material for Containment and Cleaning up

Methods for Containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for Cleaning up Use personal protective equipment as required. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections

Reference to Other Sections Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Fire prevention measures. No special measures are necessary.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Protect from moisture. Keep away from food, drink and animal feeding stuffs. Recommended storage temperature. 10 - 35 °C.

Incompatible Materials None known based on information supplied.

7.3. Specific End Use(s)

Specific Use(s)
Sealant. Observe technical data sheet.

Other Information No information available.

7.4. References to Other Sections

Reference to Other Sections Section 13: DISPOSAL CONSIDERATIONS
Section 10: STABILITY AND REACTIVITY

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Guidelines Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing. As Titanium dioxide (13463-67-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses. As Quartz (14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses. As Carbon black (1333-86-4) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses. As Limestone CAS 1317-65-3 and Calcium carbonates CAS 471-34-1 is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Limestone 1317-65-3	-	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ STEL: 20 mg/m³
Carbonic acid, calcium salt (1:1) 471-34-1	-	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust	-	-
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	IDLH: 5000 mg/m³	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ STEL: 20 mg/m³
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust	: (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.1 mg/m³
Carbon black 1333-86-4	TWA: 3 mg/m³ inhalable fraction	IDLH: 1750 mg/m³ TWA: 3.5 mg/m³ TWA: 0.1 mg/m³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH	TWA: 3.5 mg/m³	TWA: 3.5 mg/m³ STEL: 7 mg/m³
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)- 22673-19-4	STEL: 0.2 mg/m³ Sn TWA: 0.1 mg/m³ Sn S*	IDLH: 25 mg/m³ Sn TWA: 0.1 mg/m³ except Cyhexatin Sn	TWA: 0.1 mg/m³ Sn	TWA: 0.1 mg/m³ STEL: 0.2 mg/m³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Limestone 1317-65-3	TWA: 10 mg/m³	-	TWA: 8 mg/m³	-
Carbonic acid, calcium salt (1:1) 471-34-1	-	-	-	TWA: 10 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	-	-	TWA: 10 mg/m³
Quartz 14808-60-7	TWA: 0.05 mg/m³	-	TWA: 0.08 mg/m³	TWA: 0.025 mg/m³
Carbon black 1333-86-4	TWA: 3.5 mg/m³	-	-	TWA: 3.5 mg/m³
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)- 22673-19-4	TWA: 0.1 mg/m³ Skin STEL: 0.2 mg/m³	-	TWA: 0.08 mg/m³ Skin	Skin STEL: 0.2 mg/m³ TWA: 0.1 mg/m³

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Methyl alcohol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³	TWA: 200 ppm TWA: 260 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Methyl alcohol 67-56-1	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 156 ppm TWA: 200 mg/m³ Skin	TWA: 175 ppm TWA: 229 mg/m³ Skin	Skin STEL: 250 ppm TWA: 200 ppm

8.2. Exposure Controls

Other Information Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Engineering Controls Showers
Eyewash stations

Ventilation systems.

Personal protective equipment [PPE]

Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	Solid
Appearance	Paste
Color	Multiple Colors
Odor	Odorless
Odor Threshold	Not applicable

Property	**Values**	**Remarks • Method**
pH	No information available	
Melting Point/Freezing Point	No information available	
Boiling Point	No information available	
Flash Point	140 °C / 284 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in Other Solvents		
Partition Coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other Information

Softening Point	No information available
Molecular Weight	No information available
Solvent Content (%)	No information available
Solid Content (%)	>= 97
Density	1.65 g/cm³
VOC	< 1 %

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical Stability

Stable under recommended storage conditions.

10.3. Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

None known based on information supplied.

10.6. Hazardous Decomposition Products

None known based on information supplied.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on Toxicological Effects

Product Information No Data Available
Inhalation No Data Available.
Eye contact No Data Available.
Skin Contact No Data Available.
Ingestion No Data Available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Limestone 1317-65-3	>5000 mg/kg (rat)	-	-
Polypropylene glycol 25322-69-4	LD50 >1000<2000 mg/kg (Rat)	-	-
Carbonic acid, calcium salt (1:1) 471-34-1	= 6450 mg/kg (Rat)	>2000 mg/kg	LC50 (4h) >3mg/ml (Rat)
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine 1760-24-3	= 7460 µL/kg (Rat)	-	LC50 4H (Aerosol)1.5 - 2.44 mg/L air
Quartz 14808-60-7	>2000 mg/kg (Rat)	-	-
Carbon black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Symptoms No information available.
Skin Corrosion/Irritation No information available.
Serious Eye Damage/Eye Irritation No information available.
Irritation No information available.
Corrosivity No information available.

Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Reproductive Toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Chronic Toxicity	No information available.
Target Organ Effects	Eyes, Lungs, Respiratory system, Skin.
Aspiration Hazard	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. The components of this product are inextricably bound in a polymer matrix and are not expected to be available as airborne hazards (dust, mist, or spray) under normal condition of use.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Quartz 14808-60-7	A2	Group 1	Known	X
Carbon black 1333-86-4	A3	Group 2B	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Confirmed animal carcinogen with unknown relevance to humans
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus)	CL50 (96h)>10000mg/L Fish (Oncorhynchus mykiss)		CE50 (48h) >1000 mg/L Daphnia Magna
Carbonic acid, calcium salt (1:1) 471-34-1	IC50 72H Algae >1000 mg/l	CL50 96H Fish >1000 mg/l		EC50 48H Daphnia >1000 mg/l
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine 1760-24-3		LC50 (96H) =597 mg/L Fish (Danio rerio)Semi-static		EC50 (48h) =81mg/L Daphnia magna Static
Carbon black 1333-86-4	>10000 mg/l (Desmodesmus subspicatus) OECD 202	>1000 mg/l (Brachydanio rerio) OCDE 203		EC50 24 h > 5600 mg/L (Daphnia magna)
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)- 22673-19-4	>2.0 mg/l	>2.0 mg/l		

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulative Potential

No information available.

12.4. Mobility in Soil

No information available.

12.5 Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Disposal of Wastes It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

Contaminated Packaging Dispose of in accordance with federal, state and local regulations

Section 14: TRANSPORTATION INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

Section 15: REGULATORY INFORMATION

Global Inventories

TSCA	Listed
DSL	Listed

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
Listed - The components of this product are either listed or exempt from listing on inventory.
Not Listed - One or more components of this product are not listed on inventory.

Canada

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

WHMIS Hazard Class
D2B - Toxic materials

United States of America

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

California Proposition 65
This product contains one or more of the substances listed on Proposition 65 at or above 0.01 wt. %

Chemical Name	CAS No.
Titanium dioxide	13463-67-7
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1
Quartz	14808-60-7
Carbon black	1333-86-4
Methyl alcohol	67-56-1

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU
This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation.

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59
This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical Name	CAS No.
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol	25973-55-1

Section 16: OTHER INFORMATION

Product(s) Covered

A78000	PRO MS wht PCt10.1OZ/C24
A78000-7C	PRO MS wht MP5GL/P24
A78000-95	PRO MS wht MD716LB(52GL)/P3
A78000-95L	PRO MS wht MP52GL(716LB)/P3
A78010	PRO MS blk PCt10.1OZ/C24
A78010-95L	PRO MS/BLK/DRM/52GL/VRWTLB/3PP
A78020	PRO MS alu gry PCt10.1OZ/C24
A78020-95L	PRO MS alu gryMD52GL(698LB)/P3
A78030	PRO MS mdm brz PCt10.1OZ/C24
A78030-95L	PRO MS mdm brzMD52GL(698LB)/P3
A78040	PRO MS tcotta PCt10.1OZ/C24
A78040-95L	PRO MS tcotta MD52GL(698LB)/P3
A78050	PRO MS cptltan PCt10.1OZ/C24
A78050-95L	PRO MS cptltanMD52GL(698LB)/P3
A78060	PRO MS dsrt tan PCt10.1OZ/C24
A78060-95L	PRO MS dsrttanMD52GL(698LB)/P3
A78070	PRO MS stone PCt10.1OZ/C24
A78070-95L	PRO MS stone MD52GL(698LB)/P3
A78080	PRO MS lmstn PCt10.1OZ/C24
A78080-95L	PRO MS lmstn MD52GL(698LB)/P3
A78090	PRO MS lght gry PCt10.1OZ/C24
A78090-95L	PRO MS lghtgryMD52GL(698LB)/P3
A78100	PRO MS brz PCt10.1OZ/C24
A78100-95L	PRO MS brz MD52GL(698LB)/P3
A78110	PRO MS antqwht PCt10.1OZ/C24
A78110-95L	PRO MS antqwhtMD52GL(698LB)/P3
A78500	PRO MS wht Sau20OZ/C12
A78510	PRO MS blk Sau20OZ/C12
A78520	PRO MS alu gry Sau20OZ/C12
A78530	PRO MS mdm brz Sau20OZ/C12
A78550	PRO MS cptltan Sau20OZ/C12
A78560	PRO MS dsrt tan Sau20OZ/C12
A78570	PRO MS stn Sau20OZ/C12
A78580	PRO MS lmstn Sau20OZ/C12
A78590	PRO MS lght gry Sau20OZ/C12
A78600	PRO MS brz Sau20OZ/C12
A78610	PRO MS antqwht Sau20OZ/C12

HMIS **Health Hazards** 2 **Flammability** 1 **Physical Hazards** 1 **Personal Protection** X

Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet
No information available

Key Literature References and Sources for Data
No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date 19-Sep-2016

Revision Note Not applicable.

Training Advice No information available

Additional information No information available

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 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 material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Tropical - #924 Silicone Coating

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Tropical - #924 Silicone Coating

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS
1904 S.W. 31ST Ave.
HALLANDALE, FL 33009 - UNITED STATES
T 954-983-3434
technical@tropicalroofingproducts.com - www.tropicalroofingproducts.com

1.4. Emergency telephone number

Emergency number : 800-424-9300
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227
Carc. 2 H351

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

0

Hazard pictograms (GHS-US) :

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H227 - Combustible liquid
H351 - Suspected of causing cancer

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P308+P313 - If exposed or concerned: Get medical advice/attention
P370+P378 - In case of fire: Use ... to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
poly(dimethylsiloxane)	(CAS No) 9016-00-6	40 - 60	Not classified
silica, pyrogenic	(CAS No) 112945-52-5	30 - 40	Not classified
titanium(IV) oxide	(CAS No) 13463-67-7	0 - 10	Carc. 2, H351
butan-2-one O,O',O"-(methylsilylidyne)trioxime	(CAS No) 22984-54-9	1 - 5	Flam. Liq. 4, H227
3-aminopropyltrimethoxysilane	(CAS No) 13822-56-5	1 - 3	Flam. Liq. 4, H227

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tropical - #924 Silicone Coating		
ACGIH	Not applicable	
OSHA	Not applicable	

poly(dimethylsiloxane) (9016-00-6)		
ACGIH	Not applicable	
OSHA	Not applicable	

titanium(IV) oxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
OSHA	Not applicable	

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
ACGIH	Not applicable
OSHA	Not applicable

3-aminopropyltrimethoxysilane (13822-56-5)	
ACGIH	Not applicable
OSHA	Not applicable

silica, pyrogenic (112945-52-5)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Mixture contains one or more component(s) which have the following colour(s):
Colourless Pure substance: white Unpurified: coloured Yellow Colourless to light yellow White

Odour : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
Odourless Aromatic odour Mild odour Alcohol odour Amine-like odour Rotten egg smell

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

Flash point : > 100 °F

Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	≈ 11.1 lb/gal
Solubility	:	No data available
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	Not oxidising.
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

poly(dimethylsiloxane) (9016-00-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study)

titanium(IV) oxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
LD50 oral rat	2463 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)
ATE US (oral)	2463.000 mg/kg bodyweight

3-aminopropyltrimethoxysilane (13822-56-5)	
LD50 oral rat	2.970 ml/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value)
LD50 dermal rabbit	11.3 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value)
LC50 inhalation rat (ppm)	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Read-across)

silica, pyrogenic (112945-52-5)	
LD50 oral rat	3160 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	3160.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

titanium(IV) oxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

poly(dimethylsiloxane) (9016-00-6)	
LC50 fish 1	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)

titanium(IV) oxide (13463-67-7)	
EC50 Daphnia 1	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)
Threshold limit algae 1	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Read-across)
EC50 Daphnia 1	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across)

3-aminopropyltrimethoxysilane (13822-56-5)	
LC50 fish 1	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Read-across)
EC50 Daphnia 1	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across)

12.2. Persistence and degradability

poly(dimethylsiloxane) (9016-00-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

titanium(IV) oxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
Persistence and degradability	Not readily biodegradable in water.

3-aminopropyltrimethoxysilane (13822-56-5)	
Persistence and degradability	Not readily biodegradable in water.

silica, pyrogenic (112945-52-5)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

poly(dimethylsiloxane) (9016-00-6)	
BCF fish 1	2.9 - 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)
Bioaccumulative potential	No straightforward conclusion can be drawn based upon the available numerical values.

titanium(IV) oxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
BCF fish 1	0.5 - 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Read-across)
Log Pow	9.83 (Calculated, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

3-aminopropyltrimethoxysilane (13822-56-5)	
Log Pow	0.2 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

silica, pyrogenic (112945-52-5)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

poly(dimethylsiloxane) (9016-00-6)	
Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
Log Koc	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.

3-aminopropyltrimethoxysilane (13822-56-5)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT

Transport document description : DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

UN-No.(DOT) : DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

DOT Packaging Exceptions (49 CFR 173.xxx) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

DOT Packaging Bulk (49 CFR 173.xxx) : Unregulated when shipped in non-bulk containers

Additional information

Other information : No supplementary information available.

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Tropical - #924 Silicone Coating
Not subject to reporing requirements of the United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory

poly(dimethylsiloxane) (9016-00-6)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

titanium(IV) oxide (13463-67-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

3-aminopropyltrimethoxysilane (13822-56-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

silica, pyrogenic (112945-52-5)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

titanium(IV) oxide (13463-67-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

titanium(IV) oxide (13463-67-7)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 4	Flammable liquids, Category 4
H227	Combustible liquid
H351	Suspected of causing cancer

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.

Tropical - #2100 All Weather Rubberized Flashing Cement

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/18/2015 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Tropical - #2100 All Weather Rubberized Flashing Cement

Product code : TRO-2100

Formula : 700-TRO-2100

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Roofing/Waterproofing

1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS
1904 S.W. 31ST Ave.
HALLANDALE, FL 33009 - UNITED STATES
T 954-983-3434
technical@tropicalroofingproducts.com - www.tropicalroofingproducts.com

1.4. Emergency telephone number

Emergency number : 800-424-9300
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 2	H225
Muta. 1B	H340
Carc. 1B	H350
STOT RE 1	H372

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

0

Hazard pictograms (GHS-US) :

GHS02 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapour
H340 - May cause genetic defects (Dermal, Inhalation)
H350 - May cause cancer (Inhalation, Dermal)
H372 - Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation)

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from open flames. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/… equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe fume, gas, vapours
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, protective clothing
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P308+P313 - If exposed or concerned: Get medical advice/attention
P314 - Get medical advice/attention if you feel unwell
P370+P378 - In case of fire: Use carbon dioxide (CO2), foam, dry extinguishing powder to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
asphaltic bitumen, not cut back	(CAS No) 8052-42-4	60 - 80	Not classified
kaolin	(CAS No) 1332-58-7	15 - 30	Not classified
Stoddard solvent	(CAS No) 8052-41-3	20 - 25	Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304
attapulgite	(CAS No) 12174-11-7	5 - 10	Carc. 2, H351
cellulose	(CAS No) 9004-34-6	3 - 7	Not classified
SBR-latex	(CAS No) 9003-55-8		Not classified

Full text of H-phrases: see section 16 *The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : There are potential chronic health effects to consider.

Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.

Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause moderate irritation.

Symptoms/injuries after eye contact : Eye irritation.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Explosion hazard	:	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapour-air mixture.
Reactivity	:	Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions	:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Absorb spillage to prevent material damage. Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources.

6.1.1. For non-emergency personnel

Protective equipment	:	Protective clothing. Gloves.
Emergency procedures	:	Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	:	Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not breathe fume, spray, vapours.
Handling temperature	:	< 110 (≤ 100) °F
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash Always wash hands after handling the product, Do not eat, drink or smoke when using this product, Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep container closed when not in use.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition.
Storage temperature	:	< 43 °C
Heat and ignition sources	:	KEEP SUBSTANCE AWAY FROM: ignition sources.
Prohibitions on mixed storage	:	No data available.
Storage area	:	Meet the legal requirements.
Special rules on packaging	:	Keep only in original container. meet the legal requirements. Store in a closed container. correctly labelled.
Packaging materials	:	No data available.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tropical - #2100 All Weather Rubberized Flashing Cement	
ACGIH	Not applicable
OSHA	Not applicable

asphaltic bitumen, not cut back (8052-42-4)	
OSHA	Not applicable

attapulgite (12174-11-7)	
ACGIH	Not applicable
OSHA	Not applicable

cellulose (9004-34-6)	
OSHA	Not applicable

kaolin (1332-58-7)	
OSHA	Not applicable

SBR-latex (9003-55-8)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Materials for protective clothing : PICM010.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : BLACK FIBERED MASTIC.
Colour : Black
Odour : Petroleum-like odour
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : > 300 (≤ 450) °F
Flash point : 106 °F
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : 0.293 kPa at 20 C
Relative vapour density at 20 °C : No data available
Relative density : 1.02 - 1.12
Density : 8 - 9
Percent Solids : > 75 %

Solubility	:	Water: 0 % Acetone: ≈ g/100ml Organic solvent:≈ 100 %
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available.
Oxidising properties	:	No data available.
Explosive limits	:	No data available

9.2. Other information

VOC content : < 250 (≤ 250) g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO2 are formed.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
(Lack of data)

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

cellulose (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	May cause genetic defects (Dermal, Inhalation).
Carcinogenicity	:	May cause cancer (Inhalation, Dermal).

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	3 - Not classifiable

attapulgite (12174-11-7)	
IARC group	2B - Possibly carcinogenic to humans, 3 - Not classifiable

SBR-latex (9003-55-8)	
IARC group	3 - Not classifiable

Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact	:	May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	:	Eye irritation.
Chronic symptoms	:	ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

SECTION 12: Ecological information

12.1. Toxicity

asphaltic bitumen, not cut back (8052-42-4)	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)

cellulose (9004-34-6)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

12.2. Persistence and degradability

Tropical - #2100 All Weather Rubberized Flashing Cement	
Persistence and degradability	Not established.

asphaltic bitumen, not cut back (8052-42-4)	
Persistence and degradability	Not readily biodegradable in water.

attapulgite (12174-11-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

cellulose (9004-34-6)	
Persistence and degradability	Biodegradable in water.

kaolin (1332-58-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

SBR-latex (9003-55-8)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Tropical - #2100 All Weather Rubberized Flashing Cement	
Bioaccumulative potential	Not established.

asphaltic bitumen, not cut back (8052-42-4)	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.

attapulgite (12174-11-7)	
Bioaccumulative potential	No bioaccumulation data available.

cellulose (9004-34-6)	
Bioaccumulative potential	Bioaccumulation: not applicable.

kaolin (1332-58-7)	
Bioaccumulative potential	No bioaccumulation data available.

Stoddard solvent (8052-41-3)	
Log Pow	3.16-7.06

SBR-latex (9003-55-8)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.

Additional information : Industrial waste.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III

UN-No.(DOT) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

Packing group (DOT) : III - Minor Danger

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Tropical - #2100 All Weather Rubberized Flashing Cement
Not listed on the United States SARA Section 313

asphaltic bitumen, not cut back (8052-42-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

attapulgite (12174-11-7)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

cellulose (9004-34-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

kaolin (1332-58-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Stoddard solvent (8052-41-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

Tropical - #2100 All Weather Rubberized Flashing Cement()	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

attapulgite (12174-11-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

asphaltic bitumen, not cut back (8052-42-4)
U.S. - New Jersey - Right to Know Hazardous Substance List

cellulose (9004-34-6)
U.S. - New Jersey - Right to Know Hazardous Substance List

kaolin (1332-58-7)
U.S. - New Jersey - Right to Know Hazardous Substance List

Stoddard solvent (8052-41-3)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 1B	Germ cell mutagenicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard

Physical : 0 Minimal Hazard

Personal Protection : p

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.