

Material Safety Data Sheet

Print Date 22-Apr-2013

Revision Date 02-Jan-2013

Revision Number 4

1. PRODUCT AND COMPANY IDENTIFICATION

Common name Product code Trade name Product Class SERIES 120 / SERIES 251 PART A F120-5001A VINESTER (KIT) GRAY VINYL ESTER PAINT

Manufacturer Emergency telephone Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

FLAMMABLE LIQUID AND VAPOR HARMFUL IF INHALED HARMFUL OR FATAL IF SWALLOWED MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

Potential health effects

Principle Routes of Exposure Eye contact, Inhalation, Skin contact.

Acute effects

Eyes	Moderately irritating to the eyes.
Skin	Irritating to skin.
Inhalation	Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
Ingestion	May be harmful if swallowed.

Chronic effects

Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions	Central nervous system. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.
Interactive effects	Use of alcoholic beverages may enhance toxic effects.
Potential environmental effects	See Section 12 for additional Ecological Information.

Target Organ Effects

Central nervous system, Eyes, Kidney, Liver, Lungs, Reproductive System, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

lazardous Components				
Component	CAS-No	Weight %		
STYRENE	100-42-5	10 - 30		
SILICON DIOXIDE/ALUMINUM OXIDE	66402-68-4	10 - 30		
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	5 - 10		
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	5 - 10		
2-BUTANONE	-	1 - 5		
METHYLBENZENE	-	1 - 5		
ALUMINUM HYDROXIDE	21645-51-2	0.1 - 1		

	4. FIRST AID MEASURES	
ye contact: Rinse thoroughly with plenty of water for at least 15 minutes.		
kin contact: Wash off immediately with soap and plenty of water.		
ngestion: If swallowed, do not induce vomiting. Get medical attention immediately.		
nhalation: Move to fresh air. Oxygen or artificial respiration if needed.		
	5. FIRE-FIGHTING MEASURES	
Flammable properties	Flammable.	
uitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbo		

dioxide (CO2) - Foam - Dry chemical

Hazardous decomposition products Oxides of carbon, hydrocarbons.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up	If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Storage

Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Use only in an area containing flame proof equipment. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
STYRENE	TWA: 20 ppm	TWA: 50 ppm TWA:	TWA: 50 ppm TWA:	TWA: 35 ppm	TWA: 50 ppm TWA:
	STEL: 40 ppm	215 mg/m ³	213 mg/m ³	STEL: 100 ppm	215 mg/m ³
		STEL: 100 ppm STEL:	STEL: 100 ppm STEL:		STEL: 100 ppm STEL:
		425 mg/m ³	426 mg/m ³		425 mg/m ³
		TWA: 100 ppm	Skin		
		Ceiling: 200 ppm			
SILICON	TWA: 5 mg/m ³ TWA:		TWA: 5 mg/m ³	TWA: 5 mg/m ³ TWA:	TWA: 5 mg/m ³ TWA:
DIOXIDE/ALUMINUM	0.02 mg/m ³ TWA: 0.1		STEL: 10 mg/m ³	0.2 mg/m ³	0.2 mg/m ³
OXIDE	mg/m ³			STEL: 10 mg/m ³	STEL: 10 mg/m ³
CRYSTALLINE SILICA	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
(QUARTZ)	_	_	-	-	_
TITANIUM DIOXIDE	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
(TOTAL DUST)	-	TWA: 15 mg/m ³		-	STEL: 20 mg/m ³
2-BUTANONE	TWA: 200 ppm	TWA: 200 ppm TWA:	TWA: 50 ppm TWA:	TWA: 200 ppm	TWA: 200 ppm TWA:
	STEL: 300 ppm	590 mg/m ³	150 mg/m ³	STEL: 300 ppm	590 mg/m ³
		STEL: 300 ppm STEL:	STEL: 100 ppm STEL:		STEL: 300 ppm STEL:
		885 mg/m ³	300 mg/m ³		885 mg/m ³
METHYLBENZENE	TWA: 20 ppm	TWA: 100 ppm TWA:	TWA: 50 ppm TWA:	TWA: 20 ppm	TWA: 50 ppm TWA:
		375 mg/m ³	188 mg/m ³		188 mg/m ³
		STEL: 150 ppm STEL:	Skin		-
		560 mg/m ³			
		TWA: 200 ppm			
		Ceiling: 300 ppm			
ALUMINUM HYDROXIDE	TWA: 1 mg/m ³			TWA: 1 mg/m ³	

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin protection Eye/face protection Respiratory protection Lightweight protective clothing, Apron, Impervious gloves If splashes are likely to occur, wear Goggles.

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash point Boiling range Upper explosion limit Lower explosion limit Evaporation rate Vapor pressure Vapor density Specific Gravity Density Volatile organic compounds (VOC) content Volatile by weight Volatile by volume 21 °C / 70.0 °F 78 - 146.000 °C / 172.0 - 295.0 °F No information available No information available No information available No information available 1.33666 g/cm3 11.12298 lbs/gal .631 lbs/gal 5.6680 % 8.9577 %

10. STABILITY AND REACTIVITY

Chemical stability Incompatible products Stable. Strong oxidizing agents. Acids.

Conditions to avoid Possibility of hazardous reactions Heat, flames and sparks. None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
STYRENE	1000 mg/kg (Rat)		11.8 mg/L (Rat)4 h
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
2-BUTANONE			23500 mg/m³ (Rat)8 h
METHYLBENZENE	636 mg/kg (Rat)	8390 mg/kg (Rabbit)	12.5 mg/L (Rat)4 h 26700 ppm (Rat)1 h
ALUMINUM HYDROXIDE	5000 mg/kg (Rat)		
Irritation Corrosivity Sensitization	No information available No information available. No information available.		

Chronic toxicity

Carcinogenicity	The tab	ole below indicates w	hether each agency h	as listed any ingredie	ent as a carcinogen.
Component	ACGIH	IARC	NTP	OSHA	Mexico
STYRENE		Group 2B	Reasonably Anticipated	X	
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	

Mutegenicity Reproductive effects Developmental effects

No information available. No information available. No information available.

No information available. Central nervous system, Eyes, system, Skin.	Kidney, Liver, Lungs, Reprodu	ctive System, Respiratory
No information available		
EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Group I Chemical	High Exposure Concern	
	Conformation available. Central nervous system, Eyes, system, Skin. <u>No information available</u> EU - Endocrine Disrupters Candidate List Group I Chemical	No information available. Central nervous system, Eyes, Kidney, Liver, Lungs, Reprodusystem, Skin. No information available EU - Endocrine Disrupters Candidate List Group I Chemical

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to	Toxicity to daphnia
		-	microorganisms	
STYRENE	EC50 = 1.4 mg/L 72 h EC50	LC50 19.03 - 33.53 mg/L	EC50 = 5.4 mg/L 5 min	EC50 3.3 - 7.4 mg/L 48 h
	= 0.72 mg/L 96 h EC50 0.46	Lepomis macrochirus 96 h		
	- 4.3 mg/L 72 h EC50 0.15 -	LC50 3.24 - 4.99 mg/L		
	3.2 mg/L 96 h	Pimephales promelas 96 h		
		LC50 58.75 - 95.32 mg/L		
		Poecilia reticulata 96 h LC50		
		6.75 - 14.5 mg/L Pimephales		
		promelas 96 h		
2-BUTANONE		LC50 3130 - 3320 mg/L	EC50 = 3426 mg/L 5 min	EC50 4025 - 6440 mg/L 48
		Pimephales promelas 96 h	EC50 = 3403 mg/L 30 min	h EC50 = 5091 mg/L 48 h
				EC50 > 520 mg/L 48 h
METHYLBENZENE	EC50 > 433 mg/L 96 h EC50	LC50 11.0 - 15.0 mg/L	EC50 = 19.7 mg/L 30 min	EC50 5.46 - 9.83 mg/L 48 h
	= 12.5 mg/L 72 h	Lepomis macrochirus 96 h		EC50 = 11.5 mg/L 48 h
		LC50 14.1 - 17.16 mg/L		
		Oncorhynchus mykiss 96 h		
		LC50 15.22 - 19.05 mg/L		
		Pimephales promelas 96 h		
		LC50 5.89 - 7.81 mg/L		
		Oncorhynchus mykiss 96 h		
		LC50 50.87 - 70.34 mg/L		
		Poecilia reticulata 96 h		
		LC50= 12.6 mg/L		
		Pimephales promelas 96 h		
		LC50= 28.2 mg/L Poecilia		
		reticulata 96 h LC50= 5.8		
		mg/L Oncornynchus mykiss		
		96 h LC50= 54 mg/L Oryzias		
		latipes 96 h		

	13. DISPOSAL CONSIDERATIONS
Waste disposal methods	Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.
	14. TRANSPORT INFORMATION
DOT	Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

Proper shipping name

UN1263, PAINT, 3, PGIII, ERG 128

15. REGULATORY INFORMATION

International Inventories

Complies
Does not Comply
Complies
Does not Comply

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): Component STYRENE METHYLBENZENE United States of America Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
STYRENE	100-42-5	10 - 30	0.1
SILICON DIOXIDE/ALUMINUM OXIDE	66402-68-4	10 - 30	1.0
2-BUTANONE		1 - 5	1.0
METHYLBENZENE		1 - 5	1.0

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	yes
Acute Health Hazard	yes
Fire Hazard	yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
STYRENE 100-42-5(10 - 30)	1000 lb			Х
SILICON DIOXIDE/ALUMINUM OXIDE 66402-68-4(10 - 30)		Х		
METHYLBENZENE (1-5)	1000 lb	Х	Х	Х

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
STYRENE	1000 lb	
2-BUTANONE	5000 lb	
METHYLBENZENE	1000 lb 1 lb	

United States of America State Regulations

California Prop. 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	Carcinogen
METHYLBENZENE		Developmental
		Female Reproductive

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
STYRENE	Х	Х	X	Х	
SILICON DIOXIDE/ALUMINUM OXIDE		Х	X		
CRYSTALLINE SILICA (QUARTZ)	X	х	X	Х	
TITANIUM DIOXIDE (TOTAL DUST)	Х	х	X		
2-BUTANONE	Х	Х	X	Х	
METHYLBENZENE	Х	Х	X	Х	

Other international regulations

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

B2 Flammable liquid D2A Very toxic materials



Component	NPRI
STYRENE	Part 1, Group 1 Substance; Part 5 Substance
2-BUTANONE	Part 1, Group 1 Substance; Part 5 Substance
METHYLBENZENE	Part 1, Group 1 Substance; Part 5 Substance

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION	
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Revision Date

02-Jan-2013

Revision Note

No information available

HMIS (Hazardous Material	Health	2*
Information System)		

Flammability 3

Reactivity 1

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS



Material Safety Data Sheet

Print Date 22-Apr-2013

Revision Date 02-Jan-2013

Revision Number 3

1. PRODUCT AND COMPANY IDENTIFICATION

Common name Product code Trade name Product Class SERIES 120 / SERIES 251 PART B F120-0120B VINESTER (KIT) CONVERTER ORGANIC PEROXIDE CATALYST

Manufacturer Emergency telephone Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

COMBUSTIBLE LIQUID AND VAPOR CAUSES SKIN AND EYE BURNS HARMFUL OR FATAL IF SWALLOWED HARMFUL IF INHALED MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

Potential health effects

Principle Routes of Exposure Eye contact, Inhalation, Skin contact.

Acute effects

Eyes	Causes burns.
Skin	Causes burns. May cause sensitization by skin contact.
Inhalation	Irritating to respiratory system.
Ingestion	May be harmful if swallowed.

Chronic effects

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.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions	Central nervous system. Skin disorders. Respiratory disorders.
Interactive effects	Use of alcoholic beverages may enhance toxic effects.
Potential environmental effects	See Section 12 for additional Ecological Information.

Target Organ Effects

Central nervous system, Eyes, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No	Weight %
CUMENE HYDROPEROXIDE	80-15-9	60 - 100
CUMYL ALCOHOL	617-94-7	5 - 10
(1-METHYLETHYL)BENZENE	-	5 - 10
ACETOPHENONE	98-86-2	1 - 5

	4. FIRST AID MEASURES	
Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes.	
Skin contact:	Wash off immediately with soap and plenty of water.	
Ingestion:	If swallowed, do not induce vomiting. Get medical attention immediately.	
Inhalation:	Move to fresh air. Oxygen or artificial respiration if needed.	
	5. FIRE-FIGHTING MEASURES	
Flammable properties	Combustible material.	

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO2) - Foam - Dry chemical

Hazardous decomposition products Oxides of carbon, hydrocarbons.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Other information

Not applicable

7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Storage

Close container after each use. Keep away from heat, sparks and flame. Use only in an area containing flame proof equipment. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
(1-METHYLETHYL)BENZE NE	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ Skin	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ STEL: 75 ppm STEL: 365 mg/m ³
ACETOPHENONE	TWA: 10 ppm		TWA: 10 ppm TWA: 49 mg/m ³	TWA: 10 ppm	

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin protection	Lightweight protective clothing, Apron, Impervious gloves
Eye/face protection	Goggles. If splashes are likely to occur, wear face-shield.
Respiratory protection	Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience evelwatering beadache or
	dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturor's directions for respirator use
Conoral hygiana considerations	Application. Follow respirator manufacturers directions for respirator use.
General hygiene considerations	Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash point
Boiling range
Upper explosion limit
Lower explosion limit
Evaporation rate
Vapor pressure
Vapor density
Specific Gravity
Density
Volatile organic compounds (VOC) content
Volatile by weight
Volatile by volume

56 °C / 133.0 °F 152 - 153.000 °C / 305.0 - 307.0 °F No information available No information available No information available No information available 1.03331 g/cm3 8.59867 lbs/gal 1.075 lbs/gal 12.5000 % 12.3023 %

10. STABILITY AND REACTIVITY

Chemical stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Alkalines.

Strong oxidizing agents. Acids. Possibility of hazardous reactions

None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CUMENE HYDROPEROXIDE	382 mg/kg (Rat)	500 mg/kg (Rat)	220 ppm (Rat) 4 h
(1-METHYLETHYL)BENZENE	1400 mg/kg (Rat)	12300 µL/kg (Rabbit)	
ACETOPHENONE		1760 mg/kg (Rabbit)	
Irritation	No information available		-
Corrosivity	No information available.		
Sensitization	No information available.		

Chronic toxicity

Carcinogenicity	The tab	le below indicates wh	ether each agency h	as listed any ingredie	nt as a carcinogen.
Component	ACGIH	IARC	NTP	OSHA	Mexico
(1-METHYLETHYL)BENZE		Group 2B		Х	
NE		-			

Mutegenicity	No information available.
Reproductive effects	No information available.
Developmental effects	No information available.
Teratogenicity	No information available.
Target Organ Effects	Central nervous system, Eyes, Respiratory system, Skin.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
CUMENE HYDROPEROXIDE		LC50= 3.9 mg/L Oncorhynchus mykiss 96 h		EC50 = 7 mg/L 24 h
(1-METHYLETHYL)BENZE NE	EC50 = 2.6 mg/L 72 h	LC50 6.04 - 6.61 mg/L Pimephales promelas 96 h LC50= 2.7 mg/L Oncorhynchus mykiss 96 h LC50= 4.8 mg/L Oncorhynchus mykiss 96 h LC50= 5.1 mg/L Poecilia reticulata 96 h	EC50 = 0.89 mg/L 5 min EC50 = 1.10 mg/L 15 min EC50 = 1.48 mg/L 30 min EC50 = 172 mg/L 24 h	EC50 7.9 - 14.1 mg/L 48 h EC50 = 0.6 mg/L 48 h
ACETOPHENONE		LC50= 155 mg/L Pimephales promelas 96 h LC50= 162 mg/L Pimephales promelas 96 h	EC50 = 15.5 mg/L 15 min	

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.
	14. TRANSPORT INFORMATION
DOT	Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.
Proper shipping name	UN3109,ORGANIC PEROXIDE,TYPE F,LIQUID,(CUMYL HYDROPEROXIDE <90%),5.2(8),PGII, ERG 145

15. REGULATORY INFORMATION

International Inventories

Complies
Complies

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): Component HAPS Data (1-METHYLETHYL)BENZENE ACETOPHENONE United States of America Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
CUMENE HYDROPEROXIDE	80-15-9	60 - 100	1.0
(1-METHYLETHYL)BENZENE		5 - 10	1.0
ACETOPHENONE	98-86-2	1 - 5	1.0
SARA 311/312 Hazardous Categorization			

Chronic Health Hazard	yes
Acute Health Hazard	yes
Fire Hazard	yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
CUMENE HYDROPEROXIDE	10 lb	
(1-METHYLETHYL)BENZENE	5000 lb	

ACETOPHENONE	5000 lb	

United States of America State Regulations

California Prop. 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
(1-METHYLETHYL)BENZENE		Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
CUMENE	Х	Х	Х		
HYDROPEROXIDE					
(1-METHYLETHYL)BENZE	Х	Х	Х	Х	
NE					
ACETOPHENONE	Х	X	X	X	

Other international regulations

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

B3 Combustible liquid C Oxidizing materials D2B Toxic materials Е Corrosive material



Component	NPRI
CUMENE HYDROPEROXIDE	Part 1, Group 1 Substance
(1-METHYLETHYL)BENZENE	Part 1, Group 1 Substance
ACETOPHENONE	Part 1, Group 1 Substance

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMAT	ION
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Revision Date

02-Jan-2013

No information available

Revision Note

HMIS (Hazardous Material Health 3 Flammability 2 Information System)

Reactivity 2

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

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End of MSDS