

Safety Data Sheet

Issue Date No data available

Revision Date 20-Feb-2015

Revision Number 4

1. IDENTIFICATION

Product identifier

Product Code S294-0000A
Product Name CLEAR CRU CLEAR

Other means of identification

Common Name SERIES 294 PART A

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed
Causes serious eye irritation
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

**Appearance** clear**Physical state** liquid**Odor** Strong**Precautionary Statements****Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/mixing/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Response

IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up
 Store in a well-ventilated place. Keep cool
 Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

May be harmful in contact with skin
 Causes mild skin irritation
 Harmful to aquatic life with long lasting effects
 Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).
 Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs
 SEE SAFETY DATA SHEET
 Acute Toxicity 35.1132058 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	10 - 30%
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	10 - 30%
METHYL N-AMYL KETONE	110-43-0	10 - 30%
P-CHLOROBENZOTRIFLUORIDE	98-56-6	1 - 10%
AMORPHOUS SILICA	7631-86-9	1 - 10%
AMORPHOUS SILICON DIOXIDE	7631-86-9	1 - 10%
HEXYL ACETATE	142-92-7	1 - 10%
BIS (PENTAMETHYLPIPERIDYL) SEBACATE	41556-26-7	1 - 10%
XYLENE	1330-20-7	1 - 10%
BENZENE, 1,4-DIMETHYL	106-42-3	0.1 - 1%
PETROLEUM SOLVENT (NAPHTHA)	64742-95-6	0.1 - 1%
BENZENE, 1,3-DIMETHYL	108-38-3	0.1 - 1%
ETHYL BENZENE	100-41-4	0.1 - 1%

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. Oxygen or artificial respiration if needed.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.
Self-protection of the first aider	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable extinguishing media No information available.

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

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide (CO₂). Hydrocarbons. Nitrogen oxides (NO_x). Chlorine. Fluorine.

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, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Do not breathe vapours or spray mist. 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. Remove all sources of ignition.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products Incompatible with oxidizing agents. Acids. Alkalis. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	50 mg/m ³
METHYL N-AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	800 ppm
P-CHLOROBENZOTRIFLUORIDE 98-56-6	TWA: 2.5 mg/m ³	-	
AMORPHOUS SILICA 7631-86-9	-	TWA: 6 mg/m ³	3000 mg/m ³
AMORPHOUS SILICON DIOXIDE 7631-86-9	-	TWA: 6 mg/m ³	3000 mg/m ³

XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³	
BENZENE, 1,4-DIMETHYL 106-42-3	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
BENZENE, 1,3-DIMETHYL 108-38-3	TWA: 100 ppm STEL: 150 ppm	-	900 ppm
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	800 ppm

Appropriate engineering controls**Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

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

Information on basic physical and chemical properties

Physical state	liquid	Odor	Strong
Appearance	clear	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks	
pH		No data available	
Melting point / freezing point		No data available	
Boiling point / boiling range	138 °C / 280.0 °F		
Flash point	44 °C / 112.0 °F	Pensky Martens - Closed Cup	
Evaporation rate		No data available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air		No data available	
Upper flammability limit	N/A		
Lower flammability limit	1.0%		
Vapor pressure		No data available	
Vapor density		No data available	
Specific gravity	1.21229	g/cm ³	
Water solubility	Insoluble in cold water		

Solubility in other solvents		No data available
Partition coefficient: n-octanol/water		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity	2000 centipoises	No data available

Other Information

Density	10.08808 lbs/gal
Volatile organic compounds (VOC) content	3.349 lbs/gal
Total volatiles weight percent	36.5110 %
Total volatiles volume percent	47.4277 %

10. STABILITY AND REACTIVITY**Reactivity**

None under normal processing

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts with air to form peroxides.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Incompatible with oxidizing agents, Acids, Alkalis, Bases

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide (CO₂). Hydrocarbons. Nitrogen oxides (NO_x). Chlorine. Fluorine.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure**

Inhalation	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
Eye contact	Severely irritating to eyes.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	= 500 mg/kg (Rat)		
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE 108-65-6	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	
METHYL N-AMYL KETONE 110-43-0	= 1600 mg/kg (Rat) = 1670 mg/kg (Rat)	= 12.6 mL/kg (Rabbit) = 12600 µL/kg (Rabbit)	> 2000 ppm (Rat) 4 h
P-CHLOROBENZOTRIFLUORIDE 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat) 4 h
AMORPHOUS SILICA 7631-86-9	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h

AMORPHOUS SILICON DIOXIDE 7631-86-9	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
HEXYL ACETATE 142-92-7	= 41500 µL/kg (Rat)	> 5 g/kg (Rabbit)	
BIS (PENTAMETHYLPIPERIDYL) SEBACATE 41556-26-7	= 2615 mg/kg (Rat)		
XYLENE 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
BENZENE, 1,4-DIMETHYL 106-42-3	= 4029 mg/kg (Rat)		= 4740 ppm (Rat) 4 h = 4550 ppm (Rat) 4 h
PETROLEUM SOLVENT (NAPTHA) 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
BENZENE, 1,3-DIMETHYL 108-38-3	= 5000 mg/kg (Rat)	= 14100 µL/kg (Rabbit)	
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h

Information on toxicological effects**Symptoms**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Chronic Toxicity**

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

Sensitization

May cause sensitization of susceptible persons.

Mutagenicity

May cause genetic defects.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X
AMORPHOUS SILICA 7631-86-9		Group 3		
AMORPHOUS SILICON DIOXIDE 7631-86-9		Group 3		
XYLENE 1330-20-7		Group 3		
BENZENE, 1,4-DIMETHYL 106-42-3		Group 3		
BENZENE, 1,3-DIMETHYL 108-38-3		Group 3		
ETHYL BENZENE 100-41-4	A3	Group 2B		X

Reproductive effects

May damage fertility or the unborn child.

STOT - single exposure

No information available

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure
blood, Central nervous system, Eyes, hematopoietic system, kidney, liver, Lungs,
respiratory system, Reproductive System.

Target organ effects**Aspiration hazard**

Based on product level data, this product does not meet the requirement to be classified as an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.

Acute Toxicity

35.1132058 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

51.9084 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE 108-65-6		161: 96 h Pimephales promelas mg/L LC50 static	500: 48 h Daphnia magna mg/L EC50
METHYL N-AMYL KETONE 110-43-0		126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	
P-CHLOROBENZOTRIFLUORIDE 98-56-6		11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static	3.68: 48 h Daphnia magna mg/L EC50
AMORPHOUS SILICA 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static	7600: 48 h Ceriodaphnia dubia mg/L EC50
AMORPHOUS SILICON DIOXIDE 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static	7600: 48 h Ceriodaphnia dubia mg/L EC50
HEXYL ACETATE 142-92-7		3.7 - 4.4: 96 h Pimephales promelas mg/L LC50 flow-through	
BIS (PENTAMETHYLPIPERIDYL) SEBACATE 41556-26-7		0.97: 96 h Lepomis macrochirus mg/L LC50 static	20: 24 h Daphnia magna mg/L EC50
XYLENE 1330-20-7		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
BENZENE, 1,4-DIMETHYL 106-42-3	3.2: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 105.1: 3 h Chlorella vulgaris mg/L EC50	2.6: 96 h Oncorhynchus mykiss mg/L LC50 8.8: 96 h Poecilia reticulata mg/L LC50 semi-static 7.2 - 9.9: 96 h Pimephales promelas mg/L LC50 static 2.6: 96 h Oncorhynchus mykiss mg/L LC50 static	3.55 - 6.31: 48 h Daphnia magna mg/L EC50 Static
PETROLEUM SOLVENT (NAPHTHA) 64742-95-6		9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50
BENZENE, 1,3-DIMETHYL 108-38-3	4.9: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	8.4: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 14.3 - 18: 96 h Pimephales promelas mg/L LC50 flow-through 12.9: 96 h Poecilia reticulata mg/L LC50 semi-static	2.81 - 5.0: 48 h Daphnia magna mg/L EC50 Static
ETHYL BENZENE 100-41-4	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.6: 96 h Poecilia reticulata mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE 108-65-6	0.43
METHYL N-AMYL KETONE 110-43-0	1.98
P-CHLOROBENZOTRIFLUORIDE 98-56-6	3.7
BIS (PENTAMETHYLPIPERIDYL) SEBACATE 41556-26-7	0.37
XYLENE 1330-20-7	2.77
BENZENE, 1,4-DIMETHYL 106-42-3	3.15
BENZENE, 1,3-DIMETHYL 108-38-3	3.2
ETHYL BENZENE 100-41-4	3.118

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****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 to an approved waste handling site for recycling or disposal.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE 1330-20-7		Included in waste stream: F039		U239
ETHYL BENZENE 100-41-4		Included in waste stream: F039		

Component	CAWAST
XYLENE 1330-20-7	Toxic Ignitable
ETHYL BENZENE 100-41-4	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

Proper Shipping Name paint in oil Not regulated

IATA

UN/ID no. 1263
Proper Shipping Name paint
Hazard Class 3
Packing Group III
ERG Code 366

Additional information

Call TNE MEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component	HAPS Data
XYLENE	
BENZENE, 1,4-DIMETHYL	
BENZENE, 1,3-DIMETHYL	
ETHYL BENZENE	

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
XYLENE - 1330-20-7	1.0
BENZENE, 1,4-DIMETHYL - 106-42-3	1.0
BENZENE, 1,3-DIMETHYL - 108-38-3	1.0
ETHYL BENZENE - 100-41-4	0.1

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic 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
XYLENE 1330-20-7	100 lb			X
BENZENE, 1,4-DIMETHYL 106-42-3				X
BENZENE, 1,3-DIMETHYL 108-38-3				X
ETHYL BENZENE 100-41-4	1000 lb	X	X	X

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
BENZENE, 1,4-DIMETHYL 106-42-3	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
BENZENE, 1,3-DIMETHYL 108-38-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
ETHYL BENZENE - 100-41-4	Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X
METHYL N-AMYL KETONE 110-43-0	X	X	X
P-CHLOROBENZOTRIFLUORIDE 98-56-6	X		X
AMORPHOUS SILICA 7631-86-9	X	X	X
AMORPHOUS SILICON DIOXIDE 7631-86-9	X	X	X
XYLENE 1330-20-7	X	X	X
BENZENE, 1,4-DIMETHYL 106-42-3	X	X	X
BENZENE, 1,3-DIMETHYL 108-38-3	X	X	X
ETHYL BENZENE 100-41-4	X	X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 2 Instability 1 Physical hazard *
HMIS (Hazardous Health 2* Flammability 2 Reactivity 1
Material Information
System)

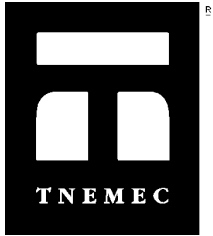
Prepared By Tnemec Regulatory Dept: 816-474-3400
Revision Date 20-Feb-2015
Revision Summary
 9 4 5 7 10 8 11 14

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



Safety Data Sheet

Issue Date 22-Jun-2015

Revision Date 22-Jun-2015

Revision Number 5

1. IDENTIFICATION

Product identifier

Product Code S291-0291B
Product Name S291/S294/S295 CONVERTER

Other means of identification

Common Name SERIES 290/291/294/295, PART B

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address
Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 4
Respiratory sensitization	Category 1
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction



Appearance clear

Physical state liquid

Odor odorless

Precautionary Statements**Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Response

Get medical advice/attention if you feel unwell
 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
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Storage

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

SEE SAFETY DATA SHEET

Acute Toxicity 35.8 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER	28182-81-2	60 - 100%
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	822-06-0	0.1 - 1%

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.
Self-protection of the first aider	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical. Carbon dioxide. Foam.

Unsuitable extinguishing media Water.

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

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide. Nitrogen oxides (NOx). Hydrogen cyanide. Isocyanates.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation.

Environmental Precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment

Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Use only with adequate ventilation. Avoid contact with eyes, skin 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.

Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products

Amines. Water. Strong bases. Alcohols. copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parametersExposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0	TWA: 0.005 ppm	-	

Appropriate engineering controls**Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV).

Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Safety glasses with side-shields

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. Do not breathe vapor or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. An airline respirator (TC 19C NIOSH/MSHA) is recommended. A vapor-particulate respirator (TC 23C NIOSH/MSHA) may be appropriate where air monitoring demonstrates vapors are less than ten times the applicable exposure limits and the isocyanate concentration is less than its applicable exposure limit. The use of an air-supplied respirator is mandatory whenever the airborne concentration of isocyanate monomer is unknown.

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

Information on basic physical and chemical properties

Physical state	liquid	Odor	odorless
Appearance	clear	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks	
pH		No data available	
Melting point / freezing point		No data available	
Boiling point / boiling range		No information available	
Flash point	149 °C / 300 °F	Pensky Martens - Closed Cup	
Evaporation rate		No data available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air		No data available	
Upper flammability limit	N/A		
Lower flammability limit	N/A		
Vapor pressure		No data available	
Vapor density		No data available	
Specific gravity	1.11974	g/cm ³	
Water solubility	Insoluble in cold water		
Solubility in other solvents		No data available	
Partition coefficient: n-octanol/water		No data available	
Autoignition temperature		No data available	

Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

Other Information

Density	9.31793 lbs/gal
Volatile organic compounds (VOC) content	.000 lbs/gal
Total volatiles weight percent	.0000 %
Total volatiles volume percent	.0000 %

10. STABILITY AND REACTIVITY

Reactivity

May occur if in contact with moisture, other materials which react with isocyanates, or temperatures above 400 F

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Amines, Water, Strong bases, Alcohols, copper

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide. Nitrogen oxides (NOx). Isocyanates. Hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	May cause sensitization of susceptible persons. Contains isocyanate monomer. If subject to spray application, engineering and administrative controls must be instituted to maintain an exposure level below .005ppm. If these controls are not adequate, the use of an air-supplied respirator is mandatory.
Eye contact	Severely irritating to eyes.
Skin contact	May cause sensitization of susceptible persons.
Ingestion	Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER 28182-81-2			= 18500 mg/m ³ (Rat) 1 h
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0	= 738 mg/kg (Rat)	= 593 mg/kg (Rabbit)	= 0.06 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Skin disorders. Respiratory disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Avoid repeated exposure. Contains isocyanates. May produce an allergic reaction.
Sensitization	May cause sensitization of susceptible persons.
Mutagenicity	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	No information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Target organ effects	respiratory system, Skin.
Aspiration hazard	No information available.

Acute Toxicity 35.8 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

99.8 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0		26.1: 96 h Brachydanio rerio mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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 to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name paint in oil

IATA

Proper Shipping Name Not regulated

Additional information

Call TNE MEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Component	HAPS Data
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER	

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	SARA 313 - Threshold Values
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER - 822-06-0	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

United States of America

California Prop. 65

None of the ingredients are listed with California Proposition 65.

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0	X	X	

16. OTHER INFORMATION

NFPA	Health 2	Flammability 0	Instability 1	Physical hazard *
HMIS (Hazardous Material Information System)	Health 2*	Flammability 0	Reactivity 1	

Prepared By Tnemec Regulatory Dept: 816-474-3400
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Revision Summary
9 4 5 6 7 10 8 11 14 15

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