











ventilated area. Use good personal and industrial hygiene practices. Keep container closed after each use.

See section 2 for further details. - [Prevention]:

**7.2. Conditions for safe storage, including any incompatibilities**

Handle containers carefully to prevent damage and spillage.

Precautions should be taken to minimize exposure to atmospheric humidity or water as carbon dioxide may be formed which, in closed containers can result in pressurization. Care should be taken when re-opening partly used containers.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: Contact with water will cause this product to cure. Incompatible with acids, bases, and oxidizers

Recommended storage range is less than 90°F.

See section 2 for further details. - [Storage]:

**7.3. Specific end use(s)**

No data available.

**8. Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure**

CAS No.	Ingredient	Source	Value
0000100-41-4	Ethyl Benzene	OSHA	TWA 100 ppm (435 mg/m <sup>3</sup> ) STEL 125 ppm
		ACGIH	TWA: 20 ppm <sup>2B</sup> , Revised 2011,
		NIOSH	TWA 100 ppm (435 mg/m <sup>3</sup> ) ST 125 ppm (545 mg/m <sup>3</sup> )
0000822-06-0	1,6-Hexamethylene Diisocyanate	ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppm <sup>S</sup>
		NIOSH	TWA 0.005 ppm (0.035 mg/m <sup>3</sup> ) C 0.020 ppm (0.140 mg/m <sup>3</sup> ) [10-minute]
0001330-20-7	Xylene	OSHA	STEL 150 ppm
		ACGIH	TWA: 100 ppm STEL: 150 ppm
0004098-71-9	Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-	ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppm <sup>S</sup>
		NIOSH	TWA 0.005 ppm (0.045 mg/m <sup>3</sup> ) ST 0.02 ppm (0.180 mg/m <sup>3</sup> ) [skin]

**8.2. Exposure controls**

**Respiratory**

When concentrations exceed the exposure limits shown above workers must wear appropriate respirators approved in accordance with Directive 89/656/EEC and the Personal Protection Equipment Regulations. Provision of other controls such as exhaust

ventilation should be considered if practical.

An air fed respirator must be worn when applying this product in a confined space. Even in open spaces, an air fed respirator should be worn when spraying.

If applying by brush or roller in an open, well ventilated area, air fed respirators could be replaced by a charcoal filter mask.

**Eyes** Chemical splash goggles (ANSI Z-87.1 or approved equivalent) and/or face shield. Have an eye wash station available.

**Skin** Avoid all skin contact by covering as much of the exposed skin area as possible with appropriate clothing. Wear impervious gloves.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Provide adequate ventilation. This should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by spray operators even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapor below the WEL, suitable respiratory protection must be worn. (See Personal Protection)

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

**Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

## 9. Physical and chemical properties

<b>Appearance</b>	Viscous Liquid
<b>Odor</b>	Not specified
<b>Odor threshold</b>	Not determined
<b>pH</b>	Not available
<b>Melting point / freezing point</b>	Not available
<b>Initial boiling point and boiling range</b>	281 - 284°F
<b>Flash Point</b>	80°F
<b>Evaporation rate (Ether = 1)</b>	Slower than ether
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> 1% <b>Upper Explosive Limit:</b> 7%
<b>Vapor pressure (Pa)</b>	Not established

<b>Vapor Density</b>	Not available
<b>Specific Gravity</b>	Not available
<b>Solubility in Water</b>	Nil, reacts with water
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not established
<b>Decomposition temperature</b>	Not available
<b>Viscosity (cSt)</b>	2,000 - 40,000 cps
<b>VOC Content</b>	< 250 g/liter
<b>Density</b>	8 - 11 pounds per gallon
<b>% Volatile</b>	< 26% (by volume)

**9.2. Other information**

No other relevant information.

## 10. Stability and reactivity

**10.1. Reactivity**

May polymerize if mixed with water.

**10.2. Chemical stability**

Stable under recommended storage and handling conditions (see section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide may be produced.

Keep away from oxidizing agents, strongly alkaline and strongly acid materials, amines, alcohols and water.

Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing, and in extreme cases, bursting of the container.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Excessive heat and open flame.

**10.5. Incompatible materials**

Contact with water will cause this product to cure. Incompatible with acids, bases, and oxidizers

**10.6. Hazardous decomposition products**

Reaction with water can create CO<sub>2</sub>.

## 11. Toxicological information

**Acute toxicity**

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue,



muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitization of the respiratory system resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Polyoxypropylene glycol - (25322-69-4)	2,000.00, Rat - Category: 4	No data available	No data available	No data available	No data available
Xylene - (1330-20-7)	4,299.00, Rat - Category: 5	1,548.00, Rabbit - Category: 4	No data available	20.00, Rat - Category: NA	5,000.00, Rat - Category: 4
Ethyl Benzene - (100-41-4)	3,500.00, Rat - Category: 5	15,433.00, Rabbit - Category: NA	17.20, Rat - Category: 4	No data available	4,000.00, Rat - Category: NA
2-N-octyl-4-isothiazoline-3-one - (26530-20-1)	550.00, Rat - Category: 4	690.00, Rabbit - Category: 3	No data available	0.27, Rat - Category: 2	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000100-41-4	Ethyl Benzene	IARC	Group 2b: Yes
0001330-20-7	Xylene	IARC	Group 3: Yes
0013463-67-7	Titanium dioxide	IARC	Group 2b: Yes

## 12. Ecological information

### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Polyoxypropylene glycol - (25322-69-4)	650.00, Menidia beryllina	Not Available	Not Available

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- - (4098-71-9)	4.00, Chaetogammarus marinus	83.70, Daphnia magna	118.70 (72 hr), Scenedesmus subspicatus
Aliphatic Hydrocarbon - (64742-49-0)	Not Available	2.60, Chaetogammarus marinus	Not Available
HDI Homopolymer - (28182-81-2)	100.00, Danio rerio	100.00, Daphnia magna	100.00 (72 hr), Scenedesmus subspicatus
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Ethyl Benzene - (100-41-4)	4.20, Oncorhynchus mykiss	2.93, Daphnia magna	3.60 (96 hr), Pseudokirchneriella subcapitata
2-N-octyl-4-isothiazoline-3-one - (26530-20-1)	0.0555, Oncorhynchus mykiss	0.18, Daphnia magna	0.084 (72 hr), Scenedesmus subspicatus
1,6-Hexamethylene Diisocyanate - (822-06-0)	82.80, Danio rerio	89.10, Daphnia magna	77.40 (72 hr), Desmodesmus subspicatus

## 12.2. Persistence and degradability

There is no data available on the preparation itself.

## 12.3. Bioaccumulative potential

Not Measured

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

## 12.6. Other adverse effects

No data available.

# 13. Disposal considerations

## 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

# 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>14.1. UN number</b>	UN1263	UN1263	UN1263
<b>14.2. UN proper shipping name</b>	UN1263, Paint, 3, III	Paint	Paint
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> 3	<b>IMDG:</b> 3 <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> 3
<b>14.4. Packing group</b>	III	III	III

**14.5. Environmental hazards****IMDG** Marine Pollutant: Yes ( Aliphatic Hydrocarbon )**14.6. Special precautions for user**

No further information

**15. Regulatory information****Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.**WHMIS Classification** D2A**US EPA Tier II Hazards****Fire:** No**Sudden Release of Pressure:** No**Reactive:** No**Immediate (Acute):** Yes**Delayed (Chronic):** Yes**EPCRA 311/312 Chemicals and RQs (lbs):**

Ethyl Benzene ( 1,000.00)

Xylene ( 100.00)

**EPCRA 302 Extremely Hazardous:**

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-

**EPCRA 313 Toxic Chemicals:**

1,6-Hexamethylene Diisocyanate

Ethyl Benzene

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-

Xylene

**Proposition 65 - Carcinogens (>0.0%):**

Ethyl Benzene

Titanium dioxide

**New Jersey RTK Substances (>1%):**

Ethyl Benzene

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-

Titanium dioxide

Xylene

**Pennsylvania RTK Substances (>1%):**

Ethyl Benzene

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-Titanium dioxide Xylene

## 16. Other information

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