

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Flush with water initially and remove contact lenses. Continue to flush eyes with large amounts of water for 15 minutes. Get medical attention immediately.
Skin	Remove contaminated clothing and shoes/boots. Wash affected area with large amounts of soap and water. Get medical attention immediately.
Ingestion	If swallowed give two glasses of water to drink. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

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

Overview	<p>Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.</p> <p>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.</p> <p>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. See section 2 for further details.</p>
Inhalation	Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye irritation.
Skin	May cause an allergic skin reaction. Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Water, carbon dioxide, foam or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Will not occur if properly handled and stored.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Use water spray to cool non-involved containers.

Wear SCBA with full-face piece operating in a positive pressure demand mode and full protective gear.

This product is considered combustible and is a fire hazard. During a fire isocyanate vapors and other irritating gases may be generated by thermal decomposition or combustion. At temperatures above 400°F, polymeric MDI can polymerize and decompose which can cause pressure build-up in closed containers. Use cold water to cool fire-exposed containers.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

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

6.3. Methods and material for containment and cleaning up

Shut off ignition sources including electrical equipment and flames. Contain spilled material. Absorb spills with inert material such as vermiculite, dry sand or earth. Place in a closed container but do not seal. Ventilate area to remove vapors.

7. Handling and storage

7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Avoid breathing aerosols, spray mists, and heated vapors. Use only in well 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/m3) STEL 125 ppm
		ACGIH	TWA: 20 ppm2B, Revised 2011,

		NIOSH	TWA 100 ppm (435 mg/m3) ST 125 ppm (545 mg/m3)
0000101-68-8	Diphenylmethanediisocyanate	OSHA	C 0.2 mg/m3 (0.02 ppm)
		ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppmSkin, S
		NIOSH	TWA 0.05 mg/m3 (0.005 ppm) C 0.2 mg/m3 (0.020 ppm) [10-minute]
0001330-20-7	Xylene	OSHA	STEL 150 ppm
		ACGIH	TWA: 100 ppm STEL: 150 ppm
0005873-54-1	Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-	ACGIH	TWA: 1.0 mg/m3Revised 2008,
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
0064742-47-8	Petroleum distillates, hydrotreated light	Supplier	Recommended 300 ppm PEL

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
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.
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

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

Vapor Density	Not available
Specific Gravity	Not available
Solubility in Water	Nil, reacts with water
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not established
Decomposition temperature	Not available
Viscosity (cSt)	2,000 - 4,000 cps
VOC Content	Less than 250 g/liter
Density	8.8 - 9.2 pounds per gallon
% Volatile	19 - 23% (by weight)

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

May polymerize.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

Reaction with water can create CO₂.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Will not occur if properly handled and stored.

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
Diphenylmethanediisocyanate - (101-68-8)	4,700.00, Rat - Category: 5	No data available	No data available	No data available	No data available
Chlorinated paraffin c22-30 - (63449-39-8)	11,700.00, Rat - Category: NA	No data available	No data available	No data available	No data available
Aluminium hydroxide - (21645-51-2)	5,000.00, Rat - Category: 5	No data available	No data available	No data available	No data available
Polymeric Diphenylmethane Diisocyanate - (9016-87-9)	49,000.00, Rat - Category: NA	9,400.00, Rabbit - Category: NA	No data available	No data available	No data available
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
Petroleum distillates, hydrotreated light - (64742-47-8)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available	No data available	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
0000101-68-8	Diphenylmethanediisocyanate	IARC	Group 3: Yes
0001330-20-7	Xylene	IARC	Group 3: Yes
0009016-87-9	Polymeric Diphenylmethane Diisocyanate	IARC	Group 3: Yes
0063449-39-8	Chlorinated paraffin c22-30	NTP	Suspected: Yes

12. Ecological information

12.1. Toxicity

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
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Diphenylmethanediisocyanate - (101-68-8)	Not Available	129.70, Daphnia magna	Not Available
Chlorinated paraffin c22-30 - (63449-39-8)	300.00, Lepomis macrochirus	102.00, Daphnia magna	Not Available
Ethyl Benzene - (100-41-4)	4.20, Oncorhynchus mykiss	2.93, Daphnia magna	3.60 (96 hr), Pseudokirchneriella subcapitata

Petroleum distillates, hydrotreated light - (64742-47-8)	45.00, Pimephales promelas	4,720.00, Dendronereides heteropoda	Not Available
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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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Potentially toxic to aquatic life.

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
14.1. UN number	UN1263	UN1263	UN1263
14.2. UN proper shipping name	UN1263, Paint, 3, III	Paint	Paint
14.3. Transport hazard class(es)	DOT Hazard Class: 3	IMDG: 3 Sub Class: Not Applicable	Air Class: 3
14.4. Packing group	III	III	III

14.5. Environmental hazards

IMDG Marine Pollutant: Yes

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.

U.S. Federal Regulations**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: Yes

Sudden Release of Pressure: No
 Reactive: No
 Immediate (Acute): Yes
 Delayed (Chronic): Yes

**EPCRA 311/312
 Chemicals and
 RQs (lbs):**

Diphenylmethanediisocyanate (5,000.00)
 Ethyl Benzene (1,000.00)
 Xylene (100.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SARA 313

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

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Xylene	1330-20-7	10 - 30	1.0
Ethyl benzene	100-41-4	7 - 13	0.1
Supplier Trade Secret		5 - 10	1.0
Methylene bisphenyl isocyanate (MDI)	101-68-8	1 - 5	1.0

**SARA 311/312 Hazard
 Categories**

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylene 1330-20-7	100 lb			X
Ethyl benzene 100-41-4	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Xylene 1330-20-7	100 lb		RQ= 100 lb final RQ RQ= 45.4 kg final RQ
Ethyl benzene 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Methylene bisphenyl isocyanate (MDI) 101-68-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Ethyl benzene - 100-41-4	Carcinogen

New Jersey RTK Substances (>1%):

Aluminum (Al)
Diphenylmethanediisocyanate
Ethyl Benzene
Polymeric Diphenylmethane Diisocyanate
Xylene

Pennsylvania RTK Substances (>1%):

Aluminum (Al)
Diphenylmethanediisocyanate
Ethyl Benzene
Xylene

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Xylene 1330-20-7	X	X	X	X	X
Ethyl benzene 100-41-4	X	X	X	X	X
Supplier Trade Secret	X	X	X	X	
Polymethylene polyphenylene isocyanate 9016-87-9	X			X	
Methylene bisphenyl isocyanate (MDI) 101-68-8	X	X	X	X	X

International Regulations

Mexico

National occupational exposure limits

Component	Exposure Limits
Xylene 1330-20-7 (10 - 30)	Mexico: TWA= 100 ppm Mexico: TWA= 435 mg/m ³ Mexico: STEL= 150 ppm Mexico: STEL= 655 mg/m ³

Ethyl benzene 100-41-4 (7 - 13)	Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 125 ppm Mexico: STEL 545 mg/m ³
Supplier Trade Secret (5 - 10)	Mexico: TWA= 10 mg/m ³
Methylene bisphenyl isocyanate (MDI) 101-68-8 (1 - 5)	Mexico: TWA 0.02 ppm Mexico: TWA 0.2 mg/m ³ Mexico: TWA 0.005 ppm Mexico: TWA 0.051 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

D2A - Very toxic materials

D2B - Toxic materials

B2 - Flammable liquid



16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

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