



# SAFETY DATA SHEET

Revision Date 09-Dec-2022

Version 6

## 1. IDENTIFICATION

### Product identifier

**Product Name** PUR Hardener

### Other means of identification

**Product Code** CG0270

**UN/ID no** UN1263

### Recommended use of the chemical and restrictions on use

**Recommended Use** No information available.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Gemini Coatings  
2300 Holloway Drive  
El Reno, OK 73036  
800-262-5710

### Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300

## 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 (Dusts/Mists)	Category 4
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### **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  
Suspected of causing cancer  
May cause respiratory irritation. May cause drowsiness or dizziness  
Highly flammable liquid and vapor

**Appearance** No information available**Physical state** Liquid**Odor** No information available**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  
 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  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool  
 Use explosion-proof electrical/ ventilating/ lighting/ equipment

**Precautionary Statements - Response**

IF exposed or concerned: 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 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  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

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

- May be harmful if swallowed
- May be harmful in contact with skin
- Causes mild skin irritation
- Harmful to aquatic life

Unknown acute toxicity

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%	Trade Secret
Butyl Acetate	123-86-4	30 - 60	*
Polymeric Isocyanate	28182-81-2	15 - 40	*
Xylene	1330-20-7	1 - 5	*
Ethyl Benzene	100-41-4	1 - 5	*
Hexamethylene-1,6-diisocyanate	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

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Call a physician immediately. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately. May cause allergic respiratory reaction.
<b>Ingestion</b>	Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	May cause sensitization by inhalation and skin contact. Treat symptomatically. Symptoms may be delayed.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

Flammable.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Remove all sources of ignition. Use personal protective equipment as required.
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##### Environmental precautions

<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.
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##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
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**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Chlorinated compounds. Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Butyl Acetate 123-86-4	STEL: 150 ppm TWA: 50 ppm	TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> (vacated) TWA: 150 ppm (vacated) TWA: 710 mg/m <sup>3</sup> (vacated) STEL: 200 ppm (vacated) STEL: 950 mg/m <sup>3</sup>	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m <sup>3</sup> STEL: 200 ppm STEL: 950 mg/m <sup>3</sup>
Xylene 1330-20-7	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m <sup>3</sup>	-
Ethyl Benzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m <sup>3</sup> (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m <sup>3</sup>	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>
Hexamethylene-1,6-diisocyanate 822-06-0	TWA: 0.005 ppm	-	Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m <sup>3</sup> 10 min TWA: 0.005 ppm TWA: 0.035 mg/m <sup>3</sup>

NIOSH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** No special technical protective measures are necessary.

**Skin and body protection** Wear protective gloves and protective clothing.

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

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	No information available
<b>Appearance</b>	No information available	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	>= 118 °C / 244 °F	
Flash point	22 °C / 72 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	0.96	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### Other Information

Softening point	No information available
Molecular weight	No information available
Liquid Density	8.03 lbs/gal
Bulk density	No information available
Percent solids by weight	37.5%
Percent volatile by weight	62.5%
Percent solids by volume	32.9%
Actual VOC (lbs/gal)	5
Actual VOC (grams/liter)	601.1
EPA VOC (lbs/gal)	5
EPA VOC (grams/liter)	601.1
EPA VOC (lb/gal solids)	15.2

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks.

#### **Incompatible materials**

Chlorinated compounds. Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

#### **Hazardous decomposition products**

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### **Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	May cause sensitization by inhalation.
<b>Eye contact</b>	May cause irritation.
<b>Skin Contact</b>	May cause irritation. May cause sensitization by skin contact.
<b>Ingestion</b>	No data available.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Butyl Acetate 123-86-4	= 10768 mg/kg ( Rat )	> 17600 mg/kg ( Rabbit )	= 0.74 mg/L ( Rat ) 4 h
Polymeric Isocyanate 28182-81-2	-	> 2000 mg/kg ( Rat )	= 18500 mg/m <sup>3</sup> ( Rat ) 1 h
Xylene 1330-20-7	= 3500 mg/kg ( Rat )	> 4350 mg/kg ( Rabbit )	= 29.08 mg/L ( Rat ) 4 h
Ethyl Benzene 100-41-4	= 3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.4 mg/L ( Rat ) 4 h
Hexamethylene-1,6-diisocyanate 822-06-0	= 738 mg/kg ( Rat )	> 7000 mg/kg ( Rat )	= 0.06 mg/L ( Rat ) 4 h

### **Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

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

**Sensitization** May cause sensitization by inhalation and skin contact.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Xylene 1330-20-7	-	Group 3	-	-
Ethyl Benzene 100-41-4	A3	Group 2B	-	X

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A3 - Animal Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*Group 3 - Not classifiable as a human carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic toxicity**

Ethylbenzene has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B). Prolonged or repeated overexposure to ethylbenzene may result in adverse effects to the kidneys, liver, respiratory system, thyroid, testicles, and pituitary glands.

**Target organ effects** Central nervous system, Eyes, Respiratory system, Skin.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life

37.5% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Butyl Acetate 123-86-4	674.7: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	17 - 19: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 100: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	-
Xylene 1330-20-7	-	13.1 - 16.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 13.5 - 17.3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 2.661 - 4.093: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 23.53 - 29.97: 96 h <i>Pimephales promelas</i> mg/L LC50 static 30.26 - 40.75: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 7.711 - 9.591: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 13.4: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 19: 96 h <i>Lepomis macrochirus</i> mg/L LC50 780: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static 780: 96 h <i>Cyprinus carpio</i> mg/L LC50	0.6: 48 h <i>Gammarus lacustris</i> mg/L LC50 3.82: 48 h water flea mg/L EC50
Ethyl Benzene 100-41-4	1.7 - 7.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 2.6 - 11.3: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 4.6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 438: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	11.0 - 18.0: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 7.55 - 11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 9.1 - 15.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 32: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 4.2: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 9.6: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	1.8 - 2.4: 48 h <i>Daphnia magna</i> mg/L EC50
Hexamethylene-1,6-diisocyanate 822-06-0	-	26.1: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical name	Partition coefficient
Butyl Acetate 123-86-4	1.81 2.3
Xylene 1330-20-7	2.77 - 3.15
Ethyl Benzene 100-41-4	3.6

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

## 14. TRANSPORT INFORMATION

### DOT

<b>UN/ID no</b>	UN1263
<b>Proper shipping name</b>	Paint
<b>Hazard class</b>	3
<b>Packing Group</b>	II
<b>Reportable Quantity (RQ)</b>	(Butyl Acetate: RQ (kg)= 2270.00, Xylene: RQ (kg)= 45.40, Hexamethylene-1,6-diisocyanate: RQ (kg)= 45.40)
<b>Special Provisions</b>	149, B52, IB2, T4, TP1, TP8, TP28
<b>Description</b>	UN1263, Paint, 3, II
<b>Emergency Response Guide Number</b>	128

### TDG

<b>UN/ID no</b>	UN1263
<b>Proper shipping name</b>	Paint
<b>Hazard class</b>	3
<b>Packing Group</b>	II
<b>Special Provisions</b>	59, 83
<b>Description</b>	UN1263, Paint, 3, II

### MEX

<b>UN/ID no</b>	UN1263
<b>Proper shipping name</b>	Paint
<b>Hazard class</b>	3
<b>Special Provisions</b>	163
<b>Packing Group</b>	II
<b>Description</b>	UN1263, Paint, 3, II

### ICAO (air)

<b>UN/ID no</b>	UN1263
<b>Proper shipping name</b>	Paint
<b>Hazard class</b>	3
<b>Packing Group</b>	II
<b>Special Provisions</b>	A3, A72
<b>Description</b>	UN1263, Paint, 3, II

### IATA

<b>UN Number</b>	UN1263
<b>Proper shipping name</b>	Paint
<b>Transport hazard class(es)</b>	3
<b>Packing Group</b>	II
<b>ERG Code</b>	3L
<b>Special Provisions</b>	A3, A72
<b>Description</b>	UN1263, Paint, 3, II

### IMDG

<b>UN Number</b>	UN1263
<b>Transport hazard class(es)</b>	3
<b>Packing Group</b>	II
<b>EmS-No</b>	F-E, S-E
<b>Special Provisions</b>	163
<b>Description</b>	UN1263, Paint, 3, II, (22°C c.c.)

**RID**

UN/ID no UN1263  
 Proper shipping name Paint  
 Transport hazard class(es) 3  
 Packing Group II  
 Classification code F1  
 Special Provisions 163, 640C, 650  
 Description UN1263, Paint, 3, II  
 Labels 3

**ADR**

UN Number UN1263  
 Proper shipping name Paint  
 Transport hazard class(es) 3  
 Packing Group II  
 Classification code F1  
 Tunnel restriction code (D/E)  
 Special Provisions 163, 640C, 650  
 Description UN1263, Paint, 3, II, (D/E)  
 Labels 3

**ADN**

Proper shipping name Paint  
 Transport hazard class(es) 3  
 Packing Group II  
 Classification code F1  
 Special Provisions 163, 640C, 650  
 Description UN1263, Paint, 3, II  
 Hazard label(s) 3  
 Limited quantity (LQ) 5 L  
 Ventilation VE01  
 Equipment Requirements PP, EX, A

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA Complies  
 DSL/NDSL Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations****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	SARA 313 - Threshold Values %
Xylene - 1330-20-7	1.0
Ethyl Benzene - 100-41-4	0.1

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
 Chronic Health Hazard No  
 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
Butyl Acetate 123-86-4	5000 lb	-	-	X
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	CERCLA/SARA RQ	Reportable Quantity (RQ)
Butyl Acetate 123-86-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final 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
Hexamethylene-1,6-diisocyanate 822-06-0	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Ethyl Benzene - 100-41-4	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts
Butyl Acetate 123-86-4	X	X
Xylene 1330-20-7	X	X
Ethyl Benzene 100-41-4	X	X

Chemical name	Pennsylvania
Butyl Acetate 123-86-4	X
Xylene 1330-20-7	X
Ethyl Benzene 100-41-4	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants' (present individually at 1% by weight, or greater):

Chemical name	Weight % of HAPS in Product	Pounds HAPS / Gal Product
Xylene 1330-20-7	4.25%	0.34
Ethyl Benzene 100-41-4	1.50%	0.12

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 2	Flammability 3	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health hazards 2 *	Flammability 3	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

**Revision Date** 09-Dec-2022

**Revision Note**  
No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

**End of Safety Data Sheet**