







**Protection of First-aiders** Avoid contact with skin, eyes and clothing. Use personal protective equipment. For personal protection see Section 8. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus

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

**Most Important Symptoms/Effects** Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 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**

No information available

<b>Uniform Fire Code</b>	Irritant: Liquid Toxic: Liquid
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**Hazardous Combustion Products**

Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** No

**Sensitivity to Static Discharge** No

**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**

**Personal Precautions** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment. Do not breathe vapors or spray mist. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

**Environmental Precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Prevent breathing of mist or vapors. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

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

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked-up. Keep out of the reach of children.

**Incompatible Products** Strong acids. Strong oxidizing agents. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethylamine 121-44-8	STEL: 3 ppm TWA: 1 ppm S*	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 40 mg/m <sup>3</sup> (vacated) STEL: 15 ppm (vacated) STEL: 60 mg/m <sup>3</sup>	IDLH: 200 ppm
Dipropylene glycol monomethyl ether 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m <sup>3</sup> (vacated) S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> STEL: 150 ppm STEL: 900 mg/m <sup>3</sup>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

**Other Exposure Guidelines** 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 Measures** Showers  
Eyewash stations  
Ventilation systems

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

**Eye/Face Protection** If splashes are likely to occur, wear: Safety glasses with side-shields. None required for consumer use.

**Skin and Body Protection** Wear protective gloves/clothing. Long sleeved clothing. Impervious gloves.

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Do not breathe vapors or spray mist Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Amine
<b>Appearance</b>	Translucent White	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks/ Method</u></b>	
<b>pH</b>	7	None known	
<b>Melting/freezing point</b>	No data available	None known	
<b>Boiling Point/Range</b>	100 °C / 212 °F	None known	
<b>Flash Point</b>		None known	
<b>Evaporation rate</b>	No data available	None known	
<b>Flammability (solid, gas)</b>	No data available	None known	
<b>Flammability Limits in Air</b>			
<b>Upper flammability limit</b>	No data available		
<b>Lower flammability limit</b>	No data available		
<b>Vapor pressure</b>	No data available	None known	
<b>Vapor density</b>	No data available	None known	
<b>Specific Gravity</b>	No data available	None known	
<b>Water Solubility</b>	Soluble in water.	None known	
<b>Solubility in other solvents</b>	No data available	None known	
<b>Partition coefficient: n-octanol/water</b>	No data available	None known	
<b>Autoignition temperature</b>	No data available	None known	
<b>Decomposition temperature</b>	No data available	None known	
<b>Kinematic viscosity</b>	No data available	None known	
<b>Dynamic viscosity</b>	No data available	None known	
<b>Explosive Properties</b>	No data available		
<b>Oxidizing Properties</b>	No data available		
<b><u>Other Information</u></b>			
<b>Softening Point</b>	No data available		
<b>VOC Content (%)</b>	No data available		

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

Excessive heat.

### Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

### Hazardous Decomposition Products

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	There is no data available for this product. May cause irritation of respiratory tract. Toxic by inhalation. (based on components)
<b>Eye Contact</b>	There is no data available for this product. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.
<b>Skin Contact</b>	There is no data available for this product. Expected to be an irritant based on components. Irritating to skin. Prolonged contact may cause redness and irritation.
<b>Ingestion</b>	There is no data available for this product. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Propanol, 1-(2-butoxy-1-methylethoxy)- 29911-28-2	-	-	> 2.04 mg/L ( Rat ) 4 h = 42.1 ppm ( Rat ) 4 h
Triethylamine 121-44-8	= 460 mg/kg ( Rat )	= 416 mg/kg ( Rabbit )	= 3496 ppm ( Rat ) 1 h = 0.42 mg/L ( Rat ) 1 h
Dipropylene glycol monomethyl ether 34590-94-8	= 5230 mg/kg ( Rat )	= 9500 mg/kg ( Rabbit )	-
Propylene Glycol 57-55-6	= 20000 mg/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-

### Information on toxicological effects

**Symptoms** Redness of the skin. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing.

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

**Sensitization** No information available.

<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	Contains no ingredients above reportable quantities listed as a carcinogen.
<b>Reproductive Toxicity</b>	No information available
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic Toxicity</b>	No known effect based on information supplied. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. May cause adverse liver effects. Carcinogenic potential is unknown.
<b>Target Organ Effects</b>	Respiratory system. Eyes. Skin. Systemic Toxicity. Central nervous system (CNS). Central Vascular System (CVS). Kidney. Liver.
<b>Aspiration Hazard</b>	No information available.

#### **Numerical measures of toxicity Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

5,220.00 mg/kg

**ATEmix (dermal)**

13,554.00 mg/kg (ATE)

**ATEmix (inhalation-dust/mist)**

17.28 mg/L

**ATEmix (inhalation-vapor)**

5.56ATEmix

## **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

The environmental impact of this product has not been fully investigated.

#### **Persistence and Degradability**

No information available.

#### **Bioaccumulation**

No information available.

#### **Other Adverse Effects**

No information available.



**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging**

Dispose of in accordance with local regulations.

**US EPA Waste Number**

U404

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Triethylamine 121-44-8	U404	Included in waste streams: K156, K157		U404

**California Hazardous Waste Codes** 331

**14. TRANSPORT INFORMATION**

**DOT**  
**Proper Shipping Name** NOT REGULATED  
**Hazard Class** Non regulated  
 N/A

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA**  
**Proper Shipping Name** Not regulated  
**Hazard Class** Non regulated  
 N/A

**IMDG/IMO**  
**Hazard Class** Not regulated  
 N/A

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL** All components are listed either on the DSL or NDSL.

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

**U.S. 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	CAS-No	Weight %	SARA 313 - Threshold Values %
Triethylamine - 121-44-8	121-44-8	1 - 5	1.0
Dipropylene glycol monomethyl ether - 34590-94-8	34590-94-8	1 - 5	1.0

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**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
Triethylamine 121-44-8	5000 lb			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
Triethylamine 121-44-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Triethylamine 121-44-8	X	X	X
Tripropylene glycol monomethyl ether 25498-49-1			X
Dipropylene glycol monomethyl ether 34590-94-8	X	X	X
Propylene Glycol 57-55-6	X		X

**International Regulations****Mexico - Grade**

No information available.

Chemical Name	Carcinogen Status	Exposure Limits
Triethylamine		Mexico: TWA 25 ppm Mexico: TWA 100 mg/m <sup>3</sup> Mexico: STEL 40 ppm Mexico: STEL 160 mg/m <sup>3</sup>

Chemical Name	Carcinogen Status	Exposure Limits
Dipropylene glycol monomethyl ether		Mexico: TWA 100 ppm Mexico: TWA 60 mg/m <sup>3</sup> Mexico: STEL 150 ppm Mexico: STEL 900 mg/m <sup>3</sup>
Propylene Glycol	-	-

**Canada****WHMIS Hazard Class**

D2B Toxic materials



<b>16. OTHER INFORMATION</b>
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<b><u>NFPA</u></b>	<b>Health Hazard 2</b>	<b>Flammability 0</b>	<b>Instability 0</b>	<b>Physical and Chemical Hazards -</b>
<b><u>HMIS</u></b>	<b>Health Hazard 2</b>	<b>Flammability 0</b>	<b>Physical Hazard 0</b>	<b>Personal Protection X</b>

<b>Prepared By</b>	EHS Department
<b>Revision Date</b>	03-Jan-2014
<b>Revision Note</b>	No information available

**General 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

**End of Safety Data Sheet**