



**Environmental Hazard** See Section 12 for additional Ecological information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Morpholine	110-91-8	0.1-1
2-Butoxyethanol	111-76-2	0.1-1
Isopropyl alcohol	67-63-0	0.1-1

### 4. FIRST AID MEASURES

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact** Wash skin with soap and water.

**Inhalation** Move to fresh air.

**Ingestion** Clean mouth with water and afterwards drink plenty of water.

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Flammable Properties** Not flammable

**Flash Point** Not applicable

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**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.

<b>NFPA</b>	<b>Health Hazard</b> 0	<b>Flammability</b> 0	<b>Stability</b> 0	<b>Physical and Chemical Hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 0	<b>Flammability</b> 0	<b>Stability</b> 0	<b>Personal Precautions</b> -

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with eyes.

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

**Methods for Cleaning Up** Soak up with inert absorbent material. Keep in suitable and closed containers for disposal.

**7. HANDLING AND STORAGE**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Morpholine	TWA: 20 ppm Skin	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup> STEL: 105 mg/m <sup>3</sup> STEL: 30 ppm Skin TWA: 20 ppm	1400 ppm
2-Butoxyethanol	TWA: 20 ppm	TWA: 25 ppm TWA: 120 mg/m <sup>3</sup> Skin TWA: 240 mg/m <sup>3</sup> TWA: 50 ppm	700 ppm
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 980 mg/m <sup>3</sup> TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup> TWA: 980 mg/m <sup>3</sup>	2000 ppm

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

**Personal Protective Equipment**  
**Eye/Face Protection** No special protective equipment required.  
**Skin and Body protection** No special protective equipment required.  
**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	White	<b>Odor</b>	Perfume
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Liquid
<b>pH</b>	8.6		

<b>Flash Point</b>	Not applicable	<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	No data available	<b>Boiling Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available		
<b>Flammability Limits in Air</b>	No data available	<b>Explosion Limits</b>	No data available
<b>Specific Gravity</b>	.95-1.006	<b>Solubility</b>	No data available
<b>Evaporation Rate</b>	No data available	<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available	<b>VOC Content</b>	2.7%
<b>Viscosity</b>	160-200 cps	<b>Partition Coefficient (n-octanol/water)</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Do not freeze.
<b>Incompatible Products</b>	None known.
<b>Hazardous Decomposition Products</b>	None known.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Morpholine	1050 mg/kg ( Rat )	310 mg/kg ( Rabbit )	
2-Butoxyethanol	470 mg/kg ( Rat )	220 mg/kg ( Rabbit ) 2270 mg/kg ( Rat )	2.21 mg/L ( Rat ) 4 h
Isopropyl alcohol	4396 mg/kg ( Rat )	12800 mg/kg ( Rabbit ) 12800 mg/kg ( Rat )	72.6 mg/L ( Rat ) 4 h

### Subchronic Toxicity (28 days)

#### Chronic Toxicity

**Chronic Toxicity** No known effect.

**Carcinogenicity** There are no known carcinogenic chemicals in this product.

#### Mutagenicity

**Reproductive Toxicity** This product does not contain any known or suspected reproductive hazards.

**Target Organ Effects** None known.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Morpholine	EC50 = 28.0 mg/L 96 h		EC50 = 57.0 mg/L 30 min	EC50 = 100.0 mg/L 24 h
2-Butoxyethanol				LC50 1698 - 1940 mg/L 24 h EC50 = 1720 mg/L 24 h
Isopropyl alcohol	EC50 > 1000 mg/L 72 h EC50 > 1000 mg/L 96 h		EC50 = 35390 mg/L 5 min	EC50 = 13299 mg/L 48 h

Chemical Name	Log Pow
Morpholine	-2.55
2-Butoxyethanol	0.81
Isopropyl alcohol	0.05

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Method

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.

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol	Toxic, Ignitable

## 14. TRANSPORT INFORMATION

<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>MEX</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADR</b>	Not regulated

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**14. TRANSPORT INFORMATION**

**ADN** Not regulated

**15. REGULATORY INFORMATION**
**International Inventories**

**TSCA** Complies  
**DSL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Does not Comply  
**CHINA** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**U.S. Federal Regulations**
**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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
2-Butoxyethanol	111-76-2	0.1-1	1.0
Isopropyl alcohol	67-63-0	0.1-1	1.0

**SARA 311/312 Hazard Categories**

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

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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

This product does not contain any Proposition 65 chemicals.

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

This product does not contain any substances regulated by state right-to-know regulations.

**International Regulations**

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**Mexico - Grade** Minimum risk, Grade 0

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

Non-controlled

<b>16. OTHER INFORMATION</b>
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**Issuing Date** 23-Mar-2007

**Revision Date**

**Revision Note** No information available

**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of MSDS**