

**Precautionary Statements - Prevention**

Do not breathe dusts or mists
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Immediately call a POISON CENTER or doctor
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance**Mixture**

Chemical Name	CAS No.	Weight-%
Ethylene glycol monobutyl ether	111-76-2	5 - 10
Alcohols, C6-C12, Ethoxylated, propoxylated	68937-66-6	5 - 10
Alcohols, C10-C16, ethoxylated, propoxylated	69227-22-1	1 - 5
C6-12 ALKLY ALCOHOL ETHOXYLATE	68921-24-4	1 - 5
PHOSPHORIC ACID		
Sodium Metasilicate	6834-92-0	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye contact Remove contact lenses, if present. Call a physician immediately. Rinse immediately with

plenty of water, also under the eyelids, for at least 15 minutes.

Skin contact

Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Call a physician immediately. Use a mild soap if available.

Inhalation

Move to fresh air. Consult a physician after significant exposure. Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.

Ingestion

Gently wipe or rinse the inside of the mouth with water. Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Risk of product entering the lungs on vomiting after ingestion.

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

See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media**Suitable extinguishing media**

Use water spray, fog, Carbon dioxide (CO₂), foam or dry chemical.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture**Special Hazard**

Immediately place absorbent material in a sealed water-filled metal container to avoid spontaneous combustion of absorbent material contaminated with this product.

Hazardous Combustion Products No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice 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

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

Hygiene measures When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep locked up or in an area accessible only to qualified or authorized persons. Store between 41 and 77 °F (5 - 25° C) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in original container.

Materials to Avoid Acids. Alcohols. Oxidizing agents. Aldehydes. Halogenated hydrocarbons. Ketones. Copper. Copper alloys. sodium hypochlorite. Avoid radical-forming starting agents, peroxides and reactive metals.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Ethylene glycol monobutyl ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ S*	TWA: 20 ppm	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm TWA: 97 mg/m ³	TWA: 20 ppm

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Long sleeved clothing. Rubber or plastic apron.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear a positive-pressure supplied-air respirator. Respirator with filter for organic vapor.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid	Color	light green
Appearance	Clear	Odor Threshold	No information available
Odor	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	12.8	
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point	> 94 °C / > 201 °F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits 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	1.032	
Water solubility	Miscible with water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content 10.4%

10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Direct sources of heat.

10.5 Incompatible Materials

Acids. Alcohols. Oxidizing agents. Aldehydes. Halogenated hydrocarbons. Ketones. Copper. Copper alloys. sodium hypochlorite. Avoid radical-forming starting agents, peroxides and reactive metals.

10.6 Hazardous Decomposition Products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke. Thermal decomposition can lead to release of irritating gases and vapors. Ammonia. Nitric acid.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

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

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	2,341.00 mg/kg
Dermal LD50	10,495.00 mg/kg mg/l
LC50 (Vapor)	110.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylene glycol monobutyl ether 111-76-2	470 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Sodium Metasilicate 6834-92-0	600 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

- No information available

Component Information

- No information available

Serious eye damage/eye irritation

Product Information

- Causes serious eye damage

Component Information

- No information available

Respiratory or skin sensitization

Product Information

- No information available

Component Information

- No information available

Germ cell mutagenicity

Product Information

- No information available

Component Information

- No information available

Carcinogenicity

Product Information

- No information available

Component Information

- No information available

Reproductive toxicity

Product Information

- No information available
- Component Information
- No information available

STOT - single exposure

No information available

STOT - repeated exposure

- May cause adverse liver effects
- Ethylene glycol monobutyl ether (CAS#111-76-2): Laboratory studies on experimental animals indicate that exposure may cause red blood cell damage and damage to the kidney and liver. These effects have not been observed in humans. Laboratory animal studies have reported adverse reproductive and developmental effects from overexposure

Other adverse effectsProduct Information

- No information available

Component Information

- No information available

Aspiration hazardProduct Information

- No information available

Component Information

- No information available

12. Ecological information

12.1 Toxicity**Ecotoxicity**

No information available

12.01337 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Ethylene glycol monobutyl ether 111-76-2	-	LC50: 96 h <i>Lepomis macrochirus</i> 1490 mg/L static LC50: 96 h <i>Lepomis macrochirus</i> 2950 mg/L	EC50: 48 h <i>Daphnia magna</i> 1000 mg/L
Sodium Metasilicate 6834-92-0	-	LC50: 96 h <i>Brachydanio rerio</i> 210 mg/L semi-static LC50: 96 h <i>Brachydanio rerio</i> 210 mg/L	-

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Ethylene glycol monobutyl ether 111-76-2	0.81

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

Discharge into the environment must be avoided

13. Disposal Considerations

13.1 Waste treatment 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.

14. Transport Information

DOT	Not regulated
MEX	-
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 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	SARA 313 - Threshold Values %	Weight-%
Ethylene glycol monobutyl ether 111-76-2	1.0	5 - 10

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
1,4-DIOXANE - 123-91-1	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

16. Other information

NFPA	Health Hazard 3	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 3	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

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

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Chronic Hazard Star Legend

Chronic Health Hazard

Revision Date 27-Jul-2017

Revision Note

No information available

Disclaimer

The information provided on this SDS 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 Safety Data Sheet