SAFETY DATA SHEET

Section 1. Identification

GHS product identifier	:
Other means of	:
identification	
Product type	: Liquid

Relevant identified uses of the substance or mixture and uses advised against Not applicable

Supplier's	details	:	
Supplier's	details		

Emergency telephone number (with hours of operation)

Section 2. Hazards identification

2

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
		Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 18.6 % There is no toxicity data available for the polymer in this product, which is exempt and categorized in a low concern functional group under the EPA's Toxic Substances Control Act (TSCA).
GHS label elements		
Signal word	:	No signal word.
Hazard statements	1	No known significant effects or critical hazards.
Precautionary statements		
General	:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	:	Not applicable
Response	1	Not applicable
Storage	1	Not applicable
Disposal	:	Not applicable
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

: Not available

CAS number/other identifiers

CAS number	: Not applicable
Product code	1

Ingredient name	%	CAS number
2-(2-ethoxyethoxy)ethanol	1 - 5	111-90-0
(2-methoxymethylethoxy)propanol	1 - 5	34590-94-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/	<u>ects, acute and delayed</u>	
Potential acute health effe	<u>i</u>	
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: No known significant effects or critical hazards.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/sym	i <u>ms</u>	
Eye contact	: No specific data.	
Inhalation	: No specific data.	
Skin contact	: No specific data.	
Ingestion	: No specific data.	
Indication of immediate me	al attention and special treatment needed, if necessary	
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if larg quantities have been ingested or inhaled.	е
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training	
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Section 4. First aid measures

See toxicological information (section 8)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

· · · · · · · · · · · · · · · · · · ·	
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact

information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	9	
Protective measures	1	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-(2-ethoxyethoxy)ethanol	AIHA WEEL (United States, 10/2011).
	TWA: 25 ppm 8 hours.
(2-methoxymethylethoxy)propanol	ACGIH TLV (United States, 3/2016).
	Absorbed through skin.
	TWA: 100 ppm 8 hours.
	TWA: 606 mg/m ³ 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 909 mg/m ³ 15 minutes.
	OSHA PEL 1989 (United States, 3/1989).
	Absorbed through skin.
	TWA: 100 ppm 8 hours.
	TWA: 600 mg/m ³ 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 900 mg/m ³ 15 minutes.
	NIOSH REL (United States, 10/2013).
	Absorbed through skin.
	TWA: 100 ppm 10 hours.
	TWA: 600 mg/m ³ 10 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 900 mg/m ³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	Absorbed through skin.
	TWA: 100 ppm 8 hours.
	TWA: 600 mg/m ³ 8 hours.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures						
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Section 8. Exposure controls/personal protection

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

	• •		
<u>Appearance</u>			
Physical state	: Liquid		
Color	: White		
Odor	: Bland		
Odor threshold	: Not available		
рН	: 8		
Melting point	: 0°C (32°F)		
Boiling point	: 100°C (212°F)		
Flash point	: Closed cup: >93.334°C (>200°F)		
Evaporation rate	: Not available		
Flammability (solid, gas)	: Not available		
Lower and upper explosive (flammable) limits	: Not available		
Vapor pressure	: <4 kPa (<30 mm Hg) [room temperature]		
Vapor density	: <1 [Air = 1]		
Specific gravity	: 1.05 g/cm³		
Solubility	: Not available		
Partition coefficient: n- octanol/water	: Not available		
Auto-ignition temperature	: Not available		
Viscosity	: Not available		
VOC content	: 222 g/l		
VOCs are calculated following the requirements un	nder 40 CFR, Part 59, Subpart C for Consumer Products and Subpart D for Architectural Coatings.		
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-ethoxyethoxy)ethanol (2-methoxymethylethoxy) propanol	LD50 Oral LD50 Dermal	Rat Rabbit	7500 mg/kg 9500 mg/kg	-
propanoi	LD50 Oral	Rat	5135 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-(2-ethoxyethoxy)ethanol	Eyes - Mild irritant	Rabbit	-	125 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
(2-methoxymethylethoxy) propanol	Eyes - Mild irritant	Human	-	8 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available

Mutagenicity

Not available

Carcinogenicity

Not available

Reproductive toxicity

Not available

Teratogenicity

Not available

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Section 11. Toxicological information

<u>Specific target organ toxicit</u> Not available	<u>y (single exposure)</u>
Specific target organ toxicit Not available	<u>y (repeated exposure)</u>
Aspiration hazard Not available	
Information on the likely routes of exposure	: Not available
Potential acute health effects	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the physical	sical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available
Potential delayed effects	: Not available
<u>Long term exposure</u>	
Potential immediate effects	: Not available
Potential delayed effects	: Not available
Potential chronic health effe	<u>ects</u>
Not available	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Numerical measures of toxici	i <u>ty</u>
Acute toxicity estimates	

Acute toxicity estimates

Not available

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2-(2-ethoxyethoxy)ethanol	Acute LC50 3340000 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 6010000 μg/l Fresh water	Fish - Ictalurus punctatus	96 hours

Persistence and degradability

Not available

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-(2-ethoxyethoxy)ethanol (2-methoxymethylethoxy) propanol	-0.54 0.004	-	low low

Mobility in soil

Soil/water partition	: Not available
coefficient (Koc)	

Other adverse effects	: No known significant effects or critical hazards.
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Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
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Section 14. Transport information			
Additional information	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 : Listed

(b) Hazardous Air **Pollutants (HAPs)**

SARA 311/312

Classification : Not applicable

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
2-(2-ethoxyethoxy)ethanol	1 - 5	No.	No.	No.	Yes.	No.
(2-methoxymethylethoxy)propanol	1 - 5	Yes.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	2-(2-ethoxyethoxy)ethanol	111-90-0	2.6394

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

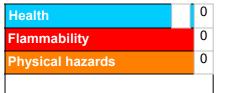
International regulations

Canada inventory

: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

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Section 16. Other information

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

HISTORY	
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Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available

Indicates information that has changed from previously issued version.

Notice to reader

History

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.