



Material Safety Data Sheet

LA1625
Ethylene Glycol 80/20

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA1625
Product Name: Ethylene Glycol 80/20
Synonyms: EG, Glycol, 1,2-Ethanediol
Chemical Family: Glycols
Application: Used as antifreeze, heat transfer fluid, solvent, and raw material in polyester fiber manufacturing.

Distributed By: Univar Canada Ltd. Univar USA.
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24-Hour Emergency Telephone Number (CHEMTREC): (800) 424-9300

Preparation date of MSDS: 05/06/2003

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components:

Ingredients	Percent	LD50s and LC50s Route & Species:
1,2-Ethanediol 107-21-1	80	Inhalation LC50 (Rat) 10876 mg/kg Oral LD50 (Rat) 4700 mg/kg Oral LD50 (Mouse) 5500 mg/kg Dermal LD50 (Rabbit) 9530 uL/kg

Non-Hazardous Components:

Ingredients	Percent	LD50s and LC50s Route & Species:
Water 7732-18-5	20	Not available.

Notes: No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact:	Liquid, vapor, or mist causes irritation, experienced as stinging, excess blinking and tear production, with excess redness of the conjunctiva.
Skin Contact:	Low toxicity. May cause mild skin irritation.
Inhalation:	Causes irritation of the mouth, nose and throat. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness, and irregular eye movements.
Ingestion:	May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain, oliguria, uremia, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure, pulmonary edema, and severe kidney damage may develop. May be fatal if swallowed.

4. FIRST AID MEASURES

Eye Contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.
Skin Contact:	Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.
Inhalation:	Move person to fresh air. If irritation persists, seek medical attention.
Ingestion:	If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical help immediately.
Notes To Physician:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point (C):	116.1	(F):	241
Flash Point Method:	Tag Closed Cup		
Autoignition Temperature (C):	400	(F):	752
Flammable Limits in Air - Lower (%):	3.2		
Flammable Limits in Air - Upper (%):	15.3		

Extinguishing Media:	Use DRY chemicals, CO2, alcohol foam or water spray.
Special Exposure Hazards:	Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity.
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Procedure for Clean Up: For small spills, collect with non-combustible absorbent. For large spills, remove by mechanical means and place in appropriate containers for disposal.

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Consult local authorities.

7. HANDLING AND STORAGE

Handling: Do not swallow. Avoid contact with eyes, skin and clothing. Use good personal hygiene. Use with adequate ventilation. Keep the containers closed when not in use.

Storage: Keep containers tightly closed. Keep in a cool, well-ventilated place. Avoid storage with incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: General (mechanical) room ventilation is expected to be satisfactory. Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit.

Respiratory Protection: NIOSH-approved atmosphere-supplying respirator or a NIOSH-approved air-purifying respirator with organic vapor cartridge and dust/mist pre-filter is recommended.

Gloves: Polyvinylchloride gloves.

Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Eyes: Monogoggles.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hazardous Components:

Ingredients	Percent	Exposure Limit - ACGIH	Exposure Limit - OSHA
1,2-Ethanediol 107-21-1	80	100mg/m ³ Ceiling(aerosol only)	125 mg/m ³ Ceiling 50 ppm Ceiling

Non-Hazardous Components:

Ingredients	Percent	Exposure Limit - ACGIH	Exposure Limit - OSHA
Water 7732-18-5	20	Not available.	Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Transparent.
Odor:	Mild. Sweet
pH	Not Available.
Specific Gravity:	1.115
Boiling Point (C):	>197 (F): >387
Freezing/Melting Point (C):	Not Available. (F): Not Available.
Vapor Pressure:	Not Available.
Vapor Density:	Not Available.
% Volatile by Volume:	Not Available.
Evaporation Rate:	Not Available.
Solubility:	Not Available.
VOCs (lbs/gallon):	Not Available.
Viscosity:	Not Available.
Molecular Weight:	Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid excessive heat, open flames and all ignition sources.
Materials to Avoid:	Strong acids and bases.
Hazardous Decomposition Products:	If the fluid is heated above the temperature of the onset of initial decomposition, 240°C, thermal degradation may result in the formation of potentially harmful volatile organic decomposition products. Respiratory protection may be required.
Additional Information:	Avoid contamination with strong oxidizing agents and materials reactive with hydroxyl compounds.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure	
Ingestion:	May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain, oliguria, uremia, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure, pulmonary edema, and severe kidney damage may develop. May be fatal if swallowed.
Skin Contact:	Low toxicity. May cause mild skin irritation.
Inhalation:	Causes irritation of the mouth, nose and throat. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness, and irregular eye movements.
Eye Contact:	Liquid, vapor, or mist causes irritation, experienced as stinging, excess blinking and tear production, with excess redness of the conjunctiva.
Other:	Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material.
Acute Test of Product:	
Acute Oral LD50:	Not Available.
Acute Dermal LD50:	Not Available.
Acute Inhalation LC50:	Not Available.

Carcinogenicity:

Hazardous Components:

Ingredients	Percent	IARC - Group	IARC - Group	IARC - Group	IARC - Group	IARC - Group
		1	2A	2B	3	4
1,2-Ethanediol 107-21-1	80	Not Listed.	Not Listed.	Not listed.	Not listed.	Not listed.

Non-Hazardous Components:

Ingredients	Percent	IARC - Group	IARC - Group	IARC - Group	IARC - Group	IARC - Group
		1	2A	2B	3	4
Water 7732-18-5	20	Not Listed.	Not Listed.	Not listed.	Not listed.	Not listed.

Hazardous Components:

Ingredients	Percent	ACGIH 2000 - Carcinogens
1,2-Ethanediol 107-21-1	80	A4 - Not Classifiable as a Human Carcinogen (aerosol)

Non-Hazardous Components:

Ingredients	Percent	ACGIH 2000 - Carcinogens
Water 7732-18-5	20	Not listed.

Carcinogenicity Comment: No additional information available.

Genotoxicity: Not Available.
Reproductive/Developmental Toxicity: Ingestion of large amounts of ethylene glycol has been shown to interfere with reproduction in animals. Specifically, growth retardation and decreased litter size in rats and mice and decreased mating frequency in mice were observed.

Teratogenicity: Based on animal studies, ingestion of very large amounts of ethylene glycol appears to be the major and possibly only route of exposure to produce birth defects.

Embryotoxicity: Not Available.
Mutagenicity: Not Available.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Hazardous Components:

Ingredients	Percent	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
1,2-Ethanediol 107-21-1	80	96 Hr LC50 (bluegill) 27500 mg/L 96 Hr LC50 (goldfish) 27500 mg/L 96 Hr LC50 (rainbow trout) 41000 mg/L	Not Available.	Not Available.

Non-Hazardous Components:

Ingredients	Percent	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Water 7732-18-5	20	Not Available.	Not Available.	Not Available.

Other Information: No additional remark.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method:

Recycle (reprocess). Incineration recommended in approved incinerator according to federal, state, and local regulations. Waste materials must be disposed of in accordance with your municipal, state, provincial and federal regulations.

Contaminated Packaging:

Waste materials must be disposed of in accordance with your municipal, state, provincial and federal regulations.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name:	Not regulated.
DOT Hazardous Class	Not applicable.
DOT UN Number:	Not Regulated.
DOT Packing Group:	Not applicable.
DOT Reportable Quantity (lbs):	Not applicable.
Marine Pollutant:	No.

ICAO/IATA:

IATA Proper Shipping Name:	Not regulated.
IATA Hazard Class:	Not Applicable.
UN/NA Number:	Not applicable.
Packing Group:	Not Applicable.
IATA Label:	Not regulated.
Remarks:	No additional remark.

IMDG:

IMDG Proper Shipping Name:	Not regulated.
Hazard Class:	Not applicable.
Packing Group:	Not applicable.

Marine Pollutant: No.
IMDG Label: Not regulated.
Remarks: No additional remark.

TDG (Canada):
TDG Proper Shipping Name: Not Regulated.
Hazard Class: Not applicable.
UN Number: Not applicable.
Packing Group: Not applicable.
Note: No additional remark.
Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.

U.S. Regulatory Rules

Hazardous Components:

Ingredients	Percent	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
1,2-Ethanediol 107-21-1	80	Not Listed.	Listed Listed	Listed

Non-Hazardous Components:

Ingredients	Percent	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Water 7732-18-5	20	Not Listed.	Not Listed.	Not Listed.

California Proposition 65: Not Listed.

MA Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class
 D2A VERY TOXIC MATERIALS
 D2B TOXIC MATERIALS



16. OTHER INFORMATION

Additional Information:

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

Disclaimer:

NOTICE TO READER:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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*****END OF MSDS*****