Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Ethoxy Diglycol Reagent
Commercial Name 2-(2-ethoxyethoxy) ethanol
Product Use Solvent
Restrictions On Use Not available.

Product Code 30-3573

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 GHS classification in accordance with 29 CFR 1910.1200 Flammable liquids - Category 4 Specific target organ toxicity - single exposure Category 3 (Central nervous system)

Signal Word WARNING

Hazard Statement(s) Combustible liquid. May cause drowsiness or dizziness.May cause respiratory irritation. Causes eye irritation. Causes skin irritation.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.

Response IF INHALED: Remove person to fresh air and keep comfortable for breathing. call a POISON CENTER/doctor if you feel unwell. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Diethylene glycol monoethyl ether
% By Weight 100
CAS# 111-90-0
Molecular Weight 134.17 g/mole
Chemical Formula C6H14O3
Synonym(s) Carbitol; Diethylene Glycol Monoethyl Ether; Glycol Ether De/Glycol Ether De Low Gravity

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Diethylene glycol monoethyl ether	111-90-0	100		

Section 4: First-Aid Measures

Inhalation Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

Skin Contact If on skin, rinse well with water. If on clothes, remove clothes.

Eye Contact Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Ir eye irritation persists, consult a specialist.

Ingestion Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a phsyician Do not induce vomiting without medical advice.

Symptoms/Effects

Acute Not available.

Delayed Not available.

Immediate Medical Attention

Not available.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Carbon dioxide (CO2), alcohol-resistant foam, Dry chemical

Unsuitable Extinguishing Media

High volume water jet.

Products of Combustion

Carbon oxides

Firefighters Special Equipment and Precautions

Do not allow run-off from fire fighting to enter drains or water courses. Use a water spray to cool fully closed containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Section 6: Accidental Release Measures

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contanminates rivers and lakes or drains inform respective authorities. Contain spillage, and then collect with non-combustible abosorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition. Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking sould be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. No smoking. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards. Storage period: 6-24 months Suitable packaging material: Carbon steel, stainless steel Unsuitable packaging material: aluminum, copper, iron

Section 8: Exposure Controls/Personal Protection

Exposure Limits TWA: 25 from AIHA TWA: 140 (mg/m3) from AIHA

Engineering Controls Not available

Personal Protection	Respiratory protection: No personal respiratory equipment normally required. In the case of vapour formation use a respirator with an approved filter. Hand Protection: Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles Skin and Body protection: Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Hygiene measures: Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Appearance	Colorless, clear liquid.
Odor	Mild. Pleasant.
Odor Threshold	1.1 ppm

Melting Point	-54 °C (-65 °F)	**pH**	Not available.
Freezing Point	-90 °C (-130 °F)	**Vapor Pressure**	0.95-0.127 mmHg @ 20-25 °C
Boiling Point/Range	196-198 °C (385-388 °F)	**Vapor Density**	Not available.
Decomposition temperature	Not available.	**Viscosity**	4.5 mPa.s (20 °C)
Partition Coefficient: n-octanol/water	-0.54 @20 °C (68 °F)	**Evaporation Rate**	0.01 Measured
Flash Point	Closed Cup 90.85-91 °C (19	**Autoignition temperature**	203-204 °C 760 mmHg
Flammability	Not available.	**Flammability or Explosive Limits:**	
		Lower	1.2 %(V) Literature
		Upper	23.5 %(V) Literature

Solubility(ies)	Completely miscible in water
Other	Henry?s Law Constant (H) 2.22E-08 atm*m3/mole; 25 °C Estimated.

Section 10: Stability and Reactivity

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stableunder normal conditions.
Hazardous Polymerization	Can form potentially explosive peroxides upon long standing in air.
Conditions to Avoid	Keep away from heat, flame, sparks and other ignition sources. Exposure to air.
Incompatible Materials	acid chlorides, acid anhydrides, bases, strong acids.
Hazardous Decomposition Products	Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

Section 11: Toxicological Information

RTECS KK8750000

Acute Toxicity
Not available.

Skin Corrosion/Irritation
Not available.

Serious Eye Damage/Irritation
Not available.

Respiratory or Skin Sensitization
Not available.

Germ Cell Mutagenicity
Not available.

Carcinogenicity
Not listed

Reproductive Toxicity
Not available.

Routes of Entry
Absorbed through skin. Eye contact.

Symptoms Related to Exposure
headache, dizines, tiredness, anusea and vomiting

Potential Health Effects
Not available.

Target Organ(s) Not available.

Section 12: Ecological Information

Ecotoxicity
No date available.

Persistance and Degradability
Not available

Bioaccumulative Potential
No data available

Mobility in Soil
Not expected to adsorb on soil.

Other Adverse Effects
Not available.

Section 13: Disposal Considerations

Waste Disposal
Dispose of in accordance with all applicable local, state and federal regulations.

Disposal of Container
Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on the empty drum.

Other Considerations
Not available.

Section 14: Transport Information

DOT Classification
Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities
Possible shipping description(s): Combustible liquid, n.o.s. (diethylene glycol monoethyl ether) combustible liquid NA 1993 III

Section 15: Regulatory Information

Regulations
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS (Canada) Status: controlled WHMIS (Canada) Hazard Classification: B/3, D/2/B SARA 311-312 Hazard Classification(s) : immediate (acute) health hazard fire hazard SARA 313: none, unless listed below DIETHYLENE GLYCOL MONOETHYL ETHER (GLYCOL ETHERS CATEGORY) Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing. DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing. EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements. EINECS Number: 203-919-7 AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS. MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification. ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.KE-10467 Philippines Inventory (PICCS) : All components of this product are listed on the Philippine inventory or otherwise comply with PICCS. Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

Other
Not available.

Section 16: Other Information

The Dow Chemical Companyurges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer?s/user?s responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer?s/user?s duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.