

Section 1: Identification

Common Name/Trade Name	ETHOXY DIGLYCOL	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Product Synonym(s)	Glycol Ether De	
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

Section 2: Hazards Identification

Classification of Substance or Mixture	Flammable liquids (CAT:4), Combustible Liquid North America, Skin Corrosion/Irritation (CAT: 2), Serious Eye Damage/Eye Irritation (CAT: 2), Target Organ Toxicity, Single Exposure (CAT:3), Target Organ Toxicity, Single Exposure (CAT:3)	
Signal Word	Warning	
Hazard Statement(s)	H227 H315 H320 H335 H336	Combustible liquid Causes skin irritation Causes eye irritation May cause respiratory irritation May cause drowsiness or dizziness
Pictogram(s)		
Precautionary Statement(s)	P264 P271 P304+P340 P305+P351+P338 P312 P337+P313	Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. If eye irritation persists Get medical advice/attention.
Hazards Not Otherwise Classified	No data available	
Ingredient(s) with Unknown Toxicity	No data available	

Section 3: Composition/Information on Ingredients

Chemical Name	2(2-Ethoxyethoxy)ethanol
Common Name	Ethoxy Diglycol
CAS Number	111-90-0
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.
If Inhaled	After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention.
In Case of Skin Contact	If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.
In Case of Eye Contact	If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.
If Swallowed	If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.
Most Important Symptoms and Effects	See Section 11 for symptoms/effects, acute & chronic. NOTES TO PHYSICIAN: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Use dry powder, carbon dioxide.
Special Hazards Arising From the Substance/Mixture	Isolate from oxidizers, heat, & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Continue all label precautions!
Special PPE and/or Precautions for Firefighters	FIRE & EXPLOSION PREVENTIVE MEASURES: NO open flames. Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots).

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Keep unprotected personnel away. Wear appropriate personal protective equipment given in Section 8.
Methods and Materials Used for Containment	Keep from entering storm sewers and ditches which lead to waterways.
Cleanup Procedures	Stop spill at source. Dike and contain. Collect leaking & spilled liquid in sealable containers as far as possible.

Section 7: Handling and Storage

Precautions for Safe Handling	Isolate from oxidizers, heat, & open flame. Use only with adequate ventilation. Avoid or repeated breathing of vapor or spray mist. Do not get in eyes, on skin or clothing. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, braze, or weld. Continue all label precautions!
Conditions for Safe Storage	Isolate from strong oxidants. Keep container tightly closed & upright when not in use to prevent leakage.

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	Material: 2(2-Ethoxyethoxy)ethanol CAS-No. 111-90-0 EINECS# 203-919-7, TWA (OSHA): None Known. TLV (ACGIH) 25 ppm. Material: 2(2-Ethoxyethoxy) ethanol: CAS# 111-90-0 c EINECS#: 203-919-7, Ceiling: None Known, STEL (OSHA/ACGIH): None Known. HAP: Yes. Each component showing 'Yes' under "HAP" is an EPA Hazardous Air Pollutant.
Appropriate Engineering Controls	WORK & HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing. EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus. VENTILATION LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Necessary SPECIAL: None OTHER: None Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
PPE - 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 or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.
PPE - Skin Protection	Use gloves chemically resistant to this material. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitril") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl", Viton. 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
PPE - Body Protection	Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.
PPE - Respiratory Protection	Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerine, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

Section 9: Physical and Chemical Properties

Appearance	Liquid, Water-White
Upper/Lower Flammability or Explosive Limits	FLAMMABILITY CLASSIFICATION: Class III-A LOWER FLAMMABLE LIMIT IN AIR (% by vol): 0.95
Odor	None
Vapor Pressure	VAPOR PRESSURE (mm of Hg)@20 C 0.120
Odor Threshold	Not Available
Vapor Density	VAPOR DENSITY (air=1): Not Applicable
pH	No data available
Relative Density	DENSITY: 0.989
Melting Point/Freezing Point	Not Available
Solubility	WATER SOLUBILITY: Complete
Initial Boiling Point and Boiling Range	BOILING RANGE (IBP,50%,Dry Point): 198 C / 388 F
Flash Point	FLASH POINT (TEST METHOD): 91 C / 196 F (PMCC)
Evaporation Rate	EVAPORATION RATE (n-Butyl Acetate=1): 0.067
Flammability (Solid, Gas)	Class III-A
Partition Coefficient	PARTITION COEFFICIENT (n-Octane/Water): Not Available
Auto-Ignition Temperature	AUTO IGNITION TEMPERATURE: 398 C / 750 F
Decomposition Temperature	Not Available
Viscosity	Not Available

Section 10: Stability and Reactivity

Reactivity	Stable under normal conditions, no hazardous reactions when kept from incompatibles.
Chemical Stability	Stable under normal conditions, no hazardous reactions when kept from incompatibles.
Possibility of Hazardous Reactions	Isolate from oxidizers, heat, & open flame.
Conditions to Avoid	Isolate from oxidizers, heat, & open flame.
Incompatible Materials	Reacts with strong oxidants, causing fire & explosion hazard.
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide from burning. HAZARDOUS POLYMERIZATION: Will not occur.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea. LOWEST KNOWN LETHAL DOSE DATA LOWEST KNOWN LD50 (ORAL) 4300.0 mg/kg(Guinea Pigs)
Acute Toxicity - Inhalation	Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.
Acute Toxicity - Dermal	Primary irritation to skin, defatting, dermatitis. Absorption thru skin increases exposure. LOWEST KNOWN LD50 (SKIN) 16500.0 mg/kg (Rabbits)
Acute Toxicity - Eye	Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.
Skin Corrosion/Irritation	Irritating to contaminated tissue.
Serious Eye Damage/Irritation	Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.
Respiratory or Skin Sensitization	No component is known as a sensitizer.
Germ Cell Mutagenicity	No known reports of mutagenic effects in humans.
Carcinogenicity IARC	This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful.
Carcinogenicity ACGIH	This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful.
Carcinogenicity NTP	This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful.
Carcinogenicity OSHA	This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful.
Reproductive Toxicity	No known reports of reproductive effects in humans.
Specific Target Organ Toxicity - Single Exposure	MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with these disorders should avoid use of this product. TARGET ORGANS: May cause damage to target organs, based on animal data.
Specific Target Organ Toxicity - Repeated Exposure	TARGET ORGANS: May cause damage to target organs, based on animal data.
Aspiration Hazard	No data available

Section 12: Ecological Information

Toxicity	This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.
Persistence and Degradability	This product is completely biodegradable.
Bio-accumulative Potential	This product does not accumulate or biomagnify in the environment.
Mobility in Soil	This material is a mobile liquid.
Other Adverse Effects	No data available

Section 13: Disposal Considerations

Waste Treatment Methods Product	The generation of waste should be avoided or minimized wherever possible. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.
Waste Treatment Methods Packaging	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	Not dangerous goods.
UN Proper Shipping Name	N/A
Transport Hazard Class(es)	N/A
Packaging Group	N/A
Environmental Hazards	N/A

Section 15: Regulatory Information

EPA REGULATION: SARA SECTION 311/312 HAZARDS: Acute Health, Fire All components of this product are on the TSCA list. SARA Title III Section 313 Supplier Notification This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material. SARA TITLE III INGREDIENTS CAS# EINECS# WT% (REG.SECT ION) RQ(LBS) *2(2-Ethoxyethoxy)ethanol 111-90-0 203-919-7 95-100 (313) None. STATE REGULATIONS: THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity. INTERNATIONAL REGULATIONS The identified components of this product are listed on the chemical inventories of the following countries: Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (MET/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA). CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) B3: Combustible liquid. D2B: Irritating to skin / eyes. This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

Section 16: Other Information

Additional Information	HAZARD RATINGS: HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 2, PHYSICAL HAZARD: 0 (Personal Protection Rating to be supplied by user based on use conditions.) This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems. EMPLOYEE TRAINING See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.
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Revision Date	06/28/2016 16:42

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