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Glycol Ether EP

Safety Data Sheet according to Federal Register /Vol.77, No.58/Monday, March 26, 2012/Rules and Regulations Date of issue: 11/24/2015 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	Substance
Substance name	Glycol Ether EP
CAS No	2807-30-9
Formula	C5H1202
BIG no	2-(propyloxy)ethanol / 2-hydroxyethylpropyl ether / 2-propoxy-ethanol / EGPE / EKTASOLVE EP / ethanol, 2-propoxy- / ethylene glycol mono-n-propyl ether / ethylene glycol monopropyl ether / ethylene glycol propyl ether / ethyleneglycolmono-normal-propyl ether / Flammable liquid, toxic, n.o.s. / monopropyl ether of ethylene glycol / normal-propyl oxitol glycol / n-propyl oxitol glycol / propyl cellosolve
	nce or mixture and uses advised against
Use of the substance/mixture:	Solvent
1.3. Details of the supplier of the safety dat McKinnon Materials, Inc 5612 56 th Commerce Park Blvd Tampa, FL 33610 813-622-7031	ta sheet
1.4. Emergency telephone number	
Emergency number	CHEMTREC (800)-424-9300
SECTION 2: Hazard{s) identification 2.1. Classification of the substance or mix	ture
GHS-US classification	
Flam. Liq. 3H226 - Flammable liquidAcute Tax. 4 (Dermal)H312 - Harmful in contaEye Irrit. 2AH319 - Causes serious eFull text of H-phrases: see section 16	ct with skin
2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	GHS02 GHS07
Signal word (GHS-US)	Warning
Hazard statements (GHS-US)	H226 - Flammable liquid and vapor H312 - Harmful in contact with skin H319 - Causes serious eye irritation
Precautionary statements (GHS-US)	P210 - Keep away from heat, sparks, open flames, hot surfaces No smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical, ventilating, lighting equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P264 - Wash Skin thoroughly after handling P280 - Wear protective gloves, protective clothing, eye protection, face protection P302+P352 - IF ON SKIN: Wash with plenty of soap and water P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell EN (English US) Page 1

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P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide (C02) to extinguish P403+P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

Other hazards 2.3.

None known

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTI	ON 3: Composition/Information on ingredients
3.1.	Substance

Name	Product identifier	%	GHS-US classification
Ethylene glycol monopropyl ether (Main constituent)	(CAS No) 2807-30-9	100	Flam. Liq. 3, H226 Acute Tax. 4 (Dermal), H312 Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

3.2. **Mixture**

Not applicable

4.1. Description of first aid measures	
First-aid measures general Check the vital functions. Unconscious: maintain adequate airway and respiration. Respira arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim consciou with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.	เร าo
First-aid measures after inhalation Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.	
First-aid measures after skin contact Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.	ŀ
First-aid measures after eye contact Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.	
First-aid measures after ingestion Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Victim is fu conscious: immediately induce vomiting. Induce vomiting by giving a 0.9 % saline solution. Poison Center. Consult a doctor/medical service if you feel unwell. Ingestion of large quant immediately to hospital.	Call
4.2. Most important symptoms and effects, both acute and delayea	
Symptoms/injuries after inhalation EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract.	
Symptoms/injuries after skin contact ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin. Red skin. Symptoms similar to those listed under ingestion.	oms
Symptoms/injuries after eye contact Irritation of the eye tissue. Lacrimation. Inflammation/damage of the eye tissue.	
Symptoms/injuries after ingestion Feeling of weakness. Nausea. Vomiting. Diarrhoea. AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Dizziness. Headache. Drunkenness. Coordination disorders. Disturbed motor response. Disturbances of consciousness. Accelerated heart action. Rapid respiration. Low arterial pressure. Change in the haemogramme/blood composition. EnlargemenUaffection of the liver. Bleeding of the gastrointestinal tract. Affection of the renal tissue. Change in urine output. Cramps/uncontrimuscular contractions.	olled
Chronic symptoms ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Loss of appetite. Tremor. Visual disturbances. Mental confusion. Change in the haemogramme/blood composition.	
4.3. Indication of any immediate medical attention and special treatment needed	
Treat symptomatically.	

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	Water spray. Dry chemical. Carbo

Unsuitable extinguishing media

oon Dioxide. Alcohol Foam. None known.

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5.2.	Special hazards arising from the substance or mixture		
Fire haz		Flammable liquid and vapor.	
Explosi	on hazard	DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".	
Reactiv	ity	Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Forms peroxides of unknown stability.	
5.3.	Advice for firefighters		
Precaut	ionary measures fire	Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighborhood close doors and windows.	
Firefigh	ting instructions	Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.	
Protecti	on during firefighting	Self-contained breathing apparatus and full protective clothing must be worn in case of fire	
SECT	ION 6: Accidental release mea	asures	
6.1.	Personal precautions, protective e	equipment and emergency procedures	
6.1.1.	For non-emergency personnel		
	ve equipment	Wear appropriate personal protective equipment.	
Emerge	ncy procedures	Mark the danger area. Stop engines and no smoking. No naked flames or sparks. Spark- and explosion-proof appliances and lighting equipment. In case of reactivity hazard: consider evacuation. Wash contaminated clothes.	
6.1.2.	For emergency responders		
Protecti	ve equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection" ".	
6.2. Prevent	Environmental precautions spreading in sewers. Avoid release to	the environment.	
6.3.	Methods and material for containn	nent and cleaning up	
For con	tainment	Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.	
Method	s for cleaning up	Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite kieselguhr, powdered limestone. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Take collected spill to manufacturer/competent authority. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.	
Other in	nformation	Dispose of materials or solid residues at an authorized site.	
6.4. For furt	Reference to other sections her information refer to section 8 : Expo	osure-controls/personal protection"".	
SECT	ION 7: Handling and storage		
7.1.	Precautions for safe handling		
Precau	tions for safe handling	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.	
Hygien	e measures	Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2.	Conditions for safe storage, inclue	ding any incompatibilities	
Technic	al measures	Ground/bond container and receiving equipment.	
Storage	conditions	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat and light.	
Heat-ig		KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.	
Prohibi	tions on mixed storage	KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.	

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Storage area	Store at ambient temperature. Provide for a tub to collect spills. Provide the tank with earthing. Meet the legal requirements.
Special rules on packaging	SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packaging in solid containers.
Packaging materials	SUITABLE MATERIAL: stoneware/porcelain . glass. MATERIAL TO AVOID: aluminum.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1.

No additional information available

8.2. **Exposure controls**

Appropriate engineering controls	Use adequate ventilation to keep airborne concentrations low. An emergency eye wash/ shower must be readily accessible to the work area.
Hand protection	Gloves.
Eye protection	Chemical splash goggles.
Skin and body protection	Wear appropriate protective gloves, boots and clothing to prevent skin exposure
Respiratory protection	Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.
Environmental exposure controls	Avoid release to the environment.

SECTION 9: Physical and chemical pr	operties
9.1. Information on basic physical and ch	
Physical state	Liquid
Appearance	Liquid.
Color	Clear, colorless
Odor	Mild odour Ether-like odour
Odor threshold	No data available
рН	No data available
Freezing/ Melting point	-90 °C / -194 °F
Boiling point	147 °C / 296.6 °F
Flash point	51 °C / 123.8° F
Relative evaporation rate (butyl acetate=1)	0.2
Relative evaporation rate (ether=1)	68
Flammability (solid, gas)	No data available
Explosion limits	1.3 - 16 vol %
Explosive properties	No data available
Oxidizing properties	No data available
Vapor pressure	2 hPa (20 °C)
Relative density	0.91
Relative vapor density at 20 °C	3.60
Specific gravity / density	911 kg/m³
Molecular mass	104.15 g/mol
Solubility	Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in chloroform. Water: Complete
Log Pow	0.08
Auto-ignition temperature	230 °C
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	2.97 mPa.s (20 °C)
Viscosity, dynamic	2.71 mPa.s (20 °C)
9.2. Other information	
VOE content	100 %
Other properties	Gas/vapour heavier than air at 20°C. Clear. Slightly volatile.

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SECTION 10: Stability and reactivity

10.1. Reactivity

None known

Chemical stability 10.2.

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Forms peroxide of unknown stability

10.4. **Conditions to avoid**

Heat, flames, and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity

Dermal: Harmful in contact with skin.

Glycol Ether EP (2807-30-9)	
LD50 oral rat	3089 mg/kg (Rat)
LD50 dermal rabbit	873 mg/kg (Rabbit)
ATE US (oral)	3089.000 mg/kg body weight
ATE US (dermal)	873.000 mg/kg body weight
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified
Symptoms/injuries after inhalation	EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract.
Symptoms/injuries after skin contact	ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin. Red skin. Symptoms similar to those listed under ingestion.
Symptoms/injuries after eye contact	Irritation of the eye tissue. Lacrimation. Inflammation/damage of the eye tissue.
Symptoms/injuries after ingestion	Feeling of weakness . Nausea. Vomiting. Diarrhea. AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression . Dizziness. Headache. Drunkenness. Coordination disorders . Disturbed motor response. Disturbances of consciousness. Accelerated heart action. Rapid respiration. Low arterial pressure. Change in the haemogramme/blood composition. Enlargement/affection of the liver. Bleeding of the gastrointestinal tract. Affection of the renal tissue. Change in urine output. Cramps/uncontrolled muscular contractions.
Chronic symptoms	ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Loss of appetite. Tremor. Visual disturbances. Mental confusion. Change in the haemogramme/blood composition.
SECTION 12: Ecological information 12.1. Toxicity	

Ecology - general

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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12.2. Persistence and degradability

Glycol Ether EP (2807-30-9)

Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil:	
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12.3. Bioaccumulative potential		
Glycol Ether EP (2807-30-9)		
BCF other aquatic organisms 1	0.6 - 0.7 (BCF)	
Log Pow	0.08	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Incinerate under surveillance with energy recovery. Do not discharge into surface water. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

SECTION 14: Transport information

Department of Transportation (DOT)

Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

Possible Shipping Description(s):

- 1. not regulated
- 2. NA 1993 Combustible liquid, n.o.s. (ethylene glycol monopropyl ether) III

SECTION 15: Regulatory information

	15.1. US Federal regulations				
	Glycol Ether EP (2807-30-9)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory					
	SARA 311/312- Hazard Classification(s) immediate (acute) health hazard; fire hazard				

SARA 313- Toxic Chemical List - Ethylene Glycol Monopropyl Ether (Glycol Ether Category)

15.2. International regulations

CANADA No additional information available

EU-Regulations No additional information available

National regulations

No additional information available

15.3. US State regulations

Glycol Ether EP (2807-30-9)

State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other information

Date prepared: 11/24/2015

Full text of H-phrases:

	Acute Tox. 4 (Dermal)		Acute toxicity (dermal) Category 4		
	Eye Irrit. 2A Flam. Liq. 3 H226 H312 H319		Serious eye damage/eye irritation Category 2A		
			Flammable liquids Category 3		
			Flammable liquid and vapor		
			Harmful in contact with skin		
			Causes serious eye irritation		
NFPA health hazard 1					
NFPA fire hazard		2			
NFPA	reactivity	1			

SDS US (GHS HazCom 2012)

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