

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 05/29/2018 Revision date: 05/29/2018 Supersedes: 11/25/2015

Version: 1.2

<b>SECTION 1: Identificat</b>	tion	
1.1. Identification		
Product form	:	Substance
Substance name	:	Glycol Ether DPM
CAS-No		34590-94-8
Formula		C7H16O3
Supervise		Disropulana Chuad Manamathul Ethar, DBM, Disropulana Chuad Mathul Ethar, DBCME
Synonyms	•	
BIG NO	:	13519
1.2. Recommended us	e and restrictions or	1 use
Use of the substance/mixture	:	Solvent
1.3. Supplier		
<u>ECOLINK</u>		
2177 Flintstone Drive		
Suite A		
Tucker, GA 30084		
770-621-8240 (t)		
1.4. Emergency teleph	one number	
Emergency number	:	INFOTRAC 800-535-5053
SECTION 2: Hazard(c)	identification	
SECTION 2. Hazard(S)	Identification	
2.1. Classification of th	ne substance or mix	ture
GHS-US classification		
Flammable liquids	H227	Combustible liquid
Category 4 Specific target organ	L1225	May cause regizatory irritation
toxicity (single exposure)	11555	way cause respiratory initiation
Category 3		
Full text of H statements : see	e section 16	
2.2. GHS Label elemen	ts, including precau	tionary statements
GHS-US labeling		
Hazard pictograms (GHS-US)	) :	
Signal word (CHS-US)		Warning
Hazard statements (CHE LIE)		H227 - Combustible liquid
Hazard statements (GHS-03)		H325 - May cause respiratory irritation
Precautionary statements (GF	HS-US) :	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
(2)		smoking
		P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
		P271 - Use only outdoors or in a well-ventilated area
		P200 - wear protective gloves, eye protection, face protection P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
		P312 - Call a poison center/doctor if you feel unwell
		P370+P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to
		extinguish
		P403+P233 - Store in a well-ventilated place. Keep container tightly closed
		P403+P200 - Store in a weil-ventilated place. Neep COOl P405 - Store locked up
		P501 - Dispose of contents/container to an approved waste disposal plant.

Other hazards which do not result in classification 2.3.

## No additional information available

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2.4. Unknown acute toxicity (GHS US)					
Not applicable					
<b>SECTION 3: Composition/Informatic</b>	on	on ingredients			
3.1. Substances					
Name			Product identifier	%	GHS-US classification
Dipropylene Glycol Monomethyl Ether (Main constituent)			(CAS-No.) 34590-94-8	>99.0	Flam. Liq. 4, H227 STOT SE 3, H335
Full text of hazard classes and H-statements : s	ee	section 16			
3.2. Mixtures					
Not applicable					
SECTION 4: First-aid measures					
4.1. Description of first aid measures					
First-aid measures general	:	Consult a physician/ doctor and safety before attempting sheet to the doctor in attempt	if necessary. Take prop g rescue and providing f lance.	er precautio first aid. Sho	ons to ensure your own health ow this material safety data
First-aid measures after inhalation	:	Remove the victim into fresh	h air. Respiratory proble	ms: consult	a doctor/medical service.
First-aid measures after skin contact	:	Rinse with water. Soap may	/ be used. Take victim to	a doctor if	irritation persists.
First-aid measures after eye contact	:	Flush with plenty of water for eyelids. If eye irritation pers	or at least 15 minutes, or ists, consult a specialist	ccasionally l	ifting the upper and lower
First-aid measures after ingestion	:	This material may be a sligh swallowed, give lukewarm v vomiting. Risk of damage to	nt health hazard if ingest vater (pint / ½ liter) if vic o lungs exceeds poisonir	ted in large tim consciou ng risk. Obta	quantities. If large quantity us and alert. Do NOT induce ain emergency medical attention.
Chronic symptoms	:	No effects known.			
4.2. Notes to physician					
Symptoms	:	High doses may cause CNS with collapse, coma and dea	S depression (fatigue, di ath in cases of severe o	zziness and ver-exposur	possibly loss of concentration, re).
Hazards	:	May be harmful if swallowed	d and enters airways. M	ay cause re	spiratory irritation.
Treatment	:	Treat symptomatically. Treas symptoms and the clinical c	tment of overexposure s condition of the patient.	should be di	irected at the control of

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishi	ng media
Suitable extinguishing media	: Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
Unsuitable extinguishing media	: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.
5.2. Specific hazards arising from the che	emical
Fire hazard	: DIRECT FIRE HAZARD: Material presenting a fire hazard. INDIRECT FIRE HAZARD: Temperature above flashpoint: higher fire/explosion hazard. Reactions involving a fire hazard: see "Reactivity Hazard".
Explosion hazard	: INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".
Reactivity	: Prolonged storage: may form peroxides on exposure to air. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion.
5.3. Special protective equipment and pre-	ecautions for fire-fighters
Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighborhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

### **SECTION 6: Accidental release measures**

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Emergen	cy procedures	: Evacuate personnel to safe areas. Keep people away from and upwind of spill/ leak. Ensure adequate ventilation. Use personal protective equipment. Eliminate all sources of ignition. Clean-up to be performed only by trained and properly equipped personnel.	
6.1.1.	For non-emergency personnel		
6.1.	Personal precautions, protective equipment and emergency procedures		

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6.1.2.	For emergency responders	
Protectiv	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.	Environmental precautions	
Avoid re	lease to the environment.	
6.3.	Methods and material for containme	ent and cleaning up
For cont	ainment	: Contain released product, pump into suitable containers. Plug the leak, cut off the supply.
Methods	s for cleaning up	: Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or lime. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
Other in	formation	: Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
For furth	ner information refer to section 13.	
SECTI	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Precauti	ons for safe handling	: Keep away from naked flames/heat. At temperature > flashpoint: use spark-/explosionproof appliances. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Before use: check for peroxides and eliminate them. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use.
Hygiene	measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2.	Conditions for safe storage, includi	ng any incompatibilities
Storage	conditions	Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents. Storage under nitrogen atmosphere is recommended to minimize potential for moisture condensation in the vapor space, and the formation of peroxides.

#### SECTION 8: Exposure controls/personal protection

8.1.	Control parameters		
Glycol	Ether DPM (34590-94-	8)	
ACGIH		ACGIH TWA (ppm)	100 ppm
ACGIH		ACGIH STEL (ppm)	150 ppm
OSHA		OSHA PEL (TWA) (mg/m³)	600 mg/m³
OSHA		OSHA PEL (TWA) (ppm)	100 ppm

8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: butyl rubber. polyethylene/ethylenevinylalcohol. GIVE GOOD RESISTANCE: butyl rubber. neoprene. PVC. tetrafluoroethylene. natural rubber. GIVE LESS RESISTANCE: nitrile rubber

#### Hand protection:

Wear chemical resistant gloves.

#### Eye protection:

Use splash goggles when eye contact due to splashing or spraying liquid is possible.

#### Skin and body protection:

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Use personal protection equipment that is chemical resistant to the product and prevents skin contact.

#### **Respiratory protection:**

Full face mask with filter type A at conc. in air > exposure limit

### SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent products specifications. Contact the supplier for additional information.

Physical state	: Liquid
Appearance	: Liquid.
Color	: Clear, colorless
Odor	: Ether-like odor
Odor threshold	: 35 ppm 210 mg/m <sup>3</sup>
рН	: 7 (100 %, 25 °C)
Melting point	: -83 °C (1013 hPa)
Freezing point	: No data available
Boiling point	: 189.6 °C (1013 hPa)
Flash point	: 75 °C (Closed cup, 1013 hPa)
Relative evaporation rate (butyl acetate=1)	: < 0.02
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 10 mm Hg (75.1 °C)
Relative vapor density at 20 °C	: 5.1
Relative density	: 0.95 (20 °C)
Relative density of saturated gas/air mixture	: 1
Specific gravity / density	: 951 kg/m³
Molecular mass	: 148.23 g/mol
Solubility	: Soluble in water. Water: 100 % (25 °C)
Log Pow	: 0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Auto-ignition temperature	: 207 °C (1013 hPa)
Decomposition temperature	: No data available
Viscosity, kinematic	: 4.55 mm <sup>2</sup> /s (20 °C, OECD 114: Viscosity of Liquids)
Viscosity, dynamic	: 4 mPa.s
Explosion limits	: 1.1 - 14 vol % LEL: 1.1 vol % (EU Method A.11: Flammability (gases)) UEL: 14 vol % (EU Method A.11: Flammability (gases))
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	
Saturation concentration :	3.6 g/m³
VOC content :	100 %
Other properties :	Gas/vapour heavier than air at 20°C. Clear. Slightly volatile.
SECTION 10: Stability and reactivity	
10.1. Reactivity	
Will not occur.	

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#### 10.4. Conditions to avoid

#### Extended contact with air or oxygen.

The potential for peroxide formation is enhanced when this solvent is used in proceses such as distilation.

Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Ignition may occur at temperatures below those published in the literature as autoignition temperatures.

#### 10.5. Incompatible materials

Air or oxygen. Moisture and humidity. Strong oxidizing agents. May react with oxygen to form peroxides

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Glycol Ether DPM (34590-94-8)		
LD50 oral rat	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value)	
LD50 dermal rabbit	9510 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value)	
LC50 inhalation rat (mg/l)	> 1.667 mg/l air (Equivalent or similar to OECD 403, 7 h, Rat, Male/female, Experimental value)	
ATE US (dermal)	9510 mg/kg body weight	
Skin corrosion/irritation	: Not classified	
	pH: 7 (100 %, 25 °C)	
Serious eye damage/irritation	: Not classified	
	pH: 7 (100 %, 25 °C)	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity – single exposure	: May cause respiratory irritation.	
Specific target organ toxicity – repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: 4.55 mm <sup>2</sup> /s (20 °C, OECD 114: Viscosity of Liquids)	
Potential Adverse human health effects and symptoms	<ul> <li>Non-toxic if swallowed (LD50 oral, rat &gt; 5000 mg/kg). Non-toxic in contact with skin (LD50 skin&gt; 5000 mg/kg). Not irritant to skin. Slightly harmful by inhalation. Not irritant to eyes. Caution! Substance is absorbed through the skin.</li> </ul>	
Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Dizziness. Drunkenness. Coordination disorders. Disturbances of consciousness. Headache. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.	
Symptoms/effects after skin contact	: ON CONTINUOUS EXPOSURE/CONTACT: Not irritating.	
Symptoms/effects after eye contact	: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the eye tissue. Redness of the eye tissue.	
Symptoms/effects after ingestion	: AFTER INGESTION OF HIGH QUANTITIES: Nausea. Symptoms similar to those listed under inhalation.	
Chronic symptoms	: No effects known.	
SECTION 12: Ecological information		

# 12.1.ToxicityEcology - water

: Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. Slightly harmful to algae. Not harmful to bacteria.

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LC50 fish 1	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value)
12.2. Persistence and degradability	
Glycol Ether DPM (34590-94-8)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance
ThOD	2.06 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0
12.3. Bioaccumulative potential	
Glycol Ether DPM (34590-94-8)	
Log Pow	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
Glycol Ether DPM (34590-94-8)	
Surface tension	68.7 mN/m (20 °C, 1 g/l)
Ecology - soil	No (test)data on mobility of the substance available.
12.5 Uther adverse effects	

No additional information available

SECTION 13: Disposal consideration	6
42.4 Disposal methods	5
13.1. Disposal methods	· Dispass of contents/container is accordance with licensed collector's parting instructions
Product/Packaging disposal recommendations	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Use appropriate containment to avoid environmental contamination. Remove waste in accordance with local and/or national regulations. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery.</li> </ul>
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Transport document description	<ul> <li>NA1993 Combustible liquid, n.o.s. (Dipropylene Glycol Methyl Ether), 3, III</li> <li>NA1993</li> </ul>
Proper Shipping Name (DOT)	: Combustible liquid, n.o.s. (Dipropylene Glycol Methyl Ether)
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	<ul> <li>IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).</li> <li>T1 - 1.5 178.274(d)(2) Normal</li></ul>
	during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.XXX)	: 150

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:

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	:	128
Other information	:	No supplementary information available.
Transportation of Dangerous Goods		

#### Transport by sea

Not regulated	
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#### Air transport

Not regulated

SECTION 15 : Regulatory information	
15.1. US Federal regulations	
Glycol Ether DPM (34590-94-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T – indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 311/312 Hazard Classes	Physical hazard – Flammable (gases, aerosols, liquids, or solids) Health hazard - Immediate Health.
TSCA 12b	Dipropylene Glycol Monomethyl Ether CAS# 34590-94-8 TSCA Section 4

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 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 DPM (34590-94-8)	
State or local regulations	U.S New Jersey - Right to Know Hazardous Substance List
	U.S Massachusetts - Right to Know Hazardous Substance List
	U.S Pennsylvania - Right to Know Hazardous Substance List

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### **SECTION 16: Other information**

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#### Full text of H-phrases:

Full lext of H-philases.		
H227	Combustible liquid	
H335	May cause respiratory irritation	
NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	
NFPA fire hazard	: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.	
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.	
Hazard Rating		
Health	: 2 Moderate Hazard - Temporary or minor injury may occur	
Flammability	: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)	
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	

SDS US (GHS HazCom 2012)

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