

Phone: 905-337-7411 Fax: 905-337-1686

megaloid.ca





1. PRODUCT IDENTIFICATION

Name: Glycol Ether TPM

Synonyms: (2-(2-Methoxymethylethoxy)methylethoxy)propanol; tripropylene glycol

methyl ether; TPM

CAS# 25498-49-1

Product Uses: high boiling solvent for polymer-containing coatings and slow evaporating

inks

Supplier Megaloid Laboratories Limited

Identifier: 5515 North Service Road, Suite 306, Burlington, ON L7L 6G4

Phone: 905-337-7411 / Fax: 905-337-1686

EMERGENCY INFORMATION:

Call CHEMTREC @ (800) 424-9300 (CCN # 693764)

2. HAZARDS

GHS Class	Non Hazardous	
(category) Signal Words	NONE	
Hazard Statements	NONE	

3. COMPOSITION

Chemical Name:	CAS No.	%	Other Identifiers
Glycol Ether TPM	25498-49-1	100	EC # 247-045-4

4. FIRST AID

Inhalation

Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.

Skin Contact

Wash with plenty of water. Remove contaminated clothing and do not reuse until thoroughly laundered.

Eye Contact

Wash eyes with plenty of water, holding eyelids open. Seek medical assistance if there is any irritation.

Ingestion

Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

First-aid Comments

Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity substance. The stomach should only be emptied under medical supervision, and after the installation of an airway to protect the lungs.

5. FIRE FIGHTING & FLAMMABILITY

Extinguishing Media

Suitable Extinguishing Media

Foam, dry chemical, water fog, water spray, product floats on water

Combustion Products

Carbon monoxide, nitrogen oxides, smoke, part oxidised hydrocarbon fragments

Special Protective Equipment and Precautions for Fire-fighters

Firefighters must wear SCBA. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Wear adequate personal protective equipment. Ventilate area. Extinguish or remove all ignition sources. Notify government occupational health and safety and environmental authorities.

Environmental Precautions

It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Leak Precaution: dyke to control spillage and prevent environmental contamination handling Spill: recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep, shovel & store in closed containers for recycling or disposal.

Other Information

Report spills to local health, safety and environmental authorities, as required.

7. HANDLING & STORAGE

Precautions for Safe Handling

Glycol Ether TPM may react with air slowly to form explosive peroxides. If prolonged storage is anticipated, flush headspace with dry nitrogen before sealing.

Conditions for Safe Storage

Store in a cool, dry environment, away from sources of ignition, heat and oxidizing agents. Always ensure that containers, whether empty or full, are tightly sealed unless in use. Avoid generating or breathing product vapour or mist. Never cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath must be available near the workplace.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

Ontario TWAEV Not listed

ACGIH TLV Not listed OSHA PEL Not listed

ACGIH STEL Not listed
OSHA STEL Not listed

Ventilation	Mechanical ventilation may be required to control airborne titre; depending on handling procedures.
Hands	Nitrile or "Viton" gloves recommended - other types also protect; confirm suitability with supplier.
Eyes	Safety glasses with side shields – always protect the eyes
Clothing	Special protective clothing is not generally necessary.

Appropriate Engineering Controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. PHYSICAL PROPERTIES

Appearance	Clear colourless liquid.		
Odour	sweetish ether odour		
Odour threshold	not known		
рН	none – (does not liberate hydrogen ions when dissolved)		
Melting Point/Freezing Point	-60°C / -76°F		
Initial Boiling Point/Range	243°C / 470°F		
Flash Point	>121°C / >250°F (closed cup)		
Evaporation Rate	0.0026 (Butyl Acetate = 1)		
Flammability (Solid, Gas)	Not Available		
Upper/Lower Flammability or Explosive Limit	not known		
Vapour Pressure	0.017mmHg / 0.002kPa (25°C / 77°F)		
Vapour Density (air = 1)	7.1		
Specific Gravity	0.967 (20/20°C)		
Solubility	not known		
Partition Coefficient, n-Octanol/Water (Log Kow)	0.08		
Auto-ignition Temperature	270°C/518°F		
Decomposition Temperature	no decomposition up to Auto-ignition Temperature		

Viscosity	5.5 centipoise (25°C / 77°F)
Physical State	Liquid
Molecular Weight	206grams per mole
Molecular Formula	C10-H22-O4

10. REACTIVITY

Dangerously Reactive *with strong oxidising agents.* **Also Reactive** *with strong acids, strong alkalis*

Chemical Stability

Stable (Some glycol ethers can form peroxides during prolonged storage in contact with air. Formation of peroxides occur more readily in sunlight. Peroxides may be flammable and explosive); will not polymerize.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Elevated temperature accelerates decomposition'

Incompatible Materials

Apart from Hazardous Combustion Products, potentially explosive peroxides

11. TOXICITY

Prolonged & extensive exposure (10,000mg/kg/day for 90 days!) caused kidney damage in rabbits; this level of exposure is unlikely to occur in industry

Acute Toxicity				
LD ₅₀ (oral)	3180 – 5460mg/kg (rat) – 4 studies, 4835mg/kg (dog) – very old data (1911)			
LD50 (skin)	15,440mg/kg (rabbit), >19,300mg/kg (rabbit)			
LC50 (inhalation)	not known			

Skin Corrosion/Irritation

Little to no effect.

Serious Eye Damage/Irritation

Slightly irritating based on animal testing.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May irritate above 100ppm – concentration unobtainable unless strongly heated; narcosis expected at 1000ppm – again unobtainable at ambient temperature.

Skin Absorption

Slight; no toxic effects likely by this route.

Ingestion

Nausea, vomiting & diarrhoea expected in cases of substantial ingestion; far more than could occur by accident; not a route of industrial exposure.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Do not breathe vapours. If inhaled remove person to fresh air and keep comfortable for breathing.

Respiratory and/or Skin Sensitization

Not a sensitizer in humans or animals.

Carcinogenicity / Tumorigen

Not considered a tumorigen or a carcinogen in humans or animals. IARC: Not specifically listed. ACGIH®: Not specifically designated. NTP: Not specifically listed.

Reproductive Toxicity

Sexual Function and Fertility

No known effect in humans or animals.

Germ Cell Mutagenicity

Not known to be a mutagen.

12. ECOLOGICAL INFORMATION

Bioaccumulation	not a bioaccumulator
Persistence and	Biodegradation -
Degradability	biodegrades readily in the presence of oxygen; 52% in 20 days – expect
	60% in 28 days achievable also 72% in 28 days
	Abiotic Degradation -
	reacts with atmospheric hydroxyl radicals with a ½-life of 2.2 hours
	reacts with authospheric hydroxyr radicals with a 72-life of 2.2 flours
Mobility in soil, water	water soluble; moves readily in soil and water
Aquatic Toxicity	
LC50 (Fish, 96hr)	11,620mg/litre (Pimephales promelas)
FC50 (Crustacea 48hr)	>10,000mg/litre (Daphnia magna)
Loso (Grastacea, 40111)	210,000mg/mie (Dapinna magna)
EC50 (Algae)	21,000mg/litre (Pseudokirchnerella subcapitata)
EC50 (Bacteria)	>10,000mg/litre (Salmonella typhimurium) 2000mg/litre (sewage sludge) – stimulated growth by 75%!

13. DISPOSAL

Water Disposal

Do not flush to sewer, recycle solvent if possible, local regulations may permit disposal in sanitary landfill, may be incinerated in approved facility after mixing with a suitable flammable waste **Containers**

Drums should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use.

Pails must be vented and thoroughly dried prior to crushing and recycling.

IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5yrs).

Steel containers must be inspected, pressure tested & recertified every 5 years.

Never cut, drill, weld or grind on or near this container, even if empty

14. TRANSPORT CLASSIFICATION

Canada TDG	PIN	Not regulated for transport
AND U.S.A. 49 CFR	Shipping Name Class & Packing Group	·

Marine Pollutant	Not a Marine Pollutant
ERAP Required	NO
Reportable Quantity	NO
Emergency Response Guide No.	NO

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

15. REGULATIONS

Canada DSL	On Inventory
U.S.A. TSCA	On Inventory
Europe EINECS	On Inventory

Canadian Regulations

CEPA - National Pollutant Release Inventory (NPRI)

Not specifically listed.

U.S.A. Regulations

SARA 302/304: This product contains no known chemicals regulated under SARA 302/304.

SARA 313: This product contains no known chemicals regulated under SARA 313.

State Reporting

California Proposition 65T: This material is not known to contain a chemical substance known to the State of California to cause cancer, reproductive, or developmental toxicity under California Proposition 65.

New Jersey's Worker and Community Right to Know Act: This product contains no known chemicals regulated by New Jersey's Worker and Community Right to Know Act.

Massachusetts Right to Know Act:

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania's Right to Know Act:

This product contains no known chemicals regulated by Pennsylvania's Right to Know Act.

Regulatory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on INSQ (Mexican national Inventory)

16. THER INFORMATION

NFPA RATING	Health 1	Flam	mability	1	Instability 0
Prepared for		oratories Limited	by	_	Richard Koscher
Preparation Date: Revision Dates:	January 2004 February 2007	Feb 2010; Feb 20	13, May 20	015	, April 2018, Jan 2019
Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA® = AIHA® Guideline Foundation HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances				
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).				
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