

Print Date: March 8, 2024

Section 1: Product & Company Information

Product Identifier: Glycol Ether DPM

Other Means of Identification

Product Number: 152251

Chemical Name: Dipropylene Glycol Monomethyl Ether

Recommended Use and Restrictions on Use

Recommended Use: Solvent.

Restrictions on Use: No data available.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc.

Address: 4320 Greenway Drive

Knoxville, TN 37918

USA

Information Telephone Number: 1-865-524-4239

Fax Number: 1-865-524-3375

Website: www.corecheminc.com
Contact Person: Regulatory Manager

E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)

Flammable, Liquids - 4

Health Hazard(s)

Specific Target Organ Toxicity (STOT)-Respiratory Irritation, Single exposure - 3

Environmental Hazard(s)

Not classified.

Label Elements

Signal Word

WARNING

Hazard Symbol(s)



Hazard Statement(s)

H227: Combustible liquid.

H335: May cause respiratory Irritation.

Precautionary Statements

General

Not applicable.

Prevention

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing



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P312 Call a poison center or doctor if you feel unwell.

P370 + P378: In case of fire: Use suitable extinguishing media for extinction.

Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Dipropylene Glycol Monomethyl Ether	Glycol Ether DPM, Dipropylene Glycol	34590-94-8	> 99.0%	No
	Methyl Ether, DPGME			

- 1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- 2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- 3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. Keep patient warm and at rest. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Skin Contact

Remove contaminated clothing as needed. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if discomfort persists.

Eye Contact

Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation persists, consult a specialist.

Ingestion

This material may be a slight health hazard if ingested in large quantities. If large quantity is swallowed, give lukewarm water if victim is completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

Most important symptoms/effects, acute and delayed

Symptoms

High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma, and death in cases of severe over-exposure).

Non toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Not irritant to skin. Non toxic in contact with skin (LD50 skin> 5000 mg/kg). Slightly harmful by inhalation. Not irritant to eyes.

Caution! Substance is absorbed through the skin.

Indication of immediate medical attention and special treatment

needed

Hazards

No data available.

Treatment

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5: Fire-Fighting Measures

General Fire Hazards

No data available.



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Suitable (and Unsuitable) Extinguishing 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. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable Extinguishing Media

Water (quick acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

Specific Hazards Arising from the Chemical

Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Flammable vapors may be heavier than air and travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flash point. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of burns/injuries. Cool containers with flooding quantities of water until well after fire is out. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Move containers from fire area if it can be done without risk. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency 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.

Methods and Materials for Containment and Clean-Up

Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

Notification Procedures

No data available.

Environmental Precautions

Avoid release to the environment.

Section 7: Handling and Storage

Precautions for Safe Handling

Keep container tightly closed when not in use. The potential for peroxide formation is enhanced when this solvent is used in processes such as distillation. Use only non-sparking tools. Properly ground containers before beginning transfer. When transferring propylene glycol ethers with flash points at or below 60 °C (140 °F) into fixed site vessels, the vessel should be purged and inerted prior to transfer. Propylene glycol ethers may be transferred into air atmospheres if the temperature of the product and the ambient temperature within the shipping container are both at least 16.7 °C (30 °F) less than the product's flash point. After loading, nitrogen blanketing is required if the contents of the transportation container could exceed a temperature of 16.7 °C (30 °F) less than the product flash point during any subsequent transportation activities. If the product flash point is less than 16.7 °C (30 °F) above either the ambient temperature of the transportation container or the storage temperature of the product, the container should be purged and inerted with nitrogen prior to loading and nitrogen blanketed after loading. Handle empty containers with care. Flammable/combustible residue remains after emptying. The purging of all empty shipping containers, regardless of the flashpoint, is recommended when received with air atmospheres. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Use adequate personal protective equipment. Observe precautions pertaining to confined space entry.

Conditions for Safe Storage, including any Incompatibilities

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. Store in properly lined steel/stainless steel to avoid slight discoloration from mild steel/copper. Aluminum (5000 series alloys - U.S. Aluminum Association Standard) showed no corrosion after 30 days contact with PM Acetate, DPM, TPM, PTB, or PM at 71°C (160°F). Some plastics/rubbers are attacked by Glycol Ethers/Ether Esters. This product will absorb water if exposed to air.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

The state of the s					
Chemical Identity	Type	Value	Source		
Dipropylene Glycol Monomethyl Ether	STEL	150 ppm	US. ACGIH Threshold Limit Values		
Dipropylene Glycol Monomethyl Ether	TWA	100 ppm	US. ACGIH Threshold Limit Values		
Dipropylene Glycol Monomethyl Ether	TWA	100 ppm 600 mg/m ³	US OSHA Table Z-1		



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Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Ensure good ventilation of the work station.

Emergenc y eye wash fountain s and safety showers

should be available in the immediate vicinity of any potential exposure.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Wear safety glasses with side shields.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Depending on the conditions of use, protective apron, boots, head and face protection should be worn. Use PPE that is chemical resistant to the product and prevents skin contact.

Respiratory Protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:

Physical State: Liquid
Color: Colorless

Odor: Ether-like odor

Odor Threshold: No data available.
pH: No data available.

Melting Point/Freezing Point: -117 °F (-83 °C) at 1,013 hPa (760 mm Hg) Initial Boiling Point and Boiling 373.3 °F (190 °C) at 1,013 hPa (760 mm Hg)

Range: Flash Point:

Flammability (solid, gas):

167 °F (75 °C) at 1,013 hPa (760 mm Hg)

Evaporation Rate (butyl acetate=1): 0.0

Upper/Lower Limit on Flammability or Explosive Limits
Flammability Limit – Upper: Not applicable.
Flammability Limit – Lower: Not applicable.
Explosive Limit – Upper: 14% volume
Explosive Limit – Lower: 1.1% volume

Vapor Pressure: $\sim 0.37 \text{ hPa } (0.28 \text{ mm Hg}) \text{ at } 68 \text{ °F } (20 \text{ °C})$

Vapor Density (air = 1): No data available.

Relative Density (water=1): 0.95 (20 °C, DIN 51747: Oscillating densitometer)

Not applicable.

Solubility(ies):

Solubility in water: 100% at 77 °F (25 °C) completely miscible

Solubility (other): No data available.

Partition coefficient (n- log Pow: 0.004 at 77 °F (25 °C)

octanol/water):

Auto-Ignition Temperature: 403.7 °F (207 °C) at 1,013 hPa (760 mm Hg)

Decomposition Temperature: No data available.

Viscosity, Kinematic: 4.55 mm²/s (20 °C, OECD 114: Viscosity of Liquids)

Other Information:

Molecular Weight: 148.2 g/mol



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Formula: No data available.

Section 10: Stability and Reactivity

Reactivity

Prolonged storage: may form peroxides on exposure to air. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion.

Chemical Stability

Material is stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Extended contact with air or oxygen. The potential for peroxide formation is enhanced when this solvent is used in processes such as distillation. Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Ignition may occur at temperatures below those published in the literature as auto-ignition or ignition temperatures.

Incompatible Materials

No data available.

Hazardous Decomposition Products

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

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: Ingestion of very large amounts may cause CNS depression, respiratory failure, and death in cases of severe overexposure.

Inhalation: May cause mild CNS depression. Exposure to vapor may cause irritation of nose and throat.

Skin Contact: No data available.

Eye Contact: Exposure may cause irritation of the eyes.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Dipropylene Glycol Monomethyl Ether: LD50 (Rat): > 5,000 mg/kg

Derma

Dipropylene Glycol Monomethyl Ether: LD50 (Rabbit): > 9,510 mg/kg

Inhalation

No data available.

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

No data available.

Serious Eye Damage/Eye Irritation

No data available.

Respiratory/Skin Sensitization

No data available.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

Not classified.

In Vivo

Not classified.



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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

Other Effects

No data available.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

LC50 Fish > 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value, GLP)

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

ErC50 Algae > 969 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value. GLP)

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability

Biodegradation

Rapidly Biodegradable.

BOD/COD Ratio

No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

This material is not expected to bioaccumulate.

Partition Coefficient n-octanol / water (log Kow)

No data available.

Mobility in Soil

Highly mobile in soil.

Surface Tension = 68.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)

Partition coefficient n-octanol/water (Log Koc) = 1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.



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Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: Yes Sudden Release of Pressure: No Reactive: No Acute (Immediate) Health Hazard: Yes Chronic (Delayed) Health Hazard: No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

New Jersey

Right to Know Hazardous Substance

Massachusetts

Right to Know Hazardous Substance

Pennsylvania

Right to Know Hazardous Substance

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 2

Chronic Health Hazard: /

Flammability: 2

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2

Fire Hazard: 2

Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By: Regulatory Manager

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Last Revised By: Regulatory Assistant C

Last Revision Date: 2/19/2024 Current Revision: 02

Sections Revised: Changes were made to all sections

Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate BCF - Bioconcentration Factor EC50 - Effective concentration. 50%

IDHL – Immediately Dangerous to Life and Health

Kg – Kilogram I – Liter Ib – Pound

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

mg - milligram ml – milliliter N/A – Not Applicable

N/D – Not Determined

PEL – Permissible Exposure Limit REL – Recommended Exposure Limit STEL – Short-term Exposure Limit

TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists

AIHA – American Industrial Hygiene Association BEI - Biological Exposure Indices

CAS – Chemical Abstracts Service DOT – US Department of Transportation EPA – US Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IARC - International Agency for Research on Cancer IATA - International Air Transport Association

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA – US Occupational Health and Safety Administration SARA – US EPA Superfund Amendments and Reauthorization Act

TSCA - US EPA Toxic Substances Control Act

UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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