

SAFETY DATA SHEET

Section 1. Identification

Product name : DPM (Dipropylene Glycol Monomethyl Ether)

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Solvent
Print date : 02/02/2015
Validation date :
Version :
Supplier's details : Deep South Chemical, Inc. 229 Millstone Road, Broussard LA 70518
For Product Information/MSDSs Call: 337-837-9931
Emergency telephone number (with hours of operation) : CHEMTREC 800-424-9300 (U.S. 24 hour)
(001)281-276-5400
CANUTEC 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

GHS label elements

Hazard pictograms :



Signal Word : Warning
Hazard statements : H227 Combustible liquid.
H335 May cause respiratory irritation.

Precautionary statements

Prevention : P261 Avoid breathing dust/fume/gas/mist/vapor/spray.
P271 Use only outdoors or in a well-ventilated area.
Response : P312 Call a POISON CENTER or physician if you feel unwell.
Storage : P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Hazards not otherwise classified : No additional information.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Dipropylene glycol monomethyl ether	>99.0	34590-94-8

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. If eye irritation persists, get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt, or waistband.
- Skin contact** : Flush contaminated skin with mild soap and plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : This product may be a slight health hazard if ingested in large quantities. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give a pint of lukewarm water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation to nose, throat and respiratory tract.
- Skin contact** : May cause skin irritation.
- Ingestion** : Irritation to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Pain or irritation, watering, redness.
- Inhalation** : Respiratory tract irritation, coughing.
- Skin contact** : Irritation, redness, defatting of the skin.
- Ingestion** : Fatigue, dizziness, loss of concentration.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : High doses may cause CNS depression (fatigue, dizziness, and possibly loss of concentration, with collapse, coma, and death in cases of severe over-exposure).
- Specific treatments** : Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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.

Hazardous thermal decomposition products : Carbon dioxide, carbon monoxide

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: 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.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including 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		TWA (8 hours)			STEL (15 min)			IDLH		
Ingredients:	CAS No.	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other
Dipropylene glycol monomethyl ether	34590-94-8	100	600	NA	150	NA	NA	600	NA	NA

Consult local authorities for acceptable exposure limits. Only components of this product with established exposure limits appear in the box above.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material, wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves: rubber gloves/Neoprene gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state : Liquid
 Color : Clear, colorless
 Odor : Ether-like
 pH : Not available
 Melting/freezing point : -117 °F
 Boiling point : 373.3°F
 Flash point : Closed cup: 167°F
 Evaporation rate : 0.02 (butyl acetate = 1)
 Flammability : Flammable in the presence of open flames, sparks and static discharge.
 Lower and upper explosive limits : 1.1 vol% lower, 14 vol% upper
 Vapor pressure : 0.28 mm Hg

Vapor density : ~5.1 at 61-90°F (Air = 1.0)
Relative density : 0.95 at 68°F
Density : 7.92 lbs/gal
Solubility in water : Completely miscible at 77°F
Partition coefficient : log Pow: 0.004 at 77°F
n-octanol/water
Auto-ignition temp. : 403.7°F
Decomposition temp. : Not determined
Viscosity : 4.0 cP
VOC : Not available
Pour point : Not available

Section 10. Stability and reactivity

Reactivity : Will not occur.
Chemical stability : Stable under recommended storage conditions.
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 flames, other ignition sources, and oxidizing conditions. Ignition may occur at temperatures below those published.
Materials to avoid : Air or oxygen. Moisture and humidity. Strong oxidizing agents. May react with oxygen to form peroxides.
Thermal decomposition : Carbon monoxide and other toxic vapors.
Hazardous reactions : Will not occur.

Section 11. Toxicological Information

[Information on toxicological effects](#)

Acute oral toxicity

Based on acute toxicity values, not classified. Ingestion of very large amounts may cause CNS depression, respiratory failure, and death in cases of severe overexposure.
LD50 (Rat) > 5,000 mg/kg

Acute inhalation toxicity

Based on acute toxicity values, not classified. May cause mild CNS depression. Exposure to vapor may cause irritation of the eyes, nose, or throat.
LC50 (Rat) > 275 ppm, Exposure time 7 hours

Acute dermal toxicity

Based on acute toxicity values, not classified.
LD50 (Rat) > 9,500 mg/kg

Irritation/Corrosion

Based on skin irritation values, not classified.

Sensitization

No applicable toxicity data

Mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Teratogenicity
Not classified

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Glycol Ether DPM	Category 3	Inhalation	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)
Not classified

Aspiration hazard
Not classified

Section 12. Ecological information

Toxicity
Based on aquatic toxicity values and biodegradability, not classified

Persistence and degradability
Biodegradability: 76-92% after 28 days
Bioaccumulation: This material is not expected to bioaccumulate.

Other adverse effects: No known effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. 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 or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

DOT Transport Information: NA 1993, Combustible Liquid N.O.S. (Dipropylene Glycol Monomethyl Ether) PG III

DOT Reportable Quantity: Not applicable
Marine pollutant: Not available

Section 15. Regulatory information

TSCA 12(b): Dipropylene Glycol Monomethyl Ether / CAS# 34590-94-8, TSCA Section 4

SARA 302/304 : No products found.
SARA 311/312 : Fire hazard
 Immediate (acute) health hazard
SARA 313 : No products found
Canada (CEPA DSL) : Not determined

Section 16. Other information

National Fire Protection Association (NFPA)

Health (1) Fire (2) Reactivity (0)

[Date of Printing:](#)

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