

## Material Safety Data Sheet Dipropylene Glycol Methyl Ether MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Dipropylene Glycol Methyl Ether

**Catalog Codes:** 10635, 20635

**CAS#:** 34590-94-8

**RTECS:** JM1575000

**TSCA:** TSCA 8(b) inventory: Dipropylene glycol monomethyl ether

**CI#:** Not available.

**Synonym:** Arcosolv, Dowanol DPM, Dowanol-50B,; 1,4-Dimethyl-3,6-dioxo-1-heptanol; Oxybispropanol methyl ether; Methyl dipropanol; 1-(2-Methoxyisopropoxy)-2-propanol

**Chemical Name:** Dipropylene glycol monomethyl ether

**Chemical Formula:** C7-H16-O3

**Contact Information:**

**Finar Limited**

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### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Dipropylene glycol monomethyl ether	34590-94-8	100

**Toxicological Data on Ingredients:** Dipropylene glycol monomethyl ether: ORAL (LD50): Acute: 5130 mg/kg [Rat]. 7500 mg/kg [Dog]. DERMAL (LD50): Acute: 9500 mg/kg [Rabbit].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant).

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Combustible.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** CLOSED CUP: 85°C (185°F).

**Flammable Limits:** LOWER: 1.1% UPPER: 3%

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards in Presence of Various Substances:**

Flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:**

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:** Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

TWA: 600 STEL: 900 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [United States] TWA: 600 STEL: 900 (mg/m<sup>3</sup>) from NIOSH [United States] TWA: 100 STEL: 150 (ppm) from NIOSH [United States] TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) [United States] SKINConsult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Ethereal.

**Taste:** Bitter.

**Molecular Weight:** 148.2 g/mole

**Color:** Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 190°C (374°F)

**Melting Point:** -80°C (-112°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 0.95 (Water = 1)

**Vapor Pressure:** 0 kPa (@ 20°C)

**Vapor Density:** 5.11 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** 34.6 ppm

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, diethyl ether, acetone.

**Solubility:**

Easily soluble in diethyl ether, acetone. Soluble in cold water. Completely miscible with Ethanol, Carbon Tetrachloride, Benzene, Monochlorobenzene, Petroleum Ether.

**Section 10: Stability and Reactivity Data**

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Heat, ignition sources, incompatible materials.

**Incompatibility with various substances:** Reactive with oxidizing agents.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

**Section 11: Toxicological Information**

**Routes of Entry:** Absorbed through skin. Inhalation. Ingestion.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 5130 mg/kg [Rat]. Acute dermal toxicity (LD50): 9500 mg/kg [Rabbit].

**Chronic Effects on Humans:** May cause damage to the following organs: liver, central nervous system (CNS).

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: Causes mild skin irritation. It is not absorbed by intact skin in appreciable amounts. However, if absorbed through the skin, it can produce central nervous system depression (see ingestion). Eyes: Causes eye irritation. It is transiently painful to the eyes. It causes minor corneal irritation. Inhalation: Exposure to high concentration of vapor causes marked respiratory tract (nasal mucous membranes and throat) irritation which is difficult to tolerate. Exposure to airborne concentrations of 500 ppm or greater can produce central nervous system impairment/depression (see ingestion). Ingestion: It is of low oral toxicity. Hepatic and renal injury may occur following ingestion of extremely large amounts. It may affect respiration, behavior/central nervous system and cause central nervous system depression (weakness, lightheadedness, dizziness, headache) Chronic Potential Health Effects: Inhalation and Ingestion: Repeated or prolonged exposure of high levels via inhalation and ingestion may affect the liver. Skin: Repeated or prolonged skin absorption may affect behavior/central nervous system (CNS depression), and metabolism (weight loss)

**Section 12: Ecological Information**

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

### Federal and State Regulations:

Illinois toxic substances disclosure to employee act: Dipropylene glycol monomethyl ether Rhode Island RTK hazardous substances: Dipropylene glycol monomethyl ether Pennsylvania RTK: Dipropylene glycol monomethyl ether Minnesota: Dipropylene glycol monomethyl ether Massachusetts RTK: Dipropylene glycol monomethyl ether New Jersey: Dipropylene glycol monomethyl ether California Director's List of Hazardous Substances: Dipropylene glycol monomethyl ether TSCA 8(b) inventory: Dipropylene glycol monomethyl ether TSCA 4(a) proposed test rules: Dipropylene glycol monomethyl ether TSCA 8(d) H and S data reporting: Dipropylene glycol monomethyl ether: Effective: 4/13/89; Sunset Date: 6/30/98

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

### WHMIS (Canada):

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

### DSCL (EEC):

This product is not classified according to the EU regulations. S23- Do not breathe gas/fumes/vapour/spray S24/25- Avoid contact with skin and eyes.

### HMIS (U.S.A.):

**Health Hazard:** 2

**Fire Hazard:** 2

**Reactivity:** 0

**Personal Protection:** g

### National Fire Protection Association (U.S.A.):

**Health:** 0

**Flammability:** 2

**Reactivity:** 0

**Specific hazard:**

### Protective Equipment:

Not applicable. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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