

Name:	1-Methoxy-2-Propanol CA. 98% Material Safety Data Sheet
Synonym:	Propyleneglycol Monomethylethe
CAS:	107-98-2

➔ Section 1 - Chemical Product

MSDS Name: 1-Methoxy-2-Propanol CA. 98%

Synonym: Propyleneglycol Monomethylether

➔ Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
107-98-2	1-Methoxy-2-propanol	98.0	203-539-1

Hazard Symbols: F

Risk Phrases: 10

➔ Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin. Prolonged and/or frequent contact may cause drying, cracking or folliculitis.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May be harmful if swallowed.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May be harmful if inhaled. Vapors may cause dizziness or suffocation.

Chronic:

Repeated or prolonged exposure may cause CNS stimulation.

➔ Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

➔ Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air.

Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

➔ Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

➔ Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Use only in a well-ventilated area.

Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.

Keep container tightly closed. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.

Flammables-area. Keep containers tightly closed.

➔ Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 107-98-2: United Kingdom, WEL - TWA: 100 ppm TWA; 375 mg/m³ TWA United Kingdom, WEL - STEL: 150 ppm STEL; 560 mg/m³ STEL Belgium - TWA: 100 ppm VLE; 375 mg/m³ VLE Belgium - STEL: 150 ppm VLE; 568 mg/m³ VLE France - VME: 100 ppm VME; 360 mg/m³ VME Germany: 100 ppm TWA; 370 mg/m³ TWA Malaysia: 100 ppm TWA; 369 mg/m³ TWA Netherlands: 100 ppm MAC; 375 mg/m³ MAC Spain: 100 ppm VLA-ED; 375 mg/m³ VLA-ED Spain: 150 ppm VLA-EC; 568 mg/m³ VLA-EC Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

➔ Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: clear, colorless

Odor: sweetish odor - ethereal odor

pH: 4-7 (200 g/L @ 20 °C)

Vapor Pressure: 10.9 mm Hg @ 25 deg C

Viscosity: 1.81 mPas @ 20C

Boiling Point: 118- 119 deg C @ 760.00mmHg

Freezing/Melting Point: -97 deg C

Autoignition Temperature: 286 deg C (546.80 deg F)

Flash Point: 33 deg C (91.40 deg F)

Explosion Limits, lower: 1.70 vol %

Explosion Limits, upper: 11.50 vol %

Decomposition Temperature:

Solubility in water: soluble

Specific Gravity/Density: .9220g/cm³

Molecular Formula: C₄H₁₀O₂

Molecular Weight: 90.12

➤ Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Isocyanates, perchloric acid, sulfuric acid, oxidizing agents, acid chlorides, acid anhydrides.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

➤ Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 107-98-2: UB7700000 LD50/LC50:

CAS# 107-98-2: Draize test, rabbit, eye: 500 mg/24H Mild; Inhalation, rat: LC50 = 10000

ppm/5H; Oral, mouse: LD50 = 11700 mg/kg; Oral, rabbit: LD50 = 5700 mg/kg; Oral, rat: LD50 = 6600 mg/kg; Skin, rabbit: LD50 = 13 gm/kg.

Carcinogenicity:

1-Methoxy-2-propanol - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

➤ Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Rainbow trout: LC50 = 19202 mg/L; 96 Hr.; UnspecifiedFish: Fathead Minnow: LC50 = 15886 mg/L; 96 Hr.; UnspecifiedFish: Bluegill/Sunfish: LC50 = 21742 mg/L; 96 Hr.;

UnspecifiedWater flea EC50 = 10457 mg/L; 96 Hr.; Unspecified

➔ Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

➔ Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: 1-METHOXY-2-PROPANOL

Hazard Class: 3

UN Number: 3092

Packing Group: III

IMO

Shipping Name: 1-METHOXY-2-PROPANOL

Hazard Class: 3

UN Number: 3092

Packing Group: III

RID/ADR

Shipping Name: 1-METHOXY-2-PROPANOL

Hazard Class: 3

UN Number: 3092

Packing group: III

➔ Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

R 10 Flammable.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 107-98-2: 1

Canada

CAS# 107-98-2 is listed on Canada's DSL List.

CAS# 107-98-2 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 107-98-2 is listed on the TSCA inventory.
