

Material Safety Data Sheet

1-Methoxy-2-propanol, 98%

ACC# 92566

Section 1 - Chemical Product and Company Identification

MSDS Name: 1-Methoxy-2-propanol, 98%

Catalog Numbers: AC244990010, AC244990025, AC244990050, AC244990250, AC9468405, AC9474899, AC9474970 AC9474970, AC9480259

Synonyms: Propyleneglycol monomethyl ether.

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
107-98-2	1-Methoxy-2-propanol	98	203-539-1

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 33 deg C.

Warning! Flammable liquid and vapor. May cause eye, skin, and respiratory tract irritation. Prolonged or repeated contact causes defatting of the skin with irritation, dryness, and cracking. May cause central nervous system depression.

Target Organs: Central nervous system.

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.

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: Treat symptomatically and supportively.

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.

Flash Point: 33 deg C (91.40 deg F)

Autoignition Temperature: 286 deg C (546.80 deg F)

Explosion Limits, Lower:1.70 vol %

Upper: 11.50 vol %

NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Methoxy-2-propanol	100 ppm TWA; 150 ppm STEL	100 ppm TWA; 360 mg/m ³ TWA	none listed

OSHA Vacated PELs: 1-Methoxy-2-propanol: 100 ppm TWA; 360 mg/m³ TWA

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

Appearance: clear, colorless

Odor: sweetish odor - ethereal odor

pH: 4-7 (200 g/L @ 20°C)

Vapor Pressure: 10.9 mm Hg @ 25 deg C

Vapor Density: 3.11

Evaporation Rate: 0.71 (butyl acetate)

Viscosity: 1.81 mpas @ 20C

Boiling Point: 118- 119 deg C @ 760.00mmHg

Freezing/Melting Point: -97 deg C

Decomposition Temperature: Not available.

Solubility: 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:

CAS# 107-98-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: No information found
Neurotoxicity: No information found
Other Studies:

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 No data available.

Environmental: If released on soil propylene glycol methyl ether would be expected to leach because it has a very low estimated soil adsorptivity. Based on limited data from screening tests, it would probably biodegrade. If released in water, the fate of propylene glycol methyl ether is not clear. Based on limited data from screening tests, it should be readily biodegradable. Propylene glycol methyl ether would not be expected to volatilize from water, adsorb to sediment, bioconcentrate in fish, photolyze or hydrolyze.

Physical: Propylene glycol methyl ether will react with photochemically-produced hydroxyl radicals in the atmosphere. Using an estimated rate constant of 1.57 cu cm/molec-sec for this reaction, the half-life of propylene glycol methyl ether in the atmosphere is predicted to be 24.5 hr. The experimentally-determined half-life of propylene glycol methyl ether under photochemical smog conditions was 3.1 hr. Propylene glycol methyl ether is soluble in water and would be subject to wash out by rain.

Other: The Koc for propylene glycol methyl ether, estimated from molecular structure is 0.21. According to a suggested classification scheme, a Koc of this magnitude indicates that propylene glycol methyl ether will exhibit very high mobility in soil.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	1-METHOXY-2-PROPANOL	1-METHOXY-2-PROPANOL
Hazard Class:	3	3
UN Number:	UN3092	UN3092
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

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

Health & Safety Reporting List

CAS# 107-98-2: Effective 4/13/89, Sunset 6/30/98

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 107-98-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

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 - DSL/NDSL

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

Canada - WHMIS

This product has a WHMIS classification of B2.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 107-98-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
--

MSDS Creation Date: 5/18/1999

Revision #5 Date: 10/19/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.