

Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	Flammable material; avoid heat and sources of ignition.	   

Section I. Chemical Product and Company Identification

Chemical Name	1-Methoxy-2-propanol		
Catalog Number	M0126	Supplier	TCl America 9211 N. Harborgate St. Portland OR 1-800-423-8616
Synonym	Propylene Glycol Monomethyl Ether 2-Propanol, 1-Methoxy- (9 CI)		
Chemical Formula	CH ₃ OCH ₂ CH(OH)CH ₃		
CAS Number	107-98-2	In case of Emergency Call	Chemtrec® (800) 424-9300 (U.S.) (703) 527-3887 (International)

Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
1-Methoxy-2-propanol	107-98-2	Min. 96.0 (GC)	Not available.	Rat LC ₅₀ (inhalation) 10000ppm/5H Rat LD ₅₀ (intraperitoneal) 3720mg/kg Rabbit LD ₅₀ (dermal) 13000mg/kg

Section III. Hazards Identification

Acute Health Effects	No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.
Chronic Health Effects	CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY Reproductive Effects: Rat TCLo (inhalation) 3000 ppm/6 hours, female 6-15 days of pregnancy. Toxic Effects: Specific Developmental Abnormalities - Musculoskeletal system. Rat TCLo (inhalation) 3000 ppm/6 hours, female multigeneration. Toxic Effects: Maternal Effects - Other Effects. Effects on Newborn - Live birth index. Effects on Newborn - Physical. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

Section IV. 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. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.
Ingestion	INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. SEEK IMMEDIATE MEDICAL ATTENTION in case of ingestion of a radioactive material.

Section V. Fire and Explosion Data

Flammability	Flammable.	Auto-Ignition	Not available.
Flash Points	32°C (89.6°F).	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO ₂).		
Fire Hazards	Not available.		
Explosion Hazards	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	Flammable liquid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Consult with local fire authorities before attempting large scale fire-fighting operations.		

Section VI. Accidental Release Measures

Spill Cleanup Instructions	Flammable liquid. Keep away from heat. Mechanical exhaust required. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. DO NOT touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Consult federal, state, and/or local authorities for assistance on disposal.
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Section VII. Handling and Storage

Handling and Storage Information	FLAMMABLE. Keep away from heat. Mechanical exhaust required. Avoid excessive heat and light. DO NOT ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively. Always store away from incompatible compounds such as oxidizing agents.
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Section VIII. 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 station and safety shower is proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Vapor respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
	
Exposure Limits	Not available.

Section IX. Physical and Chemical Properties

Physical state @ 20°C	Liquid. (Clear, colorless.)	Solubility	Soluble in water, ether, acetone, and benzene.
Specific Gravity	0.962 @ 20°C (water=1)		
Molecular Weight	90.12	Partition Coefficient	Not available.
Boiling Point	120.1°C (248.2°F)	Vapor Pressure	1.6 kPa (@ 25°C)
Melting Point	-96°C (-140.8°F)	Vapor Density	3.11 (Air = 1)
Refractive Index	1.4034 @ 20°C	Volatility	Not available.
Critical Temperature	Not available.	Odor	Mild ethereal
Viscosity	Not available.	Taste	Bitter.

Section X. Stability and Reactivity Data

Stability	This material is stable if stored under proper conditions. (See Section VII for instructions)
Conditions of Instability	Avoid excessive heat and light.
Incompatibilities	Reactive with oxidizing agents.

Section XI. Toxicological Information

RTECS Number	UB7700000
Routes of Exposure	Eye Contact. Ingestion. inhalation.
Toxicity Data	Rat LC ₅₀ (inhalation) 10000ppm/5H Rat LD ₅₀ (intraperitoneal) 3720mg/kg Rabbit LD ₅₀ (dermal) 13000mg/kg
Chronic Toxic Effects	CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY Reproductive Effects: Rat TCl _o (inhalation) 3000 ppm/6 hours, female 6-15 days of pregnancy. Toxic Effects: Specific Developmental Abnormalities - Musculoskeletal system. Rat TCl _o (inhalation) 3000 ppm/6 hours, female multigeneration. Toxic Effects: Maternal Effects - Other Effects. Effects on Newborn - Live birth index. Effects on Newborn - Physical. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.
Acute Toxic Effects	No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity	Not available.
Environmental Fate	Propylene glycol methyl ether may be released to the environment in emissions or in wastewater during its production, use in inks, cleaning agents, grease and paint removers and pesticidal formulations, and during its transport and disposal. If released on soil, propylene glycol methyl ether would be expected to biodegrade and leach since it has a very low adsorptivity to soil. If released in water, propylene glycol methyl ether may also biodegrade. It would not be expected to volatilize from water, adsorb to sediment, photolyze or hydrolyze. In the atmosphere, propylene glycol methyl ether will react with photochemically-produced hydroxyl radicals (estimated half-life 24.5 hr). Under photochemical smog conditions its half-life is about 3.1 hr. It would also be expected to be washed out of the air by rain. Exposure to propylene glycol methyl ether in the workplace will be via inhalation and dermal contact. The general public will most likely be exposed to propylene glycol methyl ether in indoor air via inhalation.

Section XIII. Disposal Considerations

Waste Disposal	Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.
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Section XIV. Transport Information

DOT Classification	CLASS 3: Flammable liquid.
PIN Number	UN3092
Proper Shipping Name	1-Methoxy-2-propanol
Packing Group (PG)	III
DOT Pictograms	

Section XV. Other Regulatory Information and Pictograms

TSCA Chemical Inventory (EPA)	This compound is ON the EPA Toxic Substances Control Act (TSCA) inventory list.
WHMIS Classification (Canada)	CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). On DSL.
EINECS Number (EEC)	216-455-5
EEC Risk Statements	R10- Flammable. R18- In use, may form flammable/explosive vapor-air mixture.
Japanese Regulatory Data	ENCS No: 7-97X

Section XVI. Other Information**Version 1.0****Validated on 10/29/2001.****Printed 2/28/2005.****Notice to Reader**

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.

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