

SAFETY DATA SHEET

Methanol

SECTION 1. IDENTIFICATION

Product identifier	Methanol
Other identifiers	Methyl alcohol; wood alcohol; carbinol; CAS 67-56-1; EC 200-659-6
Recommended use	Industrial solvent and deicer; chemical intermediate and feedstock where appropriate.
Restrictions on use	For industrial/professional use. Not for consumer ingestion, beverage use, or any use inconsistent with applicable requirements.
Distributor / responsible party	Solvents USA 9436 W Lake Mead Blvd., Suite 5-1216 Las Vegas, NV 89134, USA
Business telephone	708-280-1184
24-hour emergency telephone	CHEMTREC: 800-424-9300 (United States/Canada)

SECTION 2. HAZARD(S) IDENTIFICATION

OSHA HCS classification	Flammable liquid - Category 2 Acute toxicity, oral - Category 3 Acute toxicity, dermal - Category 3 Acute toxicity, inhalation - Category 3 Serious eye irritation - Category 2A Specific target organ toxicity, single exposure - Category 1 (optic nerve and central nervous system)
Signal word	DANGER
Hazard statements	H225 Highly flammable liquid and vapor. H301 Toxic if swallowed. H311 Toxic in contact with skin. H319 Causes serious eye irritation. H331 Toxic if inhaled. H370 Causes damage to organs (optic nerve and central nervous system).



FLAME



SKULL AND CROSSBONES



HEALTH HAZARD

Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond containers and receiving equipment. Use explosion-proof equipment and non-sparking tools. Prevent static discharge. Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using. Use only outdoors or with adequate ventilation. Wear protective gloves, protective clothing and eye/face protection.
Response	IF SWALLOWED: Immediately call a poison center/doctor. Rinse mouth. Do not induce vomiting. IF ON SKIN (or hair): Immediately remove contaminated clothing and rinse skin with water/shower. IF INHALED: Move to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if easy and continue rinsing. If exposed: Call a poison center/doctor. Wash contaminated clothing before reuse. In case of fire: Use alcohol-resistant foam, dry chemical, carbon dioxide or water fog.
Storage	Store in a well-ventilated place. Keep container tightly closed and cool. Store locked up.
Disposal	Dispose of contents/container through an authorized facility in accordance with applicable regulations.

Other hazards	Methanol can be absorbed through skin. Effects may be delayed and can include metabolic acidosis, visual impairment, blindness, central nervous system depression, coma and death. Odor does not provide adequate warning.
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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Methanol	CAS 67-56-1 EC 200-659-6 greater than 99% by weight
Impurities	No stabilizing additives or hazardous impurities identified in the supplied SDS at concentrations that change classification.

SECTION 4. FIRST-AID MEASURES

General	This is a medical emergency. First-aid providers must protect themselves from exposure. Immediate poison-center and medical evaluation is required after significant exposure; symptoms may be delayed.
Inhalation	Immediately move to fresh air. Keep warm and at rest. If breathing is difficult, trained personnel may give oxygen. If breathing stops, begin artificial respiration/CPR using appropriate barrier protection. Seek immediate medical attention.
Skin contact	Immediately remove contaminated clothing, shoes and leather items. Rinse skin with water/shower for at least 15 minutes. Seek immediate medical attention. Wash clothing before reuse; discard contaminated leather.
Eye contact	Immediately rinse cautiously with water for at least 15 minutes, lifting eyelids. Remove contact lenses if present and easy. Continue rinsing and obtain immediate medical attention, preferably ophthalmologic evaluation.
Ingestion	Immediately call a poison center and obtain emergency medical treatment. Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person.
Symptoms/effects	Headache, dizziness, nausea, vomiting, weakness, confusion, drowsiness and incoordination may occur. Severe poisoning may cause metabolic acidosis, blurred or dim vision, blindness, seizures, coma, respiratory failure and death. A symptom-free delay of 12-24 hours or longer may occur.
Medical treatment	Treat as methanol poisoning. Fomepizole is the preferred antidote where available; ethanol therapy and hemodialysis may be indicated. Antidotal therapy must be directed by qualified medical personnel. Monitor acid-base status, serum methanol, vision, electrolytes and respiratory/CNS function.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable media	Alcohol-resistant foam, dry chemical, carbon dioxide, water spray or water fog.
Unsuitable media	Do not use a direct solid water stream; it may spread burning liquid.
Specific hazards	Highly flammable liquid and vapor. Vapor is heavier than air, may travel and flash back, and may form explosive mixtures. Containers may rupture when heated. Methanol burns with a pale blue flame that may be difficult to see. Combustion produces carbon monoxide and carbon dioxide.
Firefighter protection	Wear positive-pressure self-contained breathing apparatus and full protective clothing. Approach from upwind. Cool exposed containers with water spray from a protected position. Withdraw if venting increases or containers discolor.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate unnecessary personnel and isolate the area. Eliminate all ignition sources. Ventilate. Avoid breathing vapor/mist and all skin or eye contact. Use non-sparking tools and grounded/bonded equipment. Trained responders must use Section 8 protection.
Environmental precautions	Prevent entry into drains, sewers, waterways, soil, basements and confined spaces. Notify authorities when required. Report releases at or above applicable thresholds.
Containment/cleanup	Stop leak if safe. Dike large spills. Use vapor-suppressing foam where appropriate. Absorb with dry sand, earth or other noncombustible compatible material and place in closed, labeled containers. Do not use combustible absorbents such as sawdust.

SECTION 7. HANDLING AND STORAGE

Safe handling	Use only with adequate ventilation. Keep away from ignition sources. Ground and bond all containers, tanks, piping and transfer equipment. Use explosion-proof equipment and non-sparking tools. Avoid splash filling and free fall; control transfer velocity and static accumulation. Do not use compressed air for transfer. Empty containers retain toxic, flammable residue; do not cut, weld, drill, grind or pressurize.
Storage	Store locked in a cool, dry, well-ventilated flammable-liquid area, away from direct sunlight, food/feed and incompatible materials. Keep containers tightly closed and upright. Protect drums and totes from physical damage. Use secondary containment where appropriate. Follow NFPA 30, NFPA 77 and applicable fire codes.
Tanker/cargo tank transfer	Only trained personnel may load or unload. Verify product, receiving capacity, connections, valves, hoses and bonding/grounding before transfer. Set brakes, chock wheels and attend the operation continuously. Prevent overfill and static discharge. Depressurize, drain and safely disconnect lines under site procedures and current DOT requirements.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL	Methanol: 200 ppm (260 mg/m ³), 8-hour TWA.
NIOSH REL / IDLH	REL: 200 ppm (260 mg/m ³) TWA; 250 ppm (325 mg/m ³) STEL, with skin notation. IDLH: 6,000 ppm.
ACGIH TLV	200 ppm TWA; 250 ppm STEL; skin notation. Consult the current licensed TLV publication.
Engineering controls	Use closed systems and local/general exhaust to keep exposure below limits and prevent flammable vapor accumulation. Use electrically classified equipment. Provide readily accessible eyewash and safety shower. Consider continuous vapor monitoring for bulk operations.
Eye/face	Chemical splash goggles; add a face shield for transfer, sampling, splash or spray hazards.
Hands/skin	Wear chemical-resistant gloves and clothing selected using manufacturer permeation data. Butyl rubber, barrier laminate or other specifically rated materials may be suitable. Prevent all skin contact.
Respiratory	Use a NIOSH-approved respirator selected under a compliant respiratory-protection program when engineering controls are insufficient. For unknown concentrations, emergencies or IDLH conditions, use positive-pressure full-face SCBA or equivalent supplied-air protection with auxiliary SCBA.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state / color	Clear, colorless liquid
Odor / threshold	Characteristic pungent alcohol odor; threshold not reliable for warning
Melting/freezing point	Approximately -97.8 C (-144 F)
Boiling point	Approximately 64 C (147 F)
Flammability	Highly flammable liquid and vapor; Class IB flammable liquid
Flammability limits	Lower 6.0 vol% (source SDS: 7.3%); upper 36 vol%
Flash point	Approximately 11-12 C (52-54 F), closed cup
Auto-ignition	Approximately 463 C (867 F)
Decomposition temperature	No data available
pH	No data available / not applicable
Kinematic viscosity	No data available
Solubility	Completely miscible with water
Log Kow	Approximately -0.77
Vapor pressure	Approximately 96-97 mm Hg at 20 C
Evaporation rate	1.9 (n-butyl acetate = 1), source SDS
Density	Approximately 0.79 g/cm ³ at 20 C
Relative vapor density	1.1 (air = 1)
Particle characteristics	Not applicable - liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Reacts vigorously or violently with strong oxidizers; fire and explosion hazard.
Stability	Stable under recommended handling and storage conditions.
Hazardous reactions	Flammable vapor/air mixtures may ignite or explode. Hazardous polymerization will not occur.
Conditions to avoid	Heat, sparks, flames, static discharge, direct sunlight and other ignition sources.
Incompatible materials	Strong oxidizing agents; strong acids and bases; acid chlorides; alkali metals; metal hydrides and other reactive materials.
Decomposition products	Carbon monoxide, carbon dioxide and irritating/toxic smoke during combustion.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes	Inhalation, ingestion, skin absorption and eye contact.
Acute toxicity	Toxic if swallowed, in contact with skin or inhaled. Source SDS reports oral LD50 (human) 1,000 mg/kg and dermal LD50 (rabbit) 20,000 mg/kg. Human toxicity varies substantially; relatively small ingested amounts may cause blindness or death.
Eye/skin	Causes serious eye irritation. Repeated skin contact may cause defatting or dermatitis. Systemic poisoning can occur through skin absorption.
Target organs	Causes damage after single exposure, especially to the optic nerve/eyes and central nervous system; metabolic acidosis is a key systemic effect.
Delayed/chronic effects	Visual effects and acidosis may be delayed. Repeated excessive exposure may affect vision, nervous system and other organs.
Sensitization/mutagenicity	Not classified based on available information.
Carcinogenicity	Not listed as a carcinogen by OSHA, NTP or IARC.
Reproductive toxicity	The supplied SDS notes fetal effects in laboratory animals. Classification is not assigned here based solely on that statement; evaluate current product-specific evidence if reproductive classification is contemplated.
Aspiration hazard	Not classified; vomiting may create an aspiration risk.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Generally low to moderate acute aquatic toxicity at environmental concentrations; large releases may be harmful. Source SDS cites goldfish effects at 250 mg/L over 24 hours.
Persistence/degradability	Readily biodegradable under aerobic conditions.
Bioaccumulation	Low potential for bioaccumulation (log Kow approximately -0.77).
Mobility/other effects	Highly mobile in soil and water. Volatile. Prevent uncontrolled environmental release.

SECTION 13. DISPOSAL CONSIDERATIONS

Recover or recycle where feasible. Dispose through an authorized hazardous-waste contractor in accordance with federal, state and local requirements. Unused product may exhibit the RCRA ignitability characteristic (D001); discarded commercial chemical product may also be associated with RCRA code U154. The generator must make the final waste determination. Do not discharge to drains or waterways. Empty drums, totes and cargo tanks may retain toxic, flammable vapor; do not cut, weld, grind, drill, pressurize or reuse unless properly cleaned, gas-freed and reconditioned.

SECTION 14. TRANSPORT INFORMATION

U.S. DOT	UN1230, Methanol, 3 (6.1), PG II; Emergency Response Guide 131.
Reportable quantity	Methanol has a 5,000 lb CERCLA reportable quantity. When one package contains 5,000 lb or more of methanol, use the required RQ notation in the shipping description. Typical drums and 270-gallon totes are below this per-package threshold; a highway cargo tank commonly exceeds it.
TDG (Canada)	UN1230, METHANOL, 3 (6.1), PG II.
IATA/ICAO	UN1230, Methanol, 3 (6.1), PG II. Current packing instructions and quantity limits apply.
IMDG	UN1230, METHANOL, 3 (6.1), PG II; marine pollutant: No.
Packaging precautions	Drums, intermediate bulk containers/totes and highway cargo tanks must be authorized, compatible, closed, marked, labeled/placarded and documented under current modal requirements. Trained shipping personnel must determine shipment-specific compliance.

SECTION 15. REGULATORY INFORMATION

EPCRA 311/312	Hazard categories include flammable, acute toxicity, serious eye damage/eye irritation and specific target organ toxicity - single exposure.
EPCRA 313	Methanol is subject to Section 313/Toxic Release Inventory reporting when applicable thresholds are met.
CERCLA	Methanol is a listed hazardous substance with a 5,000 lb reportable quantity.
Clean Air Act	Methanol is listed as a hazardous air pollutant under CAA Section 112.
RCRA	Potential characteristic hazardous waste D001; unused discarded commercial chemical product U154.
TSCA	Methanol is listed on the TSCA Chemical Substance Inventory.
California Proposition 65	Methanol is listed for developmental toxicity. California warning obligations depend on exposure and applicable safe-harbor provisions.

SECTION 16. OTHER INFORMATION

Preparation date	July 24, 2026
Revision	1.0 - Initial updated Solvents USA issue
Primary sources	Solvents USA source SDS dated February 26, 2020; OSHA/NIOSH methanol data; EPA consolidated regulatory lists; current U.S. Hazard Communication and hazardous-materials frameworks.
NFPA 704 (reference)	Health 1 Flammability 3 Instability 0 (OSHA chemical database reference)

Distributor statement: Solvents USA distributes this product by direct shipment and does not manufacture, blend, handle or warehouse it. This does not change the precautions required for carriers, consignees, users or emergency responders.

The information is based on data believed reliable at the date of issue and is intended for hazard communication. It is not a product specification or warranty. Users must determine suitability and comply with applicable requirements. A qualified SDS/regulatory professional should approve the document before commercial release.

END OF SAFETY DATA SHEET