

Methanol MSDS

Aban Chemical

A new look for safety data

Section 1: Chemical Product and Company Identification

Product Name: Methanol

Chemical Formula: CH₃OH

Company: Aban Chemical

Website: www.abanchemical.com

Section 2: Hazards Identification

Classification:

- Flammable liquids: Category 2
- Acute toxicity: Category 3 (oral, dermal, inhalation)
- Specific target organ toxicity - single exposure: Category 1 (eyes, central nervous system)

Label Elements:

- **Pictograms:** Flame, Skull and crossbones, Health hazard
- **Signal Word:** Danger
- **Hazard Statements:** Highly flammable liquid and vapor. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs (eyes, central nervous system).
- **Precautionary Statements:** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF exposed: Call a POISON CENTER or doctor/physician.

Section 3: Composition/Information on Ingredients

Component	CAS Number	Concentration
Methanol	67-56-1	>99%

Section 4: First Aid Measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician.

Skin Contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center or doctor/physician if you feel unwell.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Ingestion: Immediately call a poison center or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Section 5: Firefighting Measures

Suitable Extinguishing Media:

Alcohol-resistant foam, carbon dioxide (CO₂), dry chemical, water spray.

Unsuitable Extinguishing Media:

Water jet.

Specific Hazards Arising from the Chemical:

Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in confined areas. Carbon oxides may be formed in fire.

Special Protective Equipment and Precautions for Firefighters:

Wear self-contained breathing apparatus (SCBA) and full protective clothing. Use water spray to cool fire-exposed containers.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate personal protective equipment (PPE). Remove all sources of ignition. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and Materials for Containment and Cleaning Up:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

Section 7: Handling and Storage

Precautions for Safe Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Conditions for Safe Storage, Including any Incompatibilities:

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container tightly closed. Store locked up. Ground/bond container and receiving equipment.

Section 8: Exposure Controls/Personal Protection

Component	Exposure Limits	Basis
Methanol	200 ppm TWA	ACGIH TLV
Methanol	200 ppm PEL	OSHA

Appropriate Engineering Controls:

Use local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Personal Protective Equipment:

- **Eye/Face Protection:** Tightly fitting safety goggles. Face shield (8-inch minimum).
- **Skin Protection:** Wear impervious gloves (e.g., neoprene, nitrile rubber). Wear appropriate protective clothing.
- **Respiratory Protection:** If exposure limits are exceeded or if irritation is experienced, use a full-face supplied air respirator.

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Clear, colorless liquid
Odor	Alcohol-like
Odor Threshold	0.17 - 696 ppm
pH	Not available
Melting Point/Freezing Point	-98 °C
Boiling Point/Boiling Range	64.7 °C
Flash Point	12 °C
Evaporation Rate	5.2 (Butyl Acetate = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limits	6.0 % / 36.0 %
Vapor Pressure	128 hPa at 20 °C
Vapor Density	1.11 (Air = 1)
Relative Density	0.791 g/cm ³ at 20 °C
Solubility	Completely miscible with water
Partition Coefficient: n-octanol/water	-0.77
Auto-Ignition Temperature	455 °C
Decomposition Temperature	Not available
Viscosity	0.544 - 0.59 mPa.s at 20 °C

Section 10: Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Vapors may form explosive mixture with air.

Conditions to Avoid: Heat, sparks, open flames, and other sources of ignition.

Incompatible Materials: Oxidizing agents, acids, bases, alkali metals.

Hazardous Decomposition Products: Carbon oxides.

Section 11: Toxicological Information

Acute Toxicity:

- Oral LD50: Rat - 6,200 mg/kg
- Dermal LD50: Rabbit - 15,800 mg/kg
- Inhalation LC50: Rat - 64,000 ppm (4 h)

Skin Corrosion/Irritation: Rabbit - Mild skin irritation

Serious Eye Damage/Eye Irritation: Rabbit - Irritating to eyes.

Respiratory or Skin Sensitization: Not a skin sensitizer in animal tests.

Germ Cell Mutagenicity: Not classified based on available information.

Carcinogenicity:

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive Toxicity: Not classified based on available information.

Specific Target Organ Toxicity - Single Exposure: Causes damage to organs (eyes, central nervous system).

Specific Target Organ Toxicity - Repeated Exposure: Not classified based on available information.

Aspiration Hazard: Not classified based on available information.

Section 12: Ecological Information

Toxicity:

- Fish LC50 (96 h): *Lepomis macrochirus* - 15,400 mg/L
- Daphnia EC50 (48 h): *Daphnia magna* - >10,000 mg/L
- Algae EC50 (72 h): *Pseudokirchneriella subcapitata* - ~22,000 mg/L

Persistence and Degradability:

Readily biodegradable.

Bioaccumulative Potential:

Low bioaccumulation potential.

Mobility in Soil:

Highly mobile in soil.

Other Adverse Effects:

None known.

Section 13: Disposal Considerations

Waste Treatment Methods:

Dispose of in accordance with local, state, and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Section 14: Transport Information

Regulation	UN Number	Proper Shipping Name	Hazard Class	Packing Group
DOT	UN1230	Methanol	3	II
IMDG	UN1230	Methanol	3 (6.1)	II
IATA	UN1230	Methanol	3 (6.1)	II

Section 15: Regulatory Information

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

Methanol (CAS 67-56-1) is subject to SARA Title III, Section 313 reporting requirements.

TSCA Inventory:

All components are listed on the TSCA inventory.

SARA 311/312 Hazards:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

Section 16: Other Information

This information 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 Aban Chemical 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 Aban Chemical has been advised of the possibility of such damages.