



MATERIAL SAFETY DATA SHEET (MSDS)

Methanol

Version: 1.0

Issue Date: 14 July 2026

1. Product Identification

Product Name: Methanol

Chemical Name: Methyl Alcohol

Chemical Formula: CH₃OH

CAS Number: 67-56-1

UN Number: UN 1230

Recommended Uses:

Industrial solvent, chemical intermediate, formaldehyde production, biodiesel production, paints, coatings, pharmaceuticals, adhesives, fuels, antifreeze, and laboratory applications.

Supplier: Basekim Chemical Production Co. Ltd.

Email: info@basekim.com

Website: www.basekim.com

Emergency Telephone: Contact local emergency services or poison information center.



2. Hazard Identification

GHS Classification

- Flammable Liquid – Category 2
- Acute Toxicity (Oral) – Category 3
- Acute Toxicity (Dermal) – Category 3
- Acute Toxicity (Inhalation) – Category 3
- Specific Target Organ Toxicity (Single Exposure) – Category 1

Signal Word: DANGER

Hazard Statements

- Highly flammable liquid and vapor.
- Toxic if swallowed.
- Toxic in contact with skin.
- Toxic if inhaled.
- Causes damage to organs (optic nerve and central nervous system).

Precautionary Statements

- Keep away from heat, sparks, open flames and hot surfaces.
- Use only in well-ventilated areas.
- Wear protective gloves, protective clothing, and eye/face protection.
- Avoid breathing vapors.
- Keep container tightly closed.
- Ground and bond containers during transfer.

3. Composition / Information on Ingredients

Component	CAS No.	Concentration
Methanol	67-56-1	≥99.85%



4. First Aid Measures

Inhalation

Move the person to fresh air immediately. Keep at rest. Obtain immediate medical attention.

Skin Contact

Remove contaminated clothing immediately. Wash thoroughly with soap and water. Seek immediate medical attention.

Eye Contact

Flush cautiously with water for at least 15 minutes while holding eyelids open. Obtain immediate medical attention.

Ingestion

Do **NOT** induce vomiting.

Rinse mouth if conscious.

Immediately contact a poison center or physician.

Methanol poisoning can cause blindness and may be fatal.

5. Fire Fighting Measures

Suitable Extinguishing Media

- Alcohol-resistant foam
- Dry chemical powder
- Carbon dioxide
- Water spray (for cooling containers)



Special Hazards

Highly flammable liquid and vapor.

Vapors may travel considerable distances and ignite remotely.

Heating may cause containers to rupture.

Combustion products include:

- Carbon monoxide
- Carbon dioxide

Firefighters should wear self-contained breathing apparatus (SCBA).

6. Accidental Release Measures

Evacuate unnecessary personnel.

Eliminate all ignition sources.

Wear appropriate PPE.

Provide adequate ventilation.

Contain spill using sand or inert absorbent.

Prevent entry into drains and waterways.

Collect spilled material into suitable containers for disposal.

7. Handling and Storage

Handle only in well-ventilated areas.

Avoid inhalation of vapors.

Keep away from heat, sparks, flames, and static electricity.

Use explosion-proof equipment.



Ground all transfer equipment.

Store in tightly closed containers in a cool, dry, well-ventilated area.

Protect from direct sunlight and oxidizing agents.

8. Exposure Controls / Personal Protection

Engineering Controls

Explosion-proof local exhaust ventilation.

Eye Protection

Chemical splash goggles and face shield.

Hand Protection

Chemical-resistant gloves (nitrile, butyl rubber, or neoprene).

Respiratory Protection

Approved organic vapor respirator where ventilation is insufficient.

Protective Clothing

Chemical-resistant clothing and safety footwear.

9. Physical and Chemical Properties

Property	Typical Value
Appearance	Clear, colorless liquid
Odor	Mild alcoholic odor
Molecular Formula	CH ₃ OH
Molecular Weight	32.04 g/mol
Density (20°C)	0.79 g/cm ³
Boiling Point	64.7°C
Melting Point	-97.6°C
Flash Point	11°C (Closed Cup)



Property	Typical Value
Auto-Ignition Temperature	464°C
Water Solubility	Completely miscible
Vapor Pressure (20°C)	Approximately 13 kPa

10. Stability and Reactivity

Stable under recommended storage conditions.

Avoid:

- Heat
- Sparks
- Flames
- Oxidizing agents
- Strong acids
- Strong bases

Hazardous decomposition products include carbon monoxide and carbon dioxide.

11. Toxicological Information

Methanol is toxic by inhalation, skin absorption, and ingestion.

Exposure may cause:

- Headache
- Dizziness
- Nausea
- Vomiting
- Central nervous system depression
- Blurred vision
- Permanent blindness
- Death following severe poisoning

Repeated exposure may damage the optic nerve and central nervous system.



12. Ecological Information

Prevent uncontrolled release into the environment.

Methanol is readily biodegradable but large releases may contaminate groundwater and surface water.

Dispose according to local environmental regulations.

13. Disposal Considerations

Dispose of product and contaminated packaging through an approved hazardous waste contractor.

Do not discharge into drains or waterways.

14. Transport Information

Item	Information
UN Number	UN 1230
Proper Shipping Name	Methanol
Hazard Class	3 (Flammable Liquid)
Subsidiary Risk	6.1 (Toxic)
Packing Group	II

Transport in accordance with ADR, IMDG, and IATA regulations.

15. Regulatory Information

Handle according to applicable national and international chemical regulations.



Observe occupational exposure limits for methanol and applicable transport, storage, and workplace safety regulations.

16. Other Information

This Safety Data Sheet applies to industrial-grade methanol.

The information is intended to provide guidance for safe handling, storage, transportation, and disposal. Users are responsible for determining the suitability of the product for their intended application and for complying with all applicable regulations.

Manufacturer: Basekim Chemical Production Co. Ltd.

Email: info@basekim.com

Website: www.basekim.com