

Revision date: Mar-23-2015

Version: 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name/designation:	Methanol
Product No.:	BDH2018, BDH 2029
Other means of identification:	Methyl Alcohol, Wood Alcohol

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended Use No information available

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company VWR International, LLC
 Radnor Corporate Center
 100 Matsonford Road
 Radnor, PA 19087-8660
 Telephone 610.386.1700

1.4. Emergency Telephone number

CHEMTREC 800.424.9300
 CANUTEC 613.996-6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

For the full text of the H-Statement(s) and R-phrases(s) mentioned in this Section, see Section 16.

Hazard classes and hazard categories	Hazard statements
Category 2	Flammable liquids
Category 3	Acute toxicity (Oral)
Category 3	Acute toxicity (Dermal)
Category 1	Specific Target Organ Toxicity-Single Exposure (Eyes, Central Nervous System)

2.2. GHS Label elements, including precautionary statements

Symbol(s)

Xi - Irritant
F - Highly flammable

R-code(s)

R11, Xi;R36, R66, R67

Pictograms



Signal word
DANGER

Hazard statements	
H225	Highly flammable liquid and vapor
H370	Causes damage to organs (Eyes, Central Nervous System)
H301 + H311	Toxic if swallowed or in contact with skin

Precautionary	
P210	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling.
P271	Use only outdoors, or in a well-ventilated area.
P280	Wear protective gloves/eye protection/face protection
P501	Dispose of contents/container in accordance with local, state, and federal regulations
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

2.3. WHIMS Classification

B2 Flammable liquid
D-1A Very Toxic
D2B Toxic materials (Skin and Eye Irritant)

2.4. Hazards not otherwise classified (HNOC) or not covered by GHS or WHIMS

None especially mentioned.

SECTION 3: Composition / information on ingredients

3.1. Hazard components

Chemical name	Formula	Molecular weight	CAS#	Weight%
Methanol	C-H4-O	58.08	67-56-1	99-100

SECTION 4: First aid measures

4.1. General information

In case of inhalation move the exposed person to fresh air at once and keep at rest in a position comfortable for breathing. If breathing is difficult administer Oxygen, or give artificial respiration (if trained)

Get medical attention immediately

In case of skin contact remove victim from source of contamination. Promptly flush contaminated skin with soap and water for at least 15 minutes. Promptly remove clothing if soaked through and flush skin with water. Seek medical attention if irritation persists.

In case of eye contact wash eyes immediately with plenty of water for at least 15 minutes while lifting upper and lower eyelids. Get medical attention immediately.

In case of ingestion never make an unconscious person vomit or drink fluids. Do NOT induce vomiting. Rinse mouth. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Burning sensation in eyes, temporary reddening of skin with potential dryness and cracking, Headache, dazed feeling, vomiting, nausea with skin absorption/inhalation

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use CO₂, dry chemical, or foam If using water or foam, prevent product and runoff from entering drains, sewers or surface water due to high toxicity to aquatic organisms

Extinguishing media which shall not be used for safety reasons

No information available

5.2. Special hazards arising from the substance or mixture

Special Hazard

None

5.3. Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear

5.4. Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂), peroxides

5.5. Advice for firefighters

5.6. Additional information

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. See Section 12 for additional Ecological Information.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains Do not flush into surface water or sanitary sewer system

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)

6.4. Additional information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this

product. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapors or spray mist

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Containers must be stored in an upright position.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Methanol (67-56-1)	TWA-USA	200 ppm	ACGIH
Methanol (67-56-1)	STEL-USA	250 ppm	ACGIH
Methanol (67-56-1)	TWA-USA	200 ppm/260 mg/m ³	NIOSH REL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas

Personal protection equipment

Eye/face protection

Tightly fitting safety goggles

Skin protection

Protective gloves and antistatic boots. Wear fire/ flame resistant/ retardant clothing impervious gloves. Long sleeved clothing apron.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn

Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

a) Appearance:

Physical state: Liquid

- Color:** Clear
- b) **Odor:** mild, alcohol like
 - c) **Odor Threshold:** 4.2-8940 ppm
 - d) **pH:** No information available
 - e) **Melting point/freezing point:** No information available/ -97.8°C /-144 °F
 - f) **Initial boiling point and boiling range:** 64°C / 147°F
 - g) **Flash point:** 11 °C / 52 °F (Closed Cup)
 - h) **Evaporation rate:** 5.9
 - i) **Flammability (solid, gas)** : No information available
 - j) **Upper/lower flammability or explosive limits:** 36.5% (V)/6% (V)
 - k) **Vapor pressure:** 96 mmHg @ 20°C/68°F
 - l) **Vapor density:** 1.0 @ 20°C/68°F Air=1
 - m) **Relative density:** 0.791 g/cm³ @ 20°C/68°F
 - n) **Solubilities:** Completely soluble
 - o) **Partition coefficient (n-Octanol/Water):** log Pow: -0.82
 - p) **Auto-ignition temperature:** 385°C / 725°F
 - q) **Decomposition temperature:** No information available
 - r) **Viscosity:** No information available
 - s) **Explosive properties:** No information available
 - t) **Oxidizing properties:** No information available

9.2. Other information

Softening point: No information available

Molecular weight: 32.04 g/mol

VOC Content (%): No information available

Density VALUE: No information available

Bulk Density VALUE: No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Vapors may form explosive mixtures with air

10.4. Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents Incompatible with strong acids and bases

10.6. Hazardous decomposition products

Fire or mixing with incompatible materials may produce oxides of carbon and other toxic or irritating fumes.

SECTION 11: Toxicology

11.1. Information on toxicological effects

Acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD₅₀:

5,628 mg/kg (RAT)

Inhalation LC₅₀:

Vapor: 64,000 mg/l 4 hours (RAT)

Dermal LD₅₀:

15,800 mg/kg (Rabbit)

Other information on acute toxicity

Skin corrosion/irritation

May cause irritation with redness and pain. May be absorbed through skin with possible systemic effects.

Serious eye damage/eye irritation

Causes eye irritation. Direct contact with eyes produces reversible eye irritation. Methanol ingestion or inhalation can lead to visual irregularities that can proceed to blindness.

Respiratory or skin sensitization

Inhalation of vapors in high concentration may cause irritation of respiratory system. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness and possibly death.

Germ cell mutagenicity

In vivo tests did not show mutagenic effects.

Carcinogenicity

This product does NOT contain a substance which is classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Reproductive toxicity

Does not show teratogenic effects in animal experiments. (Rat, Monkey)

Specific target organ toxicity-single exposure

Central nervous system

Specific target organ toxicity-repeated exposure

No information

Aspiration hazard

No information

Additional information

Inhalation of vapors may cause drowsiness or dizziness

SECTION 12: Ecological information

12.1. Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Methanol	22,000 mg/l: 96 h Fresh Water Algae	15,400 mg/l: 96 h Bluegill sunfish	10,000 mg/l: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

Chemical name	log Pow
Methanol	-0.77

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products:

Dispose of in accordance with local, state, and federal regulations

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information: According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

Land Transport DOT (U.S.)

UN Number: 1230
Proper Shipping name: Methanol
Transport Hazard Classes
Class: 3
Hazard Label(s): Flammable 3
Packing Group: II
Environmental hazard(s): Marine Pollutant: No
Special precautions for user: None Especially Mentioned

Sea Transport IMDG

UN Number: 1230
Proper Shipping name: Methanol
Transport Hazard Classes
Class: 3, (6.1)
Hazard Label(s): Flammable 3, (6.1)
Packing Group: II
Environmental hazard(s): Marine Pollutant: No
Segregation Group: EMS- No.: F-E, S-D
Special precautions for user: None Especially Mentioned

Air Transport IATA

UN Number: 1230
Proper Shipping name: Methanol
Transport Hazard Classes
Class: 3, (6.1)
Hazard Label(s): Flammable 3
Packing Group: II
Environmental hazard(s): Marine Pollutant: No
Special precautions for user: None Especially Mentioned

SECTION 15: Regulatory information

OSHA Hazards

Flammable liquid, Teratogen

SARA 302 Extremely Hazardous Substances

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

SARA 313 (TRI reporting)

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Methanol	67-56-1	100%
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CERCLA Reportable Quantity

Components	CAS No.:	Component RQ (lbs)	Calculated Product RQ lbs
Methanol	67-56-1	5000	5000

SARA 311/312 Hazardous Chemicals

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Massachusetts Right-To-Know Substance List

Listed as: Methanol

Pennsylvania Right-To-Know Hazardous Substances

Listed as: Methanol

New Jersey Worker and Community Right-To-Know Components

Listed as: Methanol

California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

67-56-1 Methanol

Inventory status:

Canada DSL/NDSL Inventory List

US TSCA Inventory List

SECTION 16: Other information

Full text of H-Statement(s) and R-phrase(s)

R11 - Highly flammable.

R36 - Irritating to eyes.

R24 + R25 – Toxic by inhalation, in contact with skin and if swallowed.
H225 - Highly flammable liquid and vapour.
H370 - Causes damage to organs (Eyes, Central Nervous System).
H301 + H311 – Toxic if swallowed or in contact with skin.

Canadian Carcinogenicity hazard class

PHNOC hazard class: No information

HHNOC hazard class: No information

Bio-hazardous Infectious Materials hazard class: No information

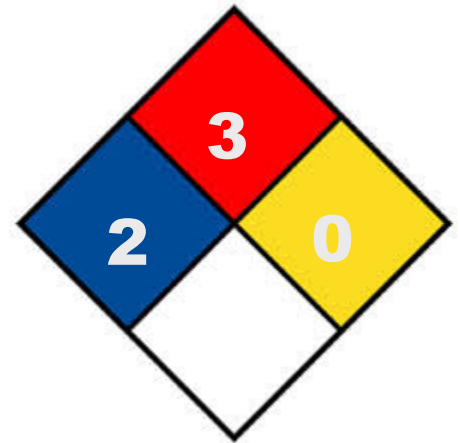
NFPA Rating:

Health: 2

Flammability: 3

Reactivity: 0

Special Hazard:



DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International, LLC and its Affiliates shall not be held liable for any damage resulting from handling.