



Safety Data Sheet

Methanol

SECTION 1: Identification

1.1 GHS Product identifier

Product name Methanol

1.2 Other means of identification

Methyl alcohol, wood alcohol

1.3 Recommended use of the chemical and restrictions on use

Manufactured and sold for industrial use only.

1.4 Supplier's details

Name High Purity Products
Address 14546 N. Lombard Street
Portland OR 97203
United States of America

Telephone 503-227-1616
email help.desk@highpp.com

1.5 Emergency phone number

CHEMTREC: 1-800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Flammable liquids, Cat. 2
- Acute toxicity, dermal, Cat. 3
- Acute toxicity, inhalation, Cat. 3
- Acute toxicity, oral, Cat. 3
- Specific target organ toxicity, single exposure, Cat. 1

2.2 GHS label elements, including precautionary statements

Safety Data Sheet

Methanol

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor
H301 Toxic if swallowed
H311 Toxic in contact with skin
H331 Toxic if inhaled
H370 Causes damage to organs, eyes, respiratory system, central nervous system, and gastrointestinal tract

Precautionary statement(s)

P102 Keep out of reach of children.
P234 Keep only in original packaging.
P240 Ground/bond container and receiving equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P312 IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311 Call a POISON CENTER if you feel unwell.
P403 Store in a well-ventilated place.

SECTION 3: Composition/information on ingredients

3.1 Substance

Components	CAS #	Percent (weight)
Methanol	67-56-1	99 - 100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

In case of skin contact Remove contaminated clothing/shoes. Flush skin with water for at least 15 minutes. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

In case of eye contact Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

Safety Data Sheet

Methanol

If swallowed

Call poison control center or get medical help immediately. If patient is conscious and alert, give 8 ounces of water or juice and induce vomiting, keeping patient's head below hips to prevent aspiration of liquid into lungs. Never induce vomiting on an unconscious person.

- 4.2 SIGNS AND SYMPTOMS OF OVEREXPOSURE ACUTE EFFECTS:** Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes, and nausea.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water fog, "alcohol" foam, dry chemical, or CO₂.

5.2 Specific hazards arising from the chemical

Carbon monoxide and unidentified organic compounds may be formed during combustion. When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

5.3 Special protective actions for fire-fighters

WARNING! Flammable Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

SECTION 6: Accidental release measures

- 6.1 GENERAL PROCEDURES:** WARNING. Flammable. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 GENERAL PROCEDURES:

Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

7.2 STORAGE:

Store away from heat, sparks, and open flame. Keep containers tightly closed when not in use. Do not weld, cut, grind, solder, or drill on or near empty containers. Empty containers may contain explosive concentrations of product vapors.

7.3 COMMENTS:

KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death. Observe all federal, state, and local regulations and National Fire Protection Association (NFPA) Codes with pertain to the specific local conditions of stage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Safety Data Sheet

Methanol

Chemical	CAS Number	NIOSH REL (TWA)
Methanol	67-56-1	200 ppm

8.2 Appropriate engineering controls

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Liquid
Appearance	Clear, colorless, liquid
Color	Colorless
Odor	Pungent odor
Odor threshold	No data available.
pH	Not applicable
Melting point/freezing point	-144 °F
Boiling point or initial boiling point and boiling range	147 °F
Flash point	52 °C
Evaporation rate	Slower than ether.
Flammability	Highly flammable
Lower and upper explosion limit/flammability limit	0.06-0.36% Volume
Vapor pressure	96 mmHg at 25 °C
Relative vapor density	Heavier than air.
Density and/or relative density	0.79
Solubility	Soluble
Partition coefficient n-octanol/water (log value)	-0.52
Auto-ignition temperature	867 °F
Decomposition temperature	No data available.
Kinematic viscosity	No data available.

Particle characteristics

Safety Data Sheet

Methanol

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal conditions.

10.4 Conditions to avoid

Avoid heat, flame, and other sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides, Strong bases, Metals, Peroxides

10.6 Hazardous decomposition products

May form carbon dioxide, carbon monoxide, various hydrocarbons.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

LD50 oral – rat - 5628 mg/kg

LC50 - inhalation - rat – 64000 ppm/ 4H

LD50 - skin - rabbit - 15800 mg/kg

Skin corrosion/irritation

May cause skin and eye irritation

Serious eye damage/irritation

Causes eye irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

Mutation Data

System: Cytogenetic Analysis

Route/Organism: parenteral/grasshopper

Dose: 3000 ppm

Date: March 2019

Mutation Data

System: Cytogenetic Analysis

Route/Organism: oral/mouse

Dose: 1 gm/kg

Date: March 2019

Carcinogenicity

No indication of carcinogenicity to humans

Safety Data Sheet

Methanol

Reproductive toxicity

Reproductive Toxin

STOT-single exposure

Eyes, skin, respiratory system, central nervous system, gastrointestinal tract

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

EC50; Species: *Chlorella fusca* ssp. *vacuolata* (Green Algae) strain 21115; Conditions: freshwater, static, 28 °C, pH 6.9; Concentration: 0.77 µmol/L for 24 hr; Effect: decreased population growth rate /100% purity/

EC50; Species: *Chlorella pyrenoidosa* (Green Algae) 65000-78000 cells/mL; Conditions: static, 25 °C; Concentration: 3.6 µmol/L for 24 hr (95% confidence interval: 3.46-3.74 µg/L; Effect: general growth

EC50; Species: *Pseudokirchneriella subcapitata* (Green Algae) 15000 cells/mL; Conditions: freshwater, static, 24 °C; Concentration: 3010 µg/L for 48 hr (95% confidence interval: 1910-5570 µg/L; Effect: physiology photosynthesis /99% purity formulation/

Persistence and degradability

methanol is not expected to adsorb to suspended solids and sediment

Bioaccumulative potential

Bioconcentration in aquatic organisms is low

Mobility in soil

Methanol is expected to have very high mobility in soil.

SECTION 13: Disposal considerations

DISPOSAL METHOD: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators

SECTION 14: Transport information

DOT (US)

UN Number: UN1230

Class: 3

Packing Group: II

Safety Data Sheet

Methanol

Proper Shipping Name: Methanol
Reportable Quantity: 5,000 lbs

IMDG

UN Number: UN1230
Class: 3
Packing Group: II
Proper Shipping Name: Methanol

IATA

UN Number: UN1230
Class: 3
Packing Group: II
Proper Shipping Name: Methanol

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Chemical name: Methanol
CAS number: 67-56-1

New Jersey Right To Know Components

Chemical name: Methanol
CAS number: 67-56-1

California Prop. 65 Components

State of California to cause birth defects or other reproductive harm.
Methanol
CAS-No. 67-56-1

Pennsylvania Right To Know Components

Chemical name: Methanol
CAS number: 67-56-1

Canadian Domestic Substances List (DSL)

Chemical name: Methanol
CAS: 67-56-1

California Prop. 65 components

Chemical name: Methanol
CAS number: 67-56-1
03/16/2012 - Developmental toxicity

CERCLA RQ Hazardous Substances

Methanol: 5,000 lbs.

EPCRA Section 313 Toxic chemicals

Methanol

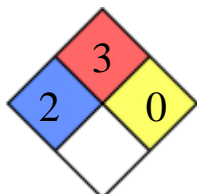
Safety Data Sheet

Methanol

HMIS Rating

Methanol	
HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

High Purity Products provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. HIGH PURITY PRODUCTS MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, HIGH PURITY PRODUCTS WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.