

Methanol

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Methanol

Synonyms/Generic Names: Methyl Alcohol

Product Number: CP-B7142, CP-C7142, CP-C7142P, CP-E7142, CP-C2305, CP-B2305T, CP-C2305T, CP-T7142, CP-C9635

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals
39103 Warren Road
Westland, MI 48185

For More Information Call: 734-884-4773 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Flammable liquid, Target Organ Effect, Toxic by ingestion, Toxic by skin absorption, Irritant

Target Organs: Eyes, Skin, Respiratory system, Central nervous system, Gastrointestinal tract, Kidney, Liver, Heart

Signal Words: Danger **Pictograms:**



GHS Classification:

Flammable liquids	Category 2
Skin irritation	Category 2
Eye irritation	Category 2A
Specific target organ toxicity – single exposure	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H225	Highly flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H370	Causes damage to organs.

Precautionary Statements:

P210	Keep away from heat/sparks/open flames/hot surfaces- No smoking.
------	--

P260	Do not breathe dust/fumes/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician.

Potential Health Effects

Eyes	Causes irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation
Skin	Toxic if absorbed through skin. Causes skin irritation.
Ingestion	Toxic if swallowed.

NFPA Ratings

Health	1
Flammability	3
Reactivity	0
Specific hazard	Not Avail:

HMIS Ratings

Health	2
Fire	3
Reactivity	0
Personal	H

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Methyl Alcohol	>99.0	67-56-1	200-659-6	CH ₃ OH	32.04 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is flammable. Use carbon dioxide, alcohol-type foam or dry chemical. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides) under fire conditions. Sealed containers may explode if exposed to high heat or fire. See also Stability and Reactivity section.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition- No Smoking. Take measure to prevent the buildup of electrostatic charge. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area in tightly-closed, plainly-labeled containers. Store between 55-100°F for product stability. Do not store with strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of container.

Component	Exposure Limits	Basis	Entity
Methyl Alcohol	200 ppm 262 mg/m ³	TLV	ACGIH
	250 ppm 328 mg/m ³	STEL	ACGIH
	200 ppm 260 mg/m ³	PEL	OSHA
	200 ppm 260 mg/m ³	REL	NIOSH
	250 ppm 325 mg/m ³	STEL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses with face shield.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	Mild alcohol
Odor threshold	Not Available
pH	6.7
Melting point/freezing point	Not Available
Initial boiling point and boiling range	73.9°C (165°F)
Flash point	11°C (52°F) closed cup
Evaporation rate	Not Available
Flammability (solid, gas)	Flammable
Upper/lower flammability or explosive limit	LFL: 6.0% UFL:36.0%
Vapor pressure	(@ 20°C) 129.32 hPa
Vapor density	(air=1) 1.11
Relative density	(@25°C) .9560 g/cm ³
Solubility (ies)	Completely soluble in water
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	464°C (867°F)
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Temperatures below 32°F or above 90°F
Incompatible Materials	Strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity**

Skin	LD50 Dermal- rabbit- 15,800 mg/kg
Eyes	Eyes- rabbit- Eye irritation- 24 hour
Respiratory	LC ₅₀ rat- 85 mg/L, 4 hours LC ₅₀ rat- 64000 ppm, 4 hours
Ingestion	LD ₅₀ rat- 5,628 mg/kg

Carcinogenicity

IARC	No components 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 components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Burning, itching, redness may be harmful if absorbed through skin.
Eyes	Causes irritation. Redness, excessive blinking and watering eyes.
Respiratory	Coughing, wheezing, headache, disorientation, blurred vision, dizziness, fatigue or nausea.
Ingestion	Nausea, vomiting, may cause blindness and central nervous system depression.
Chronic Toxicity	Ingestion may cause blindness
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Pre-and Post- implant mortality
Specific Target Organ Toxicity	Single exposure- Causes damage to organs
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Do not release directly into surface water LC ₅₀ = 15,400 mg/L, 96 hours (Lepomis Macrochirus) LC50- Oncorhynchus mykiss (rainbow trout)- 19,000 mg/l- 96 h LC50- Cyprinus carpio (Carp)- 36,000.00 mg/l- 48 h
Aquatic Invertebrate	EC50- Daphnia magna (Water flea)- 24,500.00 mg/l- 48 h EC100- Daphnia magna (Water flea)- 10,000.00 mg/l- 24 h
Terrestrial	Not Available
Persistence and Degradability	Not Available
Bioaccumulative Potential	BCF of 1
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Place in a clean container to be disposed of through a licensed contractor. Users should review their operation in terms of the applicable federal/ national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1230, Methanol solution, 3, pg II
TDG	UN1230, METHANOL SOLUTION, 3, PG II
IMDG	UN1230, METHANOL SOLUTION, 3, pg II
Marine Pollutant	No
IATA/ICAO	UN1230, Methanol solution, 3 pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Methanol
SARA 312	Methanol
SARA 313	Listed: Methanol
WHMIS Canada	Class B2: Flammable liquids Class D1B: Toxic Material Causing Immediate and Serious Toxic Effects Class D2A: Very Toxic Material Causing Other Toxic Effects Class D2B: Toxic Material Causing Other Toxic Effects

16. OTHER INFORMATION

Revision	Date
Revision 1	06/06/2013
Revision 3	11/05/2021
Revision 4	11/05/2023

Disclaimer: ChemPure Brand Chemicals, ("ChemPure") believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because ChemPure has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. ChemPure MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.