




Methanol

1. Product and Company Identification

Product Name	Methanol
Synonyms	Methyl alcohol, Wood alcohol, Carbinol, Methyl hydroxide, Wood naphtha
MSDS Number	Z2913
Company Identification	Wausau Chemical Corporation 2001 North River Drive Wausau, WI 54403
Telephone	Wausau Chemical Corporation – 715.842.2285 CHEMTREC – 800.424.9300

NFPA diamond and HMIS ratings for this product may be found in section 16 of this Safety Data Sheet.

2. Hazards Identification

Form	Liquid
Color	Clear, colorless
Odor	Slight alcohol odor
OSHA/HCS Status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200): flammable liquid, target organ effect, toxic by inhalation, toxic by ingestion, toxic by skin absorption.
Target Organs	Eyes, liver, kidney, heart, central nervous system
GHS Classification	Flammable liquids (Category 2) Acute toxicity, Oral (Category 3) Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3) Specific target organ toxicity – single exposure (Category 1)
Pictogram	
Signal Word	Danger
Hazard Statement(s)	H225 Highly flammable liquid and vapor. H301 + H311 + H331 Toxic if swallowed, in contact with skin, or if inhaled. H370 Causes damage to organs.
Precautionary Statement(s)	P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/ protective clothing. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.

Potential Acute Health Effects

Inhalation	Toxic if inhaled. Causes respiratory tract irritation.
Ingestion	Toxic if swallowed.
Skin	Toxic if absorbed through skin. Causes skin irritation.



Eyes Causes eye irritation.

See section 11 for more detailed information on health effects and symptoms

3. Composition/Information on Ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>WT %</u>
Methanol	67-56-1	100

4. First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Protection of First Aid Personnel	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If it is suspected that dust, vapor, mist, or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

5. Fire-fighting Measures

Flammability of the Product	Highly flammable
Flash Point (Method)	49.5 °F (9.7 °C) – (closed cup)
Auto Ignition Temperature	851 °F (455 °C)
<u>Extinguishing Media</u>	
Suitable	Water spray, dry chemical, carbon dioxide, or alcohol resistant foam.
Not Suitable	Not available
Special Fire-fighting Procedures & Hazards	Wear chemical protective clothing and positive pressure, self-contained breathing apparatus. Avoid vapors as they are heavier than air and may travel to a source of ignition and flash back.
Unusual Fire & Explosion Hazards	Containers may explode in heat of fire. Keep runoff away from sewer. Containers must be bonded and grounded when transferring from one container to another.

6. Accidental Release Measures

Personal Precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Spill	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

7. Handling and Storage

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.
Storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are



opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls/Personal Protection

<u>Ingredient Name</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Methanol	200 ppm	200 ppm TWA 260 mg/m ³ TWA
Engineering Measures	Use mechanical ventilation such as dilution and local exhaust. Use an explosion proof ventilation system. Supply ample air replacement.	
Hygiene Measures	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.	
Respiratory	If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134).	
Eyes and Face	Wear safety glasses with side shields (or goggles) and a face shield.	
Skin	Wear chemically impervious gloves, made of any waterproof material. Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	

9. Physical and Chemical Properties

Appearance	Clear, colorless liquid
Odor	Slight alcohol odor
pH	Not available
Water Solubility	Complete
Vapor Density (air = 1)	1.11
Evaporation rate (butyl acetate = 1)	Not determined
Boiling Point (°F)	148.5 °F (64.7 °C)
Melting Point (°F)	-144 °F (-98 °C)
Specific Gravity (@ 77 °F)	0.791
Vapor Pressure	Not determined
Volatile Organic (VOC) Content	100%

10. Stability and Reactivity

Stable: X	Unstable:	Hazardous Polymerization:	Occurs:	Does Not Occur: X
Conditions to Avoid	Heat, flames, and sparks. Extremes of temperature and direct sunlight.			
Materials to Avoid	Acid chlorides, acid anhydrides, oxidizing agents, alkali metals, reducing agents, acids			
Decomposition Products	Irritating smoke and fumes. Carbon monoxide and carbon dioxide are formed as combustion products.			

11. Toxicological Information

Eye	Causes eye irritation.
Methanol	Not available
Dermal	Toxic if absorbed through skin. Causes skin irritation.



Methanol	LD50 (rabbit) – 17,100 mg/kg
Inhalation	Toxic if inhaled. Causes respiratory tract irritation.
Methanol	LC50 (rat) – 128.2 mg/l – 4hr. LC50 (rat) – 87.6 mg/l – 6 hr.
Oral	Toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Methanol	LD50 (human) – 143 mg/kg LD50 (rat) – 1187 – 2769 mg/kg
Chronic Effects	
Carcinogenicity	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, or NTP.
Signs and symptoms of exposure	Methyl alcohol may be fatal or cause blindness if swallowed. Effects due to ingestion may include: headache, dizziness, drowsiness, metabolic acidosis, coma, seizures. Symptoms may be delayed. Damage to the liver and kidney are possible.

12. Ecological Information

Biodegradability	Product is biodegradable.
Ecotoxicity	Toxicity to fish: Mortality LC50 – <i>Lepomis macrochirus</i> (bluegill) – 15,400 mg/l – 96 hr. NOEC – <i>Oryzias latipes</i> – 7,900 mg/l – 200 hr. Toxicity to aquatic invertebrates: EC50 – <i>Daphnia magna</i> (water flea) – > 10,000 mg/l – 48 hr. Toxicity to algae: Growth inhibition EC50 – <i>Scenedesmus capricornutum</i> (fresh water algae) – 22,000 mg/l – 96 hr.

13. Disposal Considerations

Waste Disposal	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
RCRA	Methanol (U154) is considered a hazardous waste if and when it is discarded.

14. Transportation

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

US DOT 49 CFR 172.101	Non-bulk Shipments (Drums/Totes)	Bulk Shipments (Tank Trucks/Rail Cars)
Proper Shipping Name	Methanol	Same
Hazard Class	3	Same
Identification Number	UN1230	Same
Packing Group	II	Same
Reportable Quantities	RQ=5000 lbs.	Same
Placards/Labels	Flammable	Same



15. Regulatory Information

CERCLA / SARA Emergency Reporting A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements. Consult counsel for further guidance on your responsibilities under these laws.

CERCLA reporting quantity: 5000 Pounds

SARA Title III Section 313 The following components are subject to reporting levels established by SARA Title III, Section 313:

Methanol (CAS# 67-56-1)

Clean Water Act (CWA) Section 311 The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA.

Product not listed

TSCA – Toxic Substances Control Act All components of this product are listed on the Toxic Substances Control Act Inventory or are excluded from listing requirements.

RCRA – Resource Conservation and Recovery Act The requirements of the federal hazardous waste regulations do not apply unless the waste fails to pass any of EPA’s four tests for determining hazardous wastes. Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

Methanol – U154, Toxic (non-acute) Hazardous Waste

State Regulations

Massachusetts **RTK Substances:** The following components are listed: Methanol (CAS# 67-56-1)

New Jersey **RTK Substances:** The following components are listed: Methanol (CAS# 67-56-1)

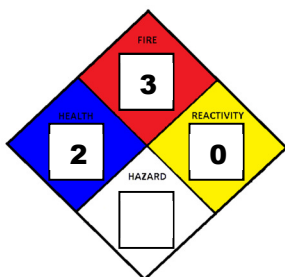
Pennsylvania **RTK Substances:** The following components are listed: Methanol (CAS# 67-56-1)

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

Date of Issue 6/7/2013 (updated 4/8/2014)

NFPA



HMIS

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PPE	

Caution: NFPA and HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them.

The customer is responsible for determining the PPE code for this material.

Notice to Reader

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WAUSAU CHEMICAL CORPORATION
SAFETY DATA SHEET



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