

000978

**SECTION I NAME**

METHYL ALCOHOL

Product: Methanol, Wood Alcohol

Chemical Synonyms: CH<sub>3</sub>OH

Formula: CH<sub>3</sub>OH

Unit(s) Size: 500 ml, 1 Liter, 5 pt., 4 Lt., 20 Lt.

CHEMTREC 800-424-9300 Day 716-226-6177 Night 716-334-4222		Health	3
NFPA HAZARD RATING		Fire	3
LEAST SLIGHT MODERATE HIGH EXTREME		Reactivity	1
0	1	2	3
			4

**SECTION II HAZARDOUS INGREDIENTS OF MIXTURES**

Principal Hazardous Component(s)

Methyl Alcohol

TLV Units

DANGER! ☠ POISON ☠ -FLAMMABLE-CAN BE FATAL OR CAUSE

BLINDNESS IF SWALLOWED. CAN NOT BE MADE NONPOISONOUS

HARMFUL IF INHALED.

**SECTION III PHYSICAL DATA**

Melting Point (°F) -97.8°C (-144°F)

Specific Gravity (H<sub>2</sub>O=1) 0.7913 (20/4°C)

Boiling Point (°F) 64.7°C (148.5°F)

Percent Volatile by Volume (%) 100%

Vapor Pressure (mm Hg) 96 mm at 20°C

Evaporation Rate = 1) 12.5% at 25°C

Vapor Density (Air = 1) 1.11

Solubility in Water Complete

Appearance and Odor Clear, colorless liquid; alcohol odor.

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used) 52°F (11°C)-TCC

Flammable Limits in Air % by Volume Lower 5-9% Upper 36-5%

Extinguisher Media Water spray; carbon dioxide (CO<sub>2</sub>); dry chemical(ABC).

**SPECIAL FIREFIGHTING PROCEDURES**

Autotignition temperature: 54°F (12.2°C)  
In fire conditions, wear a NIOSH-approved self-contained breathing apparatus. Water may be ineffective. Use water spray to cool fire exposed containers. Use alcohol resistant foam to extinguish large fires or to blanket spill to reduce vapors.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Class IB Flammable liquid.  
Burns with a clear, almost invisible flame, especially hard to see in strong sunlight. Methanol-water mixtures with 25% or more methanol are flammable. Avoid water streams which may splash and spread flaming liquid. Vapors are heavier than air and may flow along surfaces to distant ignition sources and flash back.

D.O.T. FLAMMABLE LIQUID



FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

**SECTION V HEALTH HAZARD DATA**

Threshold Limited Value

OSHA TWA 200ppm, 260 mg/m<sup>3</sup> (ACGIH 1983-84)

ACGIH TWA: (SKIN) 200 ppm, 260 mg/m<sup>3</sup>, STEL 250 ppm, 310 mg/m<sup>3</sup>.

**Effects of Overexposure**

INGESTION: May be fatal if swallowed. Cannot be made non-poisonous. Swallowing the liquid causes inebriation, headache, nausea and vomiting leading to severe illness, blindness and perhaps death. EYES: Liquid causes eye irritation. INHALATION: Breathing vapors may cause drowsiness, nausea and vomiting. SKIN: Repeated contact may irritate skin.

**Emergency and First Aid Procedures**

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting by placing finger down throat. Repeat until vomit fluid is clear. Call physician immediately. Never give anything by mouth to an unconscious person. INHALED: If inhaled, remove to fresh air. If not breathing, give artificial respiration; preferably mouth-to-mouth. If breathing is difficult, give oxygen by trained personnel. Call a physician. EYES: Flush with plenty of water for at least 15 minutes. Get medical attention. SKIN: Flush with water.

**SECTION VI REACTIVITY DATA**

Stability

Unstable Stable

Conditions to Avoid

Sparks, excessive heat.

**Incompatibility (Materials to avoid)**

Strong oxidizing agents. Particularly perchloric acid and lead perchlorate, nitric acid, chromic Anhydride.

**Hazardous Decomposition Products**

Thermal decomposition or burring will produce carbon dioxide and/or carbon monoxide.

**Hazardous Polymerization**

Conditions to Avoid

May Occur Will Not Occur

Not applicable.

**SECTION VII SPILL OR LEAK PROCEDURES**

**Steps to be taken in case material is released or spilled**

Eliminate all ignition sources. Use absorbent materials to soak up spills (sand, earth or vermiculite). Carefully sweep up and remove. Spills in critical areas can be diluted with water to reduce fire hazard during cleanup. Do NOT flush to sewers, drain or waterways.

**Waste Disposal Method**

Dispose of in an approved incinerator or contract with a licensed solvent waste disposal service.

**SECTION VIII SPECIAL PROTECTION INFORMATION**

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

**Respiration Protection**

Dispose of in an approved incinerator or contract with a licensed waste disposal service.

**Ventilation**

Local Exhaust Recommended YES

**Protective Gloves**

Rubber Eye Protection Chemical safety glasses

**Other Protective Equipment**

Goggles, smock, apron, eye wash station, safety shower, proper gloves, ventilation hood, fire extinguisher.

**SECTION IX SPECIAL PRECAUTIONS**

**Precautions to be Taken in Handling and Storing**

Store in a cool, dry, well-ventilated area away from strong oxidizers and fire hazards. Wash thoroughly after handling.

**Other Precautions**

Read label on container before using.

Use explosive-proof electrical fixtures. Containers should be electrically grounded/bonded during material transfer to prevent static spark. Corrosive to lead and aluminum.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.

Rev. No. No. 1 Date 1/18/87 Approved [Signature] Chemical Safety Coordinator [Signature]