Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

MATERIAL SAFETY DATA SHEETS

SECTION I
PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Methanol
This MSDS is valid for all grades and catalog #'s

Synonyms: Methyl Alcohol, Wood Alcohol, Carbinol
Formula: CH3OH

Manufacturer: Pharmco Products Inc.
58 Vale Road
Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II
COMPOSITION /INFORMATION ON INGREDIENTS

%wt	Material	CAS	Exposure Limits
100%	Methanol	67-56-1	200ppm TWA, OSHA/ACGIH; 250ppm STEL OSHA/ACGIH

SECTION III
HAZARDS IDENTIFICATION

Poisonous: This product contains methanol. It can not be made non-poisonous. Ingestion of 60-200ml of methanol is a fatal dose for most adults. Ingestion of 10ml may cause blindness.

Routes of Exposure:

Swallowing: May cause dizziness, faintness, drowsiness decreased awareness or responsiveness, nausea, vomiting, staggering gait, lack of coordination, blindness, coma and death.

Skin Absorption: Prolonged or widespread contact may result in the absorption of potentially harmful amounts.

Inhalation: High vapor concentration may cause burning sensation in nose and throat and stinging and watering in the eyes. At concentrations which cause irritation, dizziness, faintness, drowsiness, nausea and vomiting may also occur.

Skin Contact: Prolonged or repeated contact may cause defatting and drying of the skin.

Eye Contact: May cause irritation including stinging, tearing, redness and blindness

Effects of Repeated. Overexposure to methanol may cause eye damage and liver or kidney injury and acute indigestion.

Medical Conditions Aggravated by Overexposure:
Skin contact may aggravate dermatitis.

SECTION IV FIRST AID

Obtain medical attention for all cases of over-exposure.

Swallowing: If patient is fully conscious, give two glasses of water. Induce vomiting. Obtain medical attention. If medical advice is delayed and the person has swallowed a few ounces, give 3-4 ounces of hard liquor such as whiskey.

Skin: Wash skin with soap and water for at least 15 minutes

Inhalation: Remove to fresh air; Give artificial respiration if not breathing; If breathing is difficult oxygen may be given by qualified personnel; Obtain medical assistance is discomfort persists.

Eye Contact: Flush eyes with water for at least 15 minutes. Obtain medical assistance.

SECTION V FIRE FIGHTING MEASURES

Fire/Explosive Properties
Flash Point: 52F (11C) Tag Closed Cup
Flammable Limits in Air (% by volume):
6.0%(methanol) - 36.0%(methanol)
NFPA Rating: Health 1 Fire 3 Reactivity 0
1993 Emergency Response Guidebook: Guide 28
1996 North American Emergency Response Guidebook: Guide 131

Extinguishing Media: Apply alcohol-type or all-purpose foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

Special Fire Fighting Procedures: Use water spray to cool fire-exposed containers and structures; Use water spray to disperse vapors - re-ignition is possible; **Use self-contained breathing apparatus and protective clothing.**

Unusual Fire and Explosion Hazards:

- Vapors may travel to source of ignition and flash back.
- Vapors may settle in low or confined spaces.
- May produce a floating fire hazard.
- Static ignition hazard can result from handling and use.

SECTION VI
SPILL/ACCIDENTAL RELEASE MEASURES

Small spills can be flushed with large amounts of water. Large spills: Eliminate all ignition sources; ground all equipment; do not walk through spill; stop spill if possible; prevent entry into sewers, confined spaces, etc.; use a vapor suppressing foam to reduce vapors; absorb spill with non-combustible matter and transfer to containers; use non-sparking tools to collect absorbed material.

SECTION VII HANDLING AND STORAGE

- Flammable material - keep away from heat, sparks, and flame; sudden releases of hot organic vapors or mists from process equipment operating at elevated temperature may result in ignitions without the presence of obvious ignition sources.
- Avoid contact with eyes.
- Keep container closed.
- Use with adequate ventilation.
- Ground container when transferring product.
- Vapors may collect in containers; treat empty containers as hazardous.
- Wash thoroughly after handling
- Vapors may settle in low or confined areas
- Danger - may cause blindness or death if swallowed

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Special, local ventilation is needed where vapors escape to the workplace air
Respiratory Protection: Use self-contained breathing apparatus in high vapor concentration
Personal Protective Equipment: gloves, lab coat or uniform, safety glasses, eye wash, safety shower

SECTION IX
PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear, colorless liquid
Odor: characteristic
Vapor pressure @ 25C: 97.25 mm Hg
Vapor density: 1.5 (air =1)
Boiling point @ 760mm Hg: 65C
Melting Point: -98C
Solubility in Water: 100% @ 20C
Specific Gravity : .7928 @ 20C
Density @ 15.56C (60F) 6.6lbs/gal
Evaporation Rate: 4.6 (butyl acetate = 1)
Percent Volatiles: 100%

SECTION X
STABILITY/REACTIVITY INFORMATION

Stability: Stable
Conditions to avoid: None known
Incompatibility/Materials to avoid: strong oxidizing agents; strong inorganic acids
Hazardous Combustion/Decomposition Products:
Carbon monoxide and/or carbon dioxide
Hazardous Polymerization: Will not occur

SECTION XI
DISPOSAL CONSIDERATIONS

Vapors may collect in empty containers. Treat empty containers as hazardous.

Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations.

SECTION XII TRANSPORTATION INFORMATION

Proper Shipping Name: Methyl Alcohol
Hazard Class: 3
UN Number: 1230
IMO Information: Methyl Alcohol
Label of Class: 3
Packing Group II
Intermediate flashpoint group

SECTION XIII REGULATORY INFORMATION

Federal EPA

Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in CFR. Components present in this product at a level which could require reporting under this statute are:

Chemical	CAS Number	Upper Bound Conc. %
Methanol	67-56-1	100%

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312). Components present in this product at a level which could require reporting under this statute are: none.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are:
Methanol (67-56-1) upper bound concentration 100%

Toxic Substances Control Act (TSCA) Status:
The ingredients of this product are on the TSCA inventory.

State Right to Know

Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified. Components present which could require reporting:
Hazardous (=>1%): Methanol (CAS 67-56-1) upper bound conc. 100%
Pennsylvania: Hazardous substances must be identified.
Hazardous (=>1%): Methanol (CAS 67-56-1) upper bound conc. 100%
New Jersey: methanol is listed as an environmental hazardous substance
California SCAQMD Rule 443.1 (VOC's)
A Volatile Organic Compound (VOC) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides, or carbonates, ammonium carbonate, 1,1,1 tri-chloroethane, methylene chloride, (FC-23), (CFC-113), (CFC-12), (CFC-11), (CFC-22), (CFC-114) and (CFC-115).
Information not available