



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

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product: 30% Ethyl Alcohol

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

Synonyms: 60 Proof Ethyl Alcohol; Ethanol; Methylated Spirits

Formula: CH₃CH₂OH

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

1101 Isaac Shelby Drive
Shelbyville, KY 40065
Phone (502) 633-0650
Fax (502) 633-0685

Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION / INFORMATION ON INGREDIENTS

%wt	Material	CAS	Exposure Limits
75.33%	Water	7732-18-5	None established
24.67% (30%v/v)	Ethanol	64-17-5	1000ppm TWA

SECTION III

HAZARDS IDENTIFICATION

Carcinogen Status: Not classifiable as a human carcinogen

Routes of Exposure:

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

Skin Absorption: No harmful affects with normal skin.

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: No evidence of harmful effects from available information.

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

Effects of Repeated Overexposure: Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis

Other Health Hazards: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of

effects which together constitute fetal alcohol syndrome.

These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small size head.

Medical Conditions Aggravated by Overexposure:

Repeated exposure to ethanol may aggravate liver injury produced from other causes.

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.

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.

Note to Physician: Symptoms vary with alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.5-.15%. Approximately 25% of individuals show signs of intoxication at these levels. Above .15% the person is definitely under the influence of ethanol; 50-95% of individuals are clinically intoxicated at these levels. Severe poisoning occurs when the blood is ethanol level is 0.3-0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids.

SECTION V FIRE FIGHTING MEASURES

Fire/Explosive Properties

Flash Point: Approximately 88F / 30C Tag Closed Cup

Approximately 93F / 34C Tag Open Cup

Flammable Limits in Air for 100%: 3.3 - 19.0% (by volume)
(limits for 30% solution not available)

Flammability Classification for 100% ethanol: 3 (NFPA)

1993 Emergency Response Guidebook: Guide 26

1996 North American Emergency Response Guidebook: Guide 127

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

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 @ 20C: 44.6 mm Hg for 100% ethanol
(vapor pressure for 30% solution not available)
Vapor density: 1.6 (air =1) for 100% ethanol *(vapor density for 30% solution not available)*
Boiling point @ 760mm Hg: approx. 87C
Freezing Point: approx. -18C
Solubility in Water: 100% @ 20C
Specific Gravity : .9653 @ 15.56C
Density @ 15.56C (60F) 8.05 lb./gal
Evaporation Rate: 3.3 (butyl acetate = 1) for 100% ethanol
(evaporation rate for 30% not available)

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

DOT Information for 100% Ethanol
Proper Shipping Name: Ethyl Alcohol
Hazard Class: 3
UN Number: 1170

IMO Information: Ethanol or ethanol solutions
Label of Class: 3
Packing Group III
High flashpoint group

SECTION XIII REGULATORY INFORMATION

Federal EPA

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA): No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.
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: none.

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 (\Rightarrow 1%): Ethanol (CAS 64-17-5) upper bound conc. 24.67%

Pennsylvania: Hazardous substances must be identified.

Hazardous (\Rightarrow 1%): Ethanol (CAS 64-17-5) upper bound conc. 24.67%

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).

VOC 790g/l; vapor pressure 44.6 mm Hg @20C for 100% ethanol (VOC not available for 30% solution)

The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.