



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

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: SIC-4 (SPECIAL INDUSTRIAL SOLVENT FORMULA C-4) 200 Proof

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

Synonyms: Denatured Alcohol; Denatured Ethanol; Govt.

Formula SIC-4 (SPECIAL INSOLV C-4) 200 PROOF

Formula: Mixture

Manufacturer: PHARMCO-AAPER

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 |
|-------|------------------------|----------|--|
| 89.9% | Ethanol | 64-17-5 | 1000ppm TWA |
| 9.2% | Methanol | 67-56-1 | 200ppm TWA, OSHA/ACG IH;250ppm STEL OSHA/ACG IH |
| 0.9% | Methyl Isobutyl Ketone | 108-10-1 | 50ppm TWA; OSHA and ACGIH; 75ppm STEL, OSHA &ACGIH |

SECTION III

HAZARDS IDENTIFICATION

Carcinogen Status: Established uses of denatured ethanol are not considered to pose a significant cancer hazard.

Poisonous: This product contains methanol. It cannot 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: Ingestion: Short term overexposure can cause drunkenness, depression of the central nervous system, nausea, vomiting, diarrhea, liver damage, and death.

Inhalation: Upper respiratory tract irritation, drowsiness and dizziness may occur.

Skin Contact: May cause dermatitis by defatting the skin from prolonged or repeated contact

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

Effects of Repeated Overexposure: May cause eye and upper respiratory tract irritation. Short-term overexposure above 1000ppm by the inhalation route may cause central nervous system (CNS) effects such as headache and irritation of the eyes, nose and throat. If continued for more than an hour, additional CNS effects may occur such as: dizziness, drowsiness, loss of appetite, and inability to concentrate.

Gastrointestinal (stomach) effects may occur with symptoms as nausea and vomiting.

Medical Conditions Aggravated by Overexposure:

Any pre-existing disorders or diseases of the nervous system, liver, respiratory system, skin, eyes, gastrointestinal tract.

SECTION IV

FIRST AID

Obtain medical attention for all cases of over-exposure.

Swallowing: If patient is fully conscious, give two glasses of lukewarm water or milk. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain medical attention.

Skin: immediately flush affected area with plenty of water. Remove contaminated clothing. If irritation persists, get medical attention.

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. Obtain medical assistance if discomfort persists.

Eye Contact: Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.

Note to Physician: Provide oxygen and /or ventilation assistance, if needed. Do not induce vomiting. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION V

FIRE FIGHTING MEASURES

Fire/Explosive Properties:

Classification: Highly Flammable Liquid

Flash Point: 55.4 – 60.8FF (13-16C) Tag Closed Cup
Flammable Limits in Air (% by volume): 3.3% - 19.0
Auto-Ignition temperature: 685.4F (363C)
Flammability Classification: 3 (NFPA)
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.
Refer to section 11 for disposal information.

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, eyewash, safety shower .

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear, colorless liquid
Odor: characteristic
Vapor pressure @ 20C: 44.6 mmHg
Vapor density: 1.59 (air =1)
Boiling point @ 760mm Hg: 78.4C (173.1F)
Freezing Point: -144C(-227.2F)
Solubility in Water: 100% @ 20C
Density @ (60F) 6.61 lbs/gal
Percent Volatiles: 100%

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: Stable

Conditions to avoid: Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Incompatibility/Materials to avoid: Contact with acetyl chloride or other oxidizing agents may result in a violent reaction

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: Alcohol, nos

Hazard Class: 3

UN Number: 1987

IMO Information: Alcohols, NOS

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 of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are:

| Chemical Name | CAS Number | RQ |
|--------------------------------------|------------|---------|
| <u>Methanol</u> | 67-56-1 | 5,000lb |
| <u>Methyl isobutyl ketone (MIBK)</u> | 108-10-1 | 5,000lb |

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).

SARA 302/304 Methanol / CAS # 67-56-1 5000lbs (RQ)

MIBK / CAS # 108-10-1 5000lbs (RQ)

Based upon available information, this material is classified as the following health and/or physical hazard according to section 311 & 312:

Immediate (Acute) Health Hazard,

Delayed (Chronic) Health Hazard,

Fire Hazard.

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 material does not contain any chemical components with known CAS numbers that exceed the reporting limits.

Toxic Substances Control Act (TSCA) Status:

All components of this product are listed or are exempt from listing on the TSCA inventory.

State Right to Know

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.