

HTR

Aerosol, Level 1

# MSDS

78132  
(1802)

Revised 21 Oct 1997

D.O.T.: Compressed Gas, Flammable,  
N.O.S. (Diethyl Ether),  
D.I. UN1959

Printed 20 Jun 2001

78133

(2102)

## STARTING FLUID CYLINDER # 33118

78567

78135

### MATERIAL IDENTIFICATION

### NFPA Hazard Class

Health = 2	Hazard Rating:
Flammability = 4	0 = Least
Reactivity = 1	1 = Slight
	2 = Moderate
	3 = High
	4 = Extreme

Marketer: 5 Star Mfg. Company  
732 Central Ave.  
Springfield, TN 37172

1-888-872-7278

Phone Number: 888-872-7278  
Transportation Emergency: CHEMTREC 800-262-8200

Chemical Trade Name, synonyms: NA

Chemical Family: Mixture

Chemical Formula: Proprietary Formula

### COMPONENTS

Material	CAS Number	PEL/TLV, Source	Percent
Carbon Dioxide	124-38-9	5000 ppm, OSHA	10-15
Diethyl Ether	60-29-7	400 ppm, ACGIH	80-80
Mineral oil, severely hydrotreated predominantly naphthenic	64742-53-6	5 mg/m <sup>3</sup> , ACGIH	<1

### PHYSICAL DATA

Boiling Range	98°F, for Diethyl ether
Pressure in can at 70°F	Approx. 90 psig
Vapor Density (Air=1)	Approx. 2.6
Solubility in water	Slight
Specific Gravity (Water=1)	Less than 1.0
Percent Volatile by weight	85.0
Evaporation Rate (BuAcp=1)	Approx. 6
Appearance and odor	Pale yellow to clear liquid, strong ethereal odor, evaporates quickly, leaves slight lubricant residue.

**HAZARDOUS REACTIVITY**

Stability	Unstable explosive peroxides may be formed and concentrate by evaporation to hazardous levels. This process is favored by prolonged storage with exposure to air and light. Generally stable in sealed metal containers.
Conditions to avoid	Heat, sparks, flames, strong oxidizers.
Hazardous Polymerization	Will not occur
Hazardous Decomposition Products	Carbon monoxide may form on combustion.

**FIRE AND EXPLOSION DATA**

Flammability Category	Extremely Flammable (Reference - Consumer Product Commission, flame projection test for aerosol products, per 16 CFR 1500.45)
Flash Point	-49 °F, TCC (for Diethyl Ether)
Flammable Limits	LEL% 1.9 UEL% 36.0
Extinguishing Media	Dry chemical, Carbon dioxide, water-fog or mist only, alcohol foam.
Unusual Fire and Explosion Hazards	Avoid possible bursting of aerosol can. Do not store where temperature may exceed 120°F. Do not puncture or incinerate.
Special Fire Fighting Procedures	Avoid possible accumulations of vapors at floor level, as vapor is heavier than air. Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.
<i>This product is extremely flammable at all times. Avoid inadvertent ignition sources, including static spark. If product vapor is allowed to accumulate in air, a dangerous fire and explosion hazard exists.</i>	

**HEALTH HAZARD INFORMATION**

Suggested Exposure Guideline	400 ppm, (for Diethyl Ether, ACGIH)
Primary Route of Exposure	Inhalation, skin contact
Inhalation	Dizziness, strong anesthesia, intoxication, unconsciousness.
Skin Contact	Irritation upon prolonged contact, defatting of skin.
Eye Contact	Irritation
Carcinogenicity	None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
Additional Health Hazard Data	Avoid contact with skin, eyes, or clothing.

**FIRST AID**

Inhalation	Remove to fresh air. Artificial respiration, consult physician.
Skin Contact	Wash with soap and water. Remove soaked clothing to avoid prolonged skin contact.
Eye Contact	Flush eyes well with running water for 15 minutes.
Ingestion	Call Physician or poison control center immediately. Proper treatment is dependent on condition of patient and amount ingested.

## SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Keep away from heat, fire, sparks, or flame. Ventilate area well. CO<sub>2</sub> may be used as a precautionary vapor blanket. Small amounts may be flushed away with water.

Waste disposal method

Dispose of in accordance with all local, state and federal regulations. Do not puncture or incinerate. Avoid any contamination of groundwater.

## SPECIAL PROTECTION INFORMATION

Respiration Protection

If TLV is exceeded wear NIOSH-approved self-contained breathing device or respirator.

Ventilation

Must be adequate to maintain vapors at less than 400 ppm, particularly at floor level as vapors are heavier than air.

Protective gloves

None needed for normal use. Nitrile or other impervious type may be used for prolonged exposure.

Eye Protection

Safety glasses or goggles recommended

## HANDLING AND STORAGE PRECAUTIONS

Precautions to be taken in handling and storage

Do not store where temperature may exceed 120°F. Store away from, fire, sparks, or flame. Store in suitable area for hazardous materials storage.

## SPECIAL PRECAUTIONS

Precautions for usage

Do not use near heat, fire, flame or sparks. Avoid excessive breathing of vapor. Do not spray in direction of body. Use only in accordance with directions.

*Notice: This data represents typical values, not product specifications. No guarantee of accuracy or completeness is made. No responsibility is assumed for any kind of loss or damages arising from use of this data.*

*End of MSDS*