

MATERIAL SAFETY DATA SHEET

R-500

SECTION 1 - COMPANY IDENTIFICATION/CHEMICAL PRODUCT

Recycler: Refrigerants, Inc.
2575 W. Barberrry Pl.
Denver, CO 80204
303-629-1222

Prepared by: Refrigerants, Inc.
INFOTRAC
EMERGENCY RESPONSE # (800) 535-5053
Date Prepared: 11-28-09

Corporate MSDS Number: MSDSR500

Formula: CC12F2/CH3CHF2 (AZEOTROPE)

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
* METHANE, DICHLORODIFLUORO (R-12)	75-71-8	73.8
ETHANE, 1, I-DIFLUORO - (FC-I52a)	75-37-6	26.2

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	: -33 C (-27 F) Odor	Slight ethereal
Vapor Pressure	: 232 psia at 54 deg C (130 deg F) Form	: Liquefied gas
Vapor Density	: 3.7 (Air = 1) Color	: Colorless
Density	: 1.16 g/cc at 25 deg C (77 deg F) % Volatiles	: 100WT% :
Evaporation Rate	: >1 (CCI4=1) Appearance	Clear

SECTION 4 - FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : Will not burn
Flammable limits in Air, % by Volume
LEL : Not applicable Autoignition
VEL : Not applicable
Dichlorodifluoromethane : <760 deg C «140 deg F) Difluoroethane: <445 deg C «836 deg F)

Fire and Explosion Hazards:

Use water spray or fog to cool containers. Although cylinders are equipped with pressure and temperature relief devices, they may still rupture under fire conditions. Decomposition may occur. Self-contained breathing apparatus (SCBA) is required if cylinders rupture or discharge under fire conditions.

Extinguishing Media

As appropriate for combustibles in area.

SECTION 5 - HAZARDS IDENTIFICATION

Potential Health Effects:

Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness, or death. Intentional misuse or deliberate inhalation may cause death without warning. Vapor reduces oxygen available for breathing and is heavier than air. Liquid contact can cause frostbite. May cause eye irritation with discomfort, tearing, or blurring of vision.

Health Effects:

Skin contact with the liquid may cause frostbite or mild skin irritation with discomfort. "FREON" 12 has been infrequently associated with skin sensitization in humans. Inhalation may include nonspecific discomfort such as nausea, headache, weakness; or temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness. Higher exposures may lead to temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation; abnormal kidney function as detected by laboratory tests; or fatality from gross overexposure. Individuals with preexisting diseases of the central nervous or cardiovascular system may have increase susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1 % are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: If inhaled, immediately remove to fresh air. Keep person calm. If not breathing, give artificial Respiration. If breathing is difficult, give oxygen. Call a physician.

Skin Contact: In case of contact, flush skin with water. Treat for frostbite if necessary by gently warming affected

area. Call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion: Ingestion is not considered a potential route of exposure.

Notes to Physician:

Because of a possible disturbance of cardiac rhythm, catecholamine drugs, such as epinephrine, should only be used with special caution in situations of emergency life support.

SECTION 6- STABILITY AND REACTIVITY

Chemical Stability

Material is stable. However, avoid open flames and high temperatures.

Incompatibility with other Materials

Incompatible with alkali or alkaline earth metals - powered Al, Zn, Be, etc.

Polymerization: Polymerization will not occur.

Other hazards

Decomposition: Decomposition products are hazardous. "FREON" 500 Refrigerant can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrochloric and hydrofluoric acids and possibly carbonyl halides.

SECTION 7- CONTROL AND PROTECTIVE MEASURES

Engineering Controls: Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low or enclosed places.

Personal Protective Equipment: Impervious gloves and chemical splash goggles should be used when handling liquid. Under normal manufacturing conditions, no respiratory protection is required when using this product. Self-contained breathing apparatus (SCBA) is required if a large release occurs.

Exposure Guidelines:

METHANE, DICHLORODIFLUORO - ("FREON" 12)

PEL (OSHA): 1,000 ppm, 4,950 mg/m³, 8 hr. TW A TLV

(ACGIH): 1,000 ppm, 4,950 mg/m³, 8 hr. TWA

ETHANE, 1, 1-DIFLUORO - (FC-152a)

PEL (OSHA) : None Established TL V (ACGIH) : None Established

WEEL (AIHA) : 1000 ppm, 8 hr. TWA

SECTION 8- HANDLING/STORAGE/WASTE DISPOSAL | Waste disposal method:

Comply with Federal, State, and local regulations. Reclaim by distillation or remove to a permitted waste facility.

Handling (personnel): Avoid breathing vapors and liquid contact with the skin and eyes. Use with sufficient ventilation to keep employee exposure below recommended limits.

Storage: Clean, dry area. Do not heat above 52 deg C (125 deg F).

Accidental Release Measures: Ventilate area, especially low or enclosed places where heavy vapors might collect.

Remove open flames. Use self-contained breathing apparatus (SCBA) for large spills.

SHIPPING INFORMATION

Shipping Name : DICHLORODIFLUOROMETHANE AND DIFLUOROETHANE AZEOTROPIC MIXTURE

Hazard Class : 2.2 UN No. : 2602

DOT/IMO LABELS : NON-FLAMMABLE GAS Shipping Containers : Ton Tanks

Reportable Quality : "FREON" 12: 5000 lbs/2270 kg

U.S. FEDERAL REGULATIONS

TSCA Inventory Status : Reported Included

TITLE III HAZARDOUS CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes Reactivity

Chronic : No Fire :No

Pressure : Yes :No

HAZARDOUS CHEMICAL LISTS

Substance CERCLA Hazardous

* "FREON" 12 component only

Extremely Hazardous

Substance

OTHER INFORMATION

NFP A, NPCA-HMIS NPCA-HMIS Rating

Health : 1 Toxic Chemical - (Yes) *

Flammability : 0 - (Yes) *

Personal Protection rating to be

depending on use condition.

supplied by user

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.