MATERIAL SAFETY DATA SHEET
R-22

SECTION 1 - COMPANY IDENTIFICATION/ CHEMICAL PRODUCT

Recycler: Refrigerants, Inc.
2575 W. Barberry 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: MSDSR22
Molecular Weight 86.47
Formula: $CHClF_2$

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
* METHANE, CHLORODIFLUORO- (HCFC 22)	75-45-6	100

* 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 :-40.8C(-41.4F)
Vapor Pressure : 151 psig at 25 deg C (77 deg F)
Vapor Density : 3.03 (Air = 1.0) at 25 deg C (77 deg F)
Density : 1.194 *g1cm3* at 25 deg C (77 deg F)
Evaporation Rate : >1 (CCI4=1.0)
Solubility in Water : 0.3 WT%@25 C (77 F)

pH :Neutral
Odor: Slight ethereal
Form : Liquified gas
Color: Clear, colorless
% Volatiles: 100 WT%

SECTION 4 - FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : Will not burn Autodecomposition: 632 C (1170F)

Other burning materials may cause HCFC-22 to bum weakly.

Chlorodifluoromethane is not flammable at ambient temperatures and atmospheric pressure. However, chlorodifluoromethane has been shown in tests to be combustible at pressures as low as 60 psig at ambient temperature when mixed with air at concentrations of 65 volume % air. Experimental data have also been reported which indicate combustibility of "FREON" 22 in the presence of certain concentrations of chlorine.

Fire and Explosion Hazards:

Cylinders may rupture under fIre conditions. Decomposition may occur. Use water spray or fog to cool containers. Self-contained breathing apparatus (SCBA) is required if cylinders rupture and contents are released under fire conditions.

Extinguishing Media

As appropriate for combustibles in area. Extinguishant for other burning material in area is sufficient to stop burning.

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. Prolonged overexposure may cause defatting or dryness of the skin. Inhalation of the vapors may cause temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness. Higher exposures may lead to temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation. Fatality may occur 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 ACGrn as a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:

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

Skin Contact: In case of contact, flush skin with lukewarm water. Do not use hot 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 AI, Zn, Be, etc.

Polymerization: Polymerization will not occur.

Other hazards

Decomposition: Decomposition products are hazardous. HCFC-22 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, CHLORODIFLUORO - ("FREON" 22)

PEL	(OSHA)	: None Established
TL V	(ACGIH)	: 1,000 ppm, 3,540 mg/m3, 8 hr. TWA, A4

SECTION 8- *HANDLING/STORAGE/W* ASTE DISPOSAL

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

Handling: Use with sufficient ventilation to keep employee exposure below recommended limits. R- 22 should not be mixed with air for leak testing. In general, it should not be used or allowed to be present with high concentrations of air above atmospheric pressure. Contact with chlorine or other strong oxidizing agents should also be avoided.

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

DOTJIMO

Proper Shipping Name	:CHLORODIFLUOROMETHANE :
Hazard Class	2.2
UN No.	: 1018
DOTJIMO Label	: NONFLAMMABLE GAS

Shipping Containers:
Tank Cars
Cylinders
Tank Trucks

U.S. FEDERAL REGULATIONS

TSCA Inventory Status : Reported Included

TITLE III HAZARDOUS CLASSIFICATIONS SECTIONS 311, 312

Acute	: Yes	Reactivity: No	
Chronic	: No	Pressure: Yes	
Fire	: No		

HAZARDOUS CHEMICAL LISTS

SARA Extremely Hazardous Substance - No CERCLA Hazardous Substance - No

SARA Toxic Chemical - See Components Section

Superfund reportable discharge = 5000 Ibs.

OTHER INFORMATION

NFPA, NPCA-HMIS

NPCA-HMIS Rating

Health	: 1	Reactivity	: 1
Flammability	: 0		

Personal Protection rating to be supplied by user depending on use condition.

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.