Chemtronics

OSHA
Safety Data Sheet

Freez-It®/Freez-It® Antistat Part # 1802 Freeze Plus
C150, C220, C150-S, C151

IDENTIFICATION

Name:
Freez-It
Synonyms:
Freon® 12, FC-12
Dymel® 12,
Dichlorodifluoromethane
CAS Name: Methane,
Dichlorodifluoro

Chemical Family:
Halogenated Hydrocarbon
Formula:
CCl_2F_2

CAS Registry No.:
75-71-8

Manufacturer:
Chemtronics Inc.
681 Old Willets Path
Hauppauge, NY 11788

Medical/Transportation Emergency Phone:
516-582-3322

PHYSICAL DATA

Boiling Point (°F): -21.6
Density: 1.311 g/cc @ 77°F
Vapor Density (Air=1):
4.2
pH Information: Neutral

Form: Liquefied Gas

Color: Colorless

Percent Volatile by Volume:
100
Vapor Pressure:
80 psig @ 77°F
Solubility in H_2O:
0.028% by wt @ 77°F
Evaporation Rate (Ether = 1): > 8
Appearance: Clear
Odor: Slight ethereal odor

HAZARDOUS COMPONENTS

No carcinogens as per OSHA, IARC and NTP lists.

Material(s):	Approximate %:
Dichlorodifluoromethane	100

HAZARDOUS REACTIVITY

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

Decomposition: Can be decomposed by high temperatures (open flames, glowing surfaces, etc.) forming hydrochloric and hydrofluoric acids, possibly carbonyl halides.

Incompatibility: Alkali or alkaline earth metals—powdered Al, Zn, Be, etc.

Polymerization: Will not occur.

FIRE AND EXPLOSION DATA

Flash Point: None
Method: TOC

Autoignition Temperature:
Not determined

Flammable Limits in Air, % by Vol.:
Lower: Nonflammable
Upper: Nonflammable

Autodecomposition Temperature: Not determined

Fire and Explosion: Pressurized aerosol containers at elevated temperatures may vent, rupture or burst and add to flying and falling debris. Intense heat may cause decomposition with emission of halogen acids.

Extinguishing Media:
Nonflammable

Special Fire Fighting Instructions: Self-contained breathing apparatus (SCBA) may be required if aerosol cans rupture and contents are released under fire conditions.

HEALTH HAZARD INFORMATION

Principal Health Hazards:
Inhalation: Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause light-headedness, giddiness, shortness of breath, and may lead to narcosis, cardiac irregularities, unconsciousness or death. LC 50 Rats, 800,000 ppm/30 min.

Skin: Liquid contact can cause frostbite.

Eye: Liquid contact can cause frostbite. Tests in rabbit eyes with a 50% solution in mineral oil and with vapors resulted in no observable damage.

Oral: Rats were fed Dichlorodifluoromethane dissolved in peanut oil. No deaths occurred at highest feasible dose 1000 mg/kg.

Exposure Limits:

Material:	*TLV (ACGIH):*	*PEL (OSHA):*
Dichlorodifluoromethane	1000 ppm	1000 ppm

Safety Precautions: Avoid breathing vapors and liquid contact with skin or eyes. Use only in well-ventilated area.

First Aid:
Inhalation: Remove to fresh air, call a physician. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs.

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

Skin: Flush with water. Treat for frostbite if necessary.

Note to Physician: Because of a possible increased risk of eliciting cardiac dysrythmias, catecholamine drugs, such as epinephrine, should be considered only as a last resort in life-threatening emergencies.

Medical Conditions Possibly Aggravated by Exposure:
Cardiovascular Disease: See Principal Health Hazards, Inhalation Section.

Other Health Hazards:
Dichlorodifluoromethane is not classified as carcinogenic by IARC, NTP or OSHA. Based on animal studies and human experiences this fluorocarbon poses no hazard to man relative to systemic toxicity, carcinogenicity, mutagenicity or teratogenicity when occupational exposures are below its TLV.

PROTECTION INFORMATION

Generally Applicable Control Measures: 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 places.

Personal Protective Equipment: Lined butyl gloves should be used when handling liquid. Chemical splash goggles should be worn 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.

DISPOSAL INFORMATION

Spill, Leak or Release: Ventilate area—especially low places where heavy vapors might collect. Remove open flames.

Waste Disposal: Allow to evaporate. Do not puncture or incinerate aerosol cans. Comply with federal, state and local regulations.

SHIPPING INFORMATION

Domestic—Other Than Air (DOT):
Proper Shipping Name: Consumer Commodity
Hazard Class: ORM-D
UN No.:
DOT Label:
DOT Placard:

International Water or Air (IMO/ICAO):
Proper Shipping Name: Dichlorodifluoromethane
Hazard Class: 2
UN No.: 1028
IMO/ICAO Label: Nonflammable Gas

OTHER INFORMATION

Shipping Containers: Aerosol Cans

Storage Conditions: Do not store near sources of heat, in direct sunlight or where temperatures exceed 49°C/120°F. Do not puncture or damage containers. Rotate stock.

Date Revised: 6/87
Person Responsible: S.H. Stein, Ph.D.

Chemtronics Inc.
681 Old Willets Path
Hauppauge, NY 11788
(516) 582-3322