



Du Pont Chemicals

2008FR

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## "FREON" 22

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### Material Identification

"FREON" is a registered trademark of DuPont.

Corporate MSDS Number DU000025

Formula CHClF2

Molecular Weight 86.47

#### Tradenames and Synonyms

CC0335

#### Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont  
1007 Market Street  
Wilmington, DE 19898

#### PHONE NUMBERS

Product Information 1-800-441-9442  
Transport Emergency CHEMTREC: 1-800-424-9300  
Medical Emergency 1-800-441-3637

### COMPOSITION/INFORMATION ON INGREDIENTS

#### Components Material

CAS Number %

\*METHANE, CHLORODIFLUORO- (HCFC 22) 75-45-6 100

\* Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

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**FIRST AID MEASURES**(Continued)**INGESTION**

Ingestion is not considered a potential route of exposure.

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**Notes to Physicians**

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

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**FIRE FIGHTING MEASURES****Flammable Properties**

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

Other burning materials may cause HCFC-22 to burn 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.

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**Fire and Explosion Hazards:**

Cylinders may rupture under fire conditions. Decomposition may occur.

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**Extinguishing Media**

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

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**Fire Fighting Instructions**

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

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**ACCIDENTAL RELEASE MEASURES****Safeguards (Personnel)**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

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**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 or releases.

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## STABILITY AND REACTIVITY

### Chemical Stability

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

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### Incompatibility with Other Materials

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

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### 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.

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### Polymerization

Polymerization will not occur.

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## TOXICOLOGICAL INFORMATION

### Animal Data

#### INHALATION:

4 hour, LC50, rat: 220,000 ppm.

The compound is a skin irritant and a slight eye irritant, but is not a skin sensitizer in animals.

Effects from single high exposures include central nervous system depression, anesthesia, rapid breathing, lung congestion and microscopic liver changes. Cardiac sensitization occurred in dogs at 50,000 ppm or greater from the action of exogenous epinephrine.

No toxic effects or abnormal histopathological observations occurred in rats repeatedly exposed to concentrations ranging from 10,000 to 50,000 ppm (v/v). Long-term exposures to 50,000 ppm (v/v) of vapors produced organ weight increases and a decrease in body weight gain, but no increased mortality or adverse hematological effects. In chronic inhalation studies, HCFC-22, at a concentration of 50,000 ppm (v/v), produced a small, but statistically significant increase of late-occurring tumors involving salivary glands in male rats, but not female rats or male or female mice. In the same studies, no increased incidence of tumors was seen in either species at concentrations of 10,000 ppm or 1,000 ppm (v/v).

Long-term administration in corn oil produced no effects on body weight or mortality.

HCFC-22 was mutagenic in some strains of bacteria in bacterial cell cultures, but not mammalian cell cultures or animals. It did not cause heritable genetic damage in

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**OTHER INFORMATION****NFPA, NPCA-HMIS**

NPCA-HMIS Rating	
Health	1
Flammability	0
Reactivity	1

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

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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.

Responsibility for MSDS : DuPont Chemicals  
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> : Wilmington, DE 19880-0709  
Telephone : (302) 999-4946

# Indicates updated section.

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End of MSDS