

DU PONT E I DE NEMOURS AND CO INC -- FREON 12 FLUOROCARBON -- 6830-00-106-1656

===== Product Identification =====

Product ID:FREON 12 FLUOROCARBON

MSDS Date:05/01/1989

FSC:6830

NIIN:00-106-1656

MSDS Number: BCYVW

=== Responsible Party ===

Company Name:DU PONT E I DE NEMOURS AND CO INC

Address:1007 MARKET STREET

Box:1635

City:WILMINGTON

State:DE

ZIP:19899

Country:US

Info Phone Num:800-441-9450

Emer

gency Phone Num:800-441-3637

Preparer's Name:K.P. BROWN

CAGE:18873

=== Contractor Identification ===

Company Name:E.I. DUPONT DE NEMOURS & CO

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-441-7515;800-441-9442

CAGE:18873

===== Composition/Information on Ingredients =====

Ingred Name:DICHLORODIFLUOROMETHANE (SARA III)

CAS:75-71-8

RTECS #:PA8200000

Fraction by Wt: 100%

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9192

EPA Rpt Qty:5000 LBS

DOT

Rpt Qty:5000 LBS  
Ozone Depleting Chemical:1

===== Hazards Identification =====

LD50 LC50 Mixture:4 HOUR LC50 RATS IS 800,000 PPM  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:INHALATION OF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL AND MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS, OR DEATH. INTENTIONAL MISUSE CAN BE FATAL. LIQUID CONTACT CAN CAUSE FROSBITE. MAY CAUSE EYE IRRITATION.  
Explanation of Carcinogenicity:FREON 12 IS NOT LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA.  
Effects of Overexposure:EYE IRRITATION WITH DISCOMFORT, TEARING, OR BLURRING OF VISION. SKIN CONTACT MAY RESULT IN FROSTBITE. INHALING MAY CAUSE TEMPORARY NERVOUS SYSTEM DEPRESSION WITH DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION, AND LOSS OF CONSCIOUSNESS. EXCESSIVE EXPOSURES MAY CAUSE HEART AND CIRCULATORY IRREGULARITIES.  
Medical Cond Aggravated by  
Exposure:INDIVIDUALS WITH PREEXISTING DISEASES OF THE CENTRAL NERVOUS OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

===== First Aid Measures =====

First Aid:EYE:FLUSH W/ WATER 15 MIN HOLD LIDS OPEN SEE A DOCTOR.  
SKIN:WASH WITH SOAP & WATER. TREAT FOR FROST-BITE IF NEEDED.  
INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING, AS NEEDED. DO NOT GIVE EPINEPHRINE OR SIMILAR DRUGS. INGESTED:  
DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL CARE. IF IRRITATION PERSISTS,OR IS SEVERE,SEE A DOCTOR.

===== Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE  
Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.  
Unusual Fire/Explosion Hazard:USE WA

TER SPRAY OR FOG TO COOL  
CONTAINERS. CYLINDERS MAY RUPTURE UNDER FIRE CONDITIONS.  
DECOMPOSITION MAY OCCUR.

===== Accidental Release Measures =====

Spill Release Procedures:VENTILATE AREA. DO NOT FLUSH INTO SEWERS.  
COLLECT ON ABSORBENT MATERIAL AND TRANSFER TO STEEL DRUMS FOR  
RECOVERY OR DISPOSAL.

Neutralizing Agent:NONE

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A CLEAN, COOL, DRY A  
ND

WELL-VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FROM  
PHYSICAL DAMAGE AND KEEP CLOSED.

Other Precautions:TANK-CLEANING PERSONNEL SHOULD USE ONLY FORMAL TANK  
ENTRY PROCEDURE BASED ON RECOGNIZED SAFETY PRINCIPLES. APPLY ALL  
SAFETY PRECAUTIONS TO EMPTY CONTAINERS AS THEY MAY CONTAIN PRODUCT  
RESIDUES/VAPORS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:RESPIRATOR WILL NOT NORMALLY BE NECESSARY. USE  
NIOSH/MSHA APPROV

ED AIR SUPPLIED RESPIRATOR OR SELF CONTAINED

BREATHING APPARATUS IF EXPOSURE IS ABOVE THE TLV/PEL. SEE 29 CFR  
1910.134 FOR REGULATIONS PERTAINING TO RESPIRATOR USE.

Ventilation:PROVIDE LOCAL EXHAUST AT FILLING ZONES AND OTHER OPERATING  
SPACES WHERE LEAKAGE IS PROBABLE. MECHANICAL FOR OTHER.

Protective Gloves:LINED BUTYL RUBBER, PVA OR NEOPRENE

Eye Protection:SAFETY GLASSES OR SPLASH GOGGLES

Other Protective Equipment:USE IMPERVIOUS CLOTHING IF THERE IS DANGER  
OF REPEATED OR PROL

ONGED CONTACT WITH LIQUID.

Work Hygienic Practices:USE GOOD CHEMICAL HYGIENE PRACTICE. AVOID  
CONTACT. REMOVE AND WASH CLOTHING PROMPTLY UPON CONTAMINATION.

Supplemental Safety and Health

NONE.

===== Physical/Chemical Properties =====

HCC:G3

Boiling Pt:B.P. Text:-21.6F/-29C

Vapor Pres:94.5

Vapor Density:4.26

Spec Gravity:1.315 (LIQUID)

pH:NEUTR.

Solubility in Water:0.028

Appearance and Odor:CLEAR,COLORLESS LIQUEFIED GAS;SLIGHT ETHEREAL ODOR

Percent Volatiles by V

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ALKALI OR ALKALINE EARTH METALS-POWDERED AL, ZN, BE, ETC.

Stability Condition to Avoid:HIGH TEMPERATURES AND OPEN FLAMES

Hazardous Decomposition Products:HYDROCHLORIC AND HYDROFLUORIC  
ACIDS-POSSIBLY CARBONYL HALIDES. DECOMPOSED BY HIGH  
TEMPERATURES(OPEN FLAMES, HOT METAL)

===== Disposal Considerations =====

Waste Disposal Methods:DIS

POSE I/A/W ALL FEDERAL, STATE AND LOCAL

REGULATIONS. MANUFACTURER SUGGESTS THAT RECLAIMATYION BY  
DISTILLATION OR DISPOSAL BY A PERMITTED FACILITY.

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