

DU PONT E I DE NEMOURS AND CO INC -- FREON 12 FLUOROCARBON -- 6830-00-292-0147

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

Product ID:FREON 12 FLUOROCARBON

MSDS Date:05/01/1989

FSC:6830

NIIN:00-292-0147

MSDS Number: BDVPD

=== 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:LC 50 RAT 800,000 PPM/30 MIN  
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:DATA PER MSDS  
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:EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.SEE DOCTOR. SKIN:FLUSH WITH WATER.TREAT FOR FROSTBITE IF NECESSARY. INHALATION:REMOVE TO FRESH AIR.GIVE CPR/OXIGEN IF NEEDED.SEE DOCTOR. INGESTION:SEE DOCTOR. NOTE TO PHYSICIAN:BECAUSE OF POSSIBLE CARDIAC DISTURBANCE, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE SHOULD BE USED WITH SPECIAL CAUTION.

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

Flash Point:NONE  
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 WATER SPRAY OR FOG TO COOL

CONTAINERS. CYLINDERS MAY RUPTURE UNDER FIRE CONDITIONS.  
DECOMPOSITION MAY OCCUR.

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

Spill Release Procedures:VENTILATE AREA, ESPECIALLY LOW PLACES WHERE  
HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. USE SCBA FOR LARGE  
SPILLS.

Neutralizing Agent:NONE APPLICABLE FOR THIS MATERIAL

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

Handling and Storage Precautions:STORE IN COOL, DRY, WELL VENTILATED

AREA. PROTECT FROM PHYSICAL DAMAGE, HEAT AND IGNITION SOURCES. KEEP  
CONTAINERS CLOSED. DO NOT STORE ABOVE 125F.

Other Precautions:AVOID BREATHING VAPORS AND LIQUID CONTACT WITH SKIN  
OR EYES. USE ONLY IN WELL VENTILATED AREA.

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

Respiratory Protection:NONE REQUIRED FOR ADEQUATELY VENTED WORK  
SITUATIONS. FOR ACCIDENTAL OR NON-VENTILATED SITUATIONS, USE A  
SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED-AIR RESPIRAT  
OR,  
APPROVED BY NIOSH.

Ventilation:MECHANICAL (GENERAL) VENTILATION IS REQUIRED. LOCAL EXHAUST  
MAY BE REQUIRED IF WORK AREA IS NOT VENTED.

Protective Gloves:BUTYL RUBBER, PVA OR NEOPRENE

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:USE IMPERVIOUS CLOTHING IF THERE IS REPEATED  
OR PROLONGED CONTACT WITH LIQUID.

Work Hygienic Practices:STANDARD HYGENIC PRACTICES.

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

pH:NEUTR.

Solubility in Water:0.028

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

Percent Volatiles by Volume:100

===== 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 Produ

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

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

Waste Disposal Methods:CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER.  
RECLAIM BY DISTILLATION OR REMOVE TO A PERMITTED FACILITY. DISPOSE  
OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL  
REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This i

nformation is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.