

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 FROSTBITE

. 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/OXYGEN IF  
NEEDED.SEE DOCTOR. INGESTION:SEE DOCTOR. NOTE TO  
PHYSICIAN:BECAUSE OF POSSIBLE CARDIAC DIST

URBANCE, 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

C

ONTAINERS. 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 RESPIRATOR,

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 =====

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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 Prod

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.

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