

DU PONT E I DE NEMOURS & CO INC -- FREON 114 (DU001061) -- 6830-00-782-6512  
===== Product Identification =====

Product ID:FREON 114 (DU001061)  
MSDS Date:10/07/1991  
FSC:6830  
NIIN:00-782-6512  
MSDS Number: BYXTV  
=== Responsible Party ===  
Company Name:DU PONT E I DE NEMOURS & CO INC  
Address:1007 MARKET STREET  
Box:1635  
City:WILMINGTON  
State:DE  
ZIP:19898  
Country:US  
Info Phone Num:800-441-9442  
Emergency  
Phone Num:800-441-3637(MEDICAL) OR CHEMTREC  
Preparer's Name:W. J. BROCK  
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:ETHANE, 1,2-DICHLOROTETRAFLUORO-("FREON" 114) (SARA 313)  
CAS:76-14-2  
RTECS #:KI1101000  
Fraction by Wt: 100%  
Other REC Limits:NONE RECOMMEND

ED  
OSHA PEL:1000 PPM, 8 HR TWA  
ACGIH TLV:1000 PPM, 8 HR TWA  
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:SEE SUPPLEMENTAL DATA.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:UNKNOWN IARC:UNKNOWN OSHA:NO  
Health Hazards Acute and Chronic:SKIN: POS IRRIT/RASH/FROSTBITE. EYES:  
IRRITATION/TEARING/BLURRY VISION. INHAL: POS NONSPECIFIC DISCOMFORT  
(NAUSEA/HEADACHE/WEAKNESS; TEMPORARY ALTERATION HEART ELECTRICAL  
ACTIVITY W/IRREG PULSE/PALPITATIONS/INADEQUATE CIRCULATION.) DEATH  
POS W/GROSS OVEREXPOS. INTENTIONAL MISUSE/DELIBERATE INHAL MAY  
CAUSE DEATH W/O\*  
Explanation of Carcinogenicity:CONTAINS 2-A [53-96-3]  
WHICH IS LISTED BY NTP AND IARC AND REGULATED BY OSHA AS A  
CARCINOGEN.  
Effects of Overexposure:NK \*WARNING. VAPOR REDUCES OXYGEN AVAILABLE  
FOR BREATHING & IS HEAVIER THAN AIR.  
Medical Condition Aggravated by Exposure:INDIVIDUALS W/PREEXISTING  
DISEASES  
OF CNS, CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO  
TOXICITY OF EXCESSIVE EXPOSURES.

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

First Aid:INHAL: GET FRESH AIR IMMEDIATELY. KEEP CALM. IF NOT BREATHING GIVE  
ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULT, GIVE OXYGEN. CALL DR. SKIN:  
FLUSH W/WATER 15 MIN. IF FROST BITE, WARM AFFECTED AREAS. GET MEDICAL  
AID IF IRRITATION PRESENT. EYES: FLUSH IMMEDIATELY W/LOTS OF H2O 15 MIN. CALL  
DR. NOTE TO DR.: BECAUSE OF POSITIVE  
CARDIAC RHYTHM DISTURBANCE,  
CATECHOLAMINE DRUGS (EPINEPHRINE) SHOULD BE USED W/SPECIAL CAUTION  
IN EMERGENCY LIFE SUPPORT.

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

Flash Point Method:TOC  
Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.  
Fire Fighting Procedures:SCBA REQUIRED IF CYLINDERS RUPTURE/RELEASE  
UNDER FIRE CONDITIONS.  
Unusual Fire/Explosion Hazard:USE WATER SPRAY/FOG TO COOL CONTAINERS.  
CYLINDERS ARE EQUIPPED W/TEMP & PRESSURE RELIEF DEVICES.

VICES BUT MAY

STILL RUPTURE UNDER FIRE CONDITIONS. DECOMP POSSIBLE.

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

Spill Release Procedures:REVIEW FIRE EXPLN HAZ/SAFETY PRECAUTIONS BEFORE CLEAN UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIP. VENTILATE AREA, ESPEC LOW PLACES WHERE VAPORS MIGHT COLLECT. USE SCBA FOR LARGE SPILLS. REMOVE OPEN FLAMES. COMPLY W/APPLIC LAWS ON REPORTING RELEASE

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

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Handling and Storage Precautions:STORE CONTAINERS IN COOL, CLEAN DRY AREA. DO NOT ALLOW TEMP TO RISE ABOVE 125F.

Other Precautions:AVOID BREATHING VAPORS. AVOID LIQUID CONTACT W/SKIN/EYES. USE SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS. AQUATIC TOXICITY: 96 HR LC50, KILLIFISH = 45 PPM.

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

Respiratory Protection:NOT REQUIRED UNDER NORMAL MFG CONDITIONS. SCBA REQUIRED IF SPILL OCCURS.

Ventilation:NORMAL FOR STANDARD MFG ADEQUATE. LOCAL EXHAUST WHEN LG AMTS RELEASED. MECHANCL VENT SHOULD BE USED IN LOW PLACES.

Protective Gloves:RUBBER,PLASTIC

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:USE GLOVES & FACE SHIELD WHEN HANDLING LIQUID

Supplemental Safety and Health

INHALATION 4-HR ALC = 383,000 PPM RATS. ORAL ALD RATS = >1500 MG/KG.

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

HCC:G3

Boiling Pt:B.P. Text:39.0F,3.9C

Va

por Pres:31PSIA@77F

Vapor Density:6.2 @ 77F

Evaporation Rate & Reference: