

DU PONT E I DE NEMOURS & CO INC -- FREON 22 -- 6830-00-935-9896

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

Product ID:FREON 22

MSDS Date:08/31/1993

FSC:6830

NIIN:00-935-9896

MSDS Number: BPBZT

=== Responsible Party ===

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

Address:1007 MARKET STREET

Box:1635

City:WILMINGTON

State:DE

ZIP:19899

Country:US

Info Phone Num:800-441-9442

Emergency Phone Num:800-441-3637/800-424-9300(CHEMTREC)

Preparer's Name:DR. W.J.BROCK

CAGE:18873

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== Contractor Identification ==

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

Address:1251 BRANDYWINE BLDG

Box:City:WILMINGTON

State:DE

ZIP:19898

Phone:302-773-5676

CAGE:73925

Company Name:E I DUPONT DE NEMOURS & CO, FREON PROD (REPLACED BY 73925)

Address:1007 MARKET ST

Box:City:WILMINGTON

State:DE

ZIP:19899

Country:US

Phone:800-441-3637-MED 800-424-9300-TRAN

CAGE:5P414

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

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:1

9898
Country:US
Phone:800-441-7515;800-441-9442
CAGE:18873

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

Ingred Name:METHANE, CHLORODIFLUOROMETHANE- ("FREON" 22)
CAS:75-45-6
RTECS #:PA6390000
Fraction by Wt: 100%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1000 PPM-8 HR TWA
ACGIH TLV:1000 PPM-8 HR TWA
Ozone Depleting Chemical:2

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

LD50 LC50 Mixture:INHAL 4-HR LC50: 220,000 PPM (RAT)
Routes of Entry: Inhalat
ion:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:SKIN:FROSTBITE. EYE:IRRIT. INHAL:TEMP
CNS DEPRESSION W/ANESTHETIC EFFECTS. CHRONIC:PROLONGED SKIN
OVEREXPOSURE MAY CAUSE DEFATTING OR DRYNESS. INHAL:TEMP ALTERATION
OF HEART'S ELECTRICAL ACTIVITY W/IR REG PULSE, PALPITATIONS,
INADEQUAT CIRCULATION. FATALITY MAY OCCUR FROM GROSS OVEREXPOSURE.
Explanation of Carcinogenicity:NONE OF THE COMPONENTS IN THIS MATERIAL

IS LISTED BY IARC, NTP, OSHA, OR ACGIH AS A CARCINOGEN.
Effects of Overexposure:SKIN:INFLAMMATORY REDNESS, SLIGHT PAIN.
EYE:REDNESS, DISCOMFORT, TEARING, BLURRING OF VISION.
INHAL:DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION, LOSS OF
CONSCIOUSNESS. IRREGULAR PULSE, PALPITATINS, INADEQUATE
CIRCULATION, DEATH.
Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PRE-EXISTING
DISEASES OF THE CENTRAL NERVOUS OR CARDIOVASCULAR SYSTEM MAY HAVE
INCREASED SUSCEPTIBILITY TO T
HE TOXICITY OF EXCESSIVE EXPOSURES.

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

First Aid:INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSONS
CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING
IS DIFFICULT, GIVE OXYGEN. CALL DOCTOR. SKIN: FLUSH WITH WATER.
TREAT FOR FR OSTBITE IF NECESSARY. EYE: IMMEDIATELY FLUSH EYES WITH
PLENTY OF WATER. CALL DOCTOR.

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

Flash Poin

t Method:TOC

Flash Point:NOT FLAMMABLE

Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA. USE WATER SPRAY OR FOG TO COOL CONTAINERS.

Fire Fighting Procedures:SELF-CONTAINED BREATHING APPARATUS IS REQUIRED IF CYLINDERS RUPTURE OR CONTENTS ARE RELEASED UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard:FREON 22 CAN BE COMBUSTIBLE @ PRESSURES AS LOW AS 60PSIG @ AMBIENT TEMP WHEN MIXED W/AIR @ CONCEN OF 65 VOL%AIR & COMBUST IN PRESENCE OF CERTAIN CON OF CHLORINE

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

Spill Release Procedures:NOTE: REVIEW FIRE & EXPLOSION HAZARDS & SAFETY PRECAUTIONS BEFORE PROCEEDING W/CLEAN UP. USE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN UP. VENTILATE AREA. REMOVE OPEN FLAMES. USE SCBA FOR LARGE SPILL S OR RELEASES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN CLEAN, DRY AREA. DO NOT HEAT

ABOVE 125F. AVOID BREATHING VAPORS & LIQUID CONTACT W/SKIN OR EYES.

Other Precautions:USE WITH SUFFICIENT VENT TO KEEP EMPLOYEES EXPOSURES BELOW RECOMMENDED LIMITS. HCFC-22 SHOULD NOT BE MIXED OR ALLOWED TO BE PRESENT WITH HIGH CONCENTRATIONS OF AIR ABOVE ATMOSPHERIC PRESSURE.

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

Respiratory Protection:REVIEW FIRE & EXPLOSION HAZ & SAFETY PRECAUTIONS BEFORE PROCEEDING W/CLEANUP. USE PERSONAL PROTECTIVE EQUIPMENT DURING

CLEANUP. VENTILATE AREA. FREON HEAVIER THAN AIR & WILL DISPLACE OXYGEN. REMOVE OPEN FLAMES. USE SCBA FOR LG SPILLS OR RELEASES

Ventilation:NORMAL VENTILATION FOR STD MFG PROCEDURES IS ADEQUATE. USE LOCAL EXHAUST FOR LG AMT OF RELEASE & MECHANICAL FOR LOW AMTS

Protective Gloves:LINED BUTYL GLOVES.

Eye Protection:CHEM SPLASH GOGGLES FOR HANDLING LIQUID.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH HANDS AFTER USE AND BEFORE EAT

ING,
DRINKING, OR SMOKING.
Supplemental Safety and Health
LIQ DESITY=1.194G/CM3 @25C.

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

HCC:G3
Boiling Pt:B.P. Text:-41F,-41C
Melt/Freeze Pt:M.P/F.P Text:1170F,632C
Decomp Temp:Decomp Text:1170F,632C
Vapor Pres:151 PSIG
Vapor Density:3.03 @ 25C
Spec Gravity:1.194 G/CC @25C
pH:NEUTRA
Evaporation Rate & Reference:>1 (CC14=1.0)
Solubility in Water:NEGLIGIBLE
Appearance and Odor:CLEAR, COLORLESS LIQUEFIED GAS, SLIGHT ETHERA
L
ODOR.
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
INCOMPATIBLE WITH ALKALI OR ALKALINE EARTH METALS-- POWDERED AL, ZN,
BE, ETC.
Stability Condition to Avoid:AVOID OPEN FLAMES, HIGH TEMPERATURES AND
GLOWING METAL SURFACES.
Hazardous Decomposition Products:BY HIGH TEMPERATURES FORMING:
HYDROCHLORIC & HYDROFLUORIC ACIDS--POSSIBLY CARBONYL HALIDES.

===== Disposal Co
nsiderations =====

Waste Disposal Methods:COMPLY WITH LOCAL, STATE AND FEDERAL
REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO A PERMITTED WASTE
DISPOSAL FACILITY.

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