

DU PONT CHEMICALS -- FREON 502 REFRIGERANT -- 6830-00-144-9952

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

Product ID:FREON 502 REFRIGERANT

MSDS Date:09/26/1991

FSC:6830

NIIN:00-144-9952

MSDS Number: BRNGX

=== Responsible Party ===

Company Name:DU PONT CHEMICALS

Address:CHESTNUT RUN

Box:80709

City:WILMINGTON

State:DE

ZIP:19880-0709

Country:US

Info Phone Num:302-999-5072/800-441-9450

Emergency Phone Num:80

0-424-9300 CHEMTREC/800-441-3637

Preparer's Name:W J BROCK

CAGE:DO217

=== Contractor Identification ===

Company Name:DU PONT CHEMICALS

Address:CHESTNUT RUN, P.O.BOX 80709

Box:80709

City:WILMINGTON

State:DE

ZIP:19880-0709

Phone:800-441-3637,800-424-9300(CHEMTREC)

CAGE:DO217

Company Name:DU PONT E I NEMOURS & CO CHEMICALS & PIGMENTS DEPT

Address:1007 MARKET ST

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-441-7515

CAGE:23037

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

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Ingred Name:ETHANE, CHLOROPENTAFLUORO ("FREON" 115) (SARA III)
(INHALATION 4 HOUR LC50:>800,000 PPM, RAT; ORAL ALD:>1200
MG/KG,RAT)

CAS:76-15-3

RTECS #:KH7877500

Fraction by Wt: 51.2%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1000 PPM 8 HR TWA

ACGIH TLV:1000 PPM 8 HR TWA

Ozone Depleting Chemical:1

Ingred Name:METHANE, CHLORODIFLUORO ("FREON" 22) (INHALATION 4 HOUR
LC50: 220,000 PPM, RAT)

CAS:75-45-6

RTECS #:PA6390000

Fraction by Wt: 48.8%

Other REC Limits:NONE SPECIFIED

O

SHA PEL:1000 PPM 8 HR TWA

ACGIH TLV:1000 PPM 8 HR TWA

Ozone Depleting Chemical:2

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

Health Hazards Acute and Chronic:INHAL: HARMFUL, HEART IRREGS,
UNCONSCIOUS, DEATH. CONCENTRATING & INHAL: DEATH. TEMPORY NERVOUS
SYSTEM DEPRESSN (ANESTHETIC EFFECTS: DIZZY, HEADACHE, CONFUSION,
INCOORDINATION, UNCONSCIOUSNESS). ALTER ATION OF HEART'S ELECTRICAL
ACTIVITY W/IRREGULAR PULSE, PALPITATIONS, INADEQUATE CIRCULATION.

SKIN: FROSTBITE MAY OCCUR.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PREEXISTING
DISEASES OF THE CENTRAL NERVOUS SYSTEM OF THE CENTRAL NERVOUS
SYSTEM OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY
TO 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
DIFFICULT, GIVE OXY

GEN. CALL PHYSICIAN. SKIN: FLUSH WITH WATER FOR 15 MINUTE S. TREAT FOR FROSTBITE IF NEEDED BY GENTLY WARMING AFFECTED AREA. EYE: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER, 15 MIN. CALL DR. INGESTION: INGESTION NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE.

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

Flash Point:WILL NOT BURN
Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.
Fire Fighting Procedures:SELF-CONTAINED BREATHING APPARATUS IS REQUIRED
IF CYLINDERS RUPTURE OR RELEASE UNDER FIRE CONDITIONS.

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

Spill Release Procedures:NOTE: REVIEW FIRE & EXPLOSION HAZARDS & SAFETY PRECAUTIONS BEFORE PROCEEDING WITH CLEAN UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN UP. VENT AREA. ESPECIALLY LOW PLACES WHERE VAPOR COLLECT. REMOVE OPEN FLAME. USE SCBA FOR LRG SPILL

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

Handling and Storage Precautions:USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS.

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

Respiratory Protection:UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. SELF-CONTAINED BREATHING APPARATUS IS REQUIRED IF SPILL OR RELEASE OCCURS.
Ventilation:NORMAL VENT FOR STD MFR PROCEDURES ADEQUATE. LOCAL EXHAUST WHEN LRG AMT RELEASED.MECH ANICL VENT FOR LOW/ENCLOSED PLACES.
Protective Gloves:IMPERVIOUS GLOVES IF CONTACT IS POSSIBLE
Eye Protection:CHEM SPLASH GOGGLES IF CONTACT POSSIBLE
Supplemental Safety and Health

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

HCC:G3
Boiling Pt:B.P. Text:-45F,-43C
Decomp Temp:Decomp Text:1299F,704C
Vapor Pres:169 PSIA
Vapor Density:3.92 @ 77F
pH:NEUTRL
Evaporation Rate & Reference:>1 (CC14=1.0)
Solubility in Water:0.15 WT % @ 25C
Appearance and Odor:CLEAR, ODORLESS,

LIQUIFIED GAS, SLIGHT ETHEREAL
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 AND HIGH TEMPERATURES.

Hazardous Decomposition Products:FREON 502 CAN DECOMPOSE BY HIGH TEMP
FORMING: HYDROCHLORIC & HYDROFLUORIC ACIDS, & POSSIBLY CARBONYL
HALIDES.

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

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

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