

DUPONT -- FREON 12 FLUOROCARBON -- 6830-00-531-8102

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

Product ID:FREON 12 FLUOROCARBON

MSDS Date:12/17/1990

FSC:6830

NIIN:00-531-8102

MSDS Number: BNPQB

=== Responsible Party ===

Company Name:DUPONT

Address:CHESTNUT RUN PLAZA 711S

Box:80711

City:WILMINGTON

State:DE

ZIP:19890-0711

Country:US

Info Phone Num:800-441-9450

Emergency Phone Num:800-423-9300(CHEMTREC)/800-441-3637

Preparer's Name:DR W BROCK

CAGE:EO596

=== Contractor Identification ===

Company Name:DU PONT

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-441-9442

CAGE:25827

Company Name:DUPONT

Address:1007 MARKET STREET

City:WILMINGTON

State:DE

ZIP:19898-5000

Country:US

Phone:PROD 800-441-7515 MED: 8004413637

CAGE:EO596

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

Ingred Name:METHANE, DICHLORODIFLUORO ("FREON" 12 FLUOROCARBON) (SARA

III)
CAS:75-71-8
RTECS #:PA8200000
Fraction by Wt: 100%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1000 PPM 8 HR TWA
ACGIH TLV:1000 PPM 8 HR TWA
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS
Ozone Depleting Chemical:1

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Hazards Identification
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LD50 LC50 Mixture:INHAL 4-HR LC50: 80,000 PPM (RAT) **
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYE CONTACT WITH VAPOR MAY CAUSE EYE IRRITATION. SKIN CONTACT WITH LIQUID MAY CAUSE FROSTBITE.
INHALATION OF VAPORS MAY CAUSE TEMPORARY NERVOUS SYSTEM DEPRESSION W/ANESTHETIC EFFECTS. TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY.

** ORAL ALD: >1000 MG/KG (RATS).

Explanation of Carcinogenicity:NONE OF THE COMPONENTS IN THIS MAT'L IS LISTED BY IARC, NTP, OSHA, OR ACGIH AS A CARCINOGEN.

Effects of Overexposure:EYE: DISCOMFORT, TEARING, BLURRING OF VISION. INHALATION: NERVOUS SYSTEM DEPRESSION: DIZZINESS, HEADACHE,

CONFUSION, INCOORDINATION AND LOSS OF CONSCIOUSNESS. IRREGULAR PULSE, PALPITATIONS, INADEQUATE CIRCULATION, OR THE EFFECTS OF EXCLUSION OF OXYGEN W/GROSSLY EXCESSIVE EXPOSURES.

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.

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First Aid Measures
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First Aid:INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSONS CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL DR. SKIN: FLUSH W/WATER. TREAT FOR FROSTBITE IF NECESSARY BY GENTLY WARMING AFFECTED AREA. EYE: IMMEDIATE FLUSH W/PLENTY OF WATER 15 MIN. CALL DR. NOTES TO PHYSICIAN: BECAUSE OF A POSSIBLE DISTURBANCE OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH***

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Fire Fighting Measures
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Flash Point:WILL NOT BURN
Exting

guishing Media:AS FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures:SCBA IS REQUIRED IF CYLINDERS RUPTURE OR CONTENTS ARE RELEASED UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard:USE WATER SPRAY OR FOG TO COOL CONTAINERS. CYLNDRS EQUIPPED W/PRESSURE & TEMP RELIEF DEVICES BUT MAY RUPTURE UNDER FIRE CONDITIONS. DECOMPOSITION MAY OCCUR.

===== 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. VENT AREA-ESPECIALLY LOW PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. FOR LRG SPILLUSE SCBA.

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

Handling and Storage Precautions:STORE IN CLEAN, DRY AREA. DO NOT HEAT ABOVE 125F. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS.

Other Precautions:N/K

*** AS

EPINEPHRINE, SHOULD BE USED WITH SPECIAL CAUTION IN SITUATIONS OF EMERGENCY LIFE SUPP ORT.

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

Respiratory Protection:UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. SELF-CONTAINED BREATHING APPARATUS (SCBA) IS REQUIRED IF A LARGE RELEASE OCCURS.

Ventilation:NORMAL VENT FOR STD MFR PROCEDURES IS GEN ADEQUATE. LOCAL EXHAUST WHEN LRG AMTS ARE RE LEASED. MECHAN VENT IN LOW PLACES.

Protective Gloves:LINED BUTYL GLOVES.

Eye Protection:CHEM SPLASH GOGGLES WHEN HANDLING LIQUID

Supplemental Safety and Health

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

HCC:G3

Boiling Pt:B.P. Text:-22F,-30C

Decomp Temp:Decomp Text:>1400F,>760

Vapor Pres:94.5 PSIA*

Vapor Density:4.26 @ 25C

Spec Gravity:1.315 G/CC @25C

pH:NEUTRL

Evaporation Rate & Reference:N/K * 25 C

Solubility in Water:0.028WT% @1 ATM @25C

Appearance and Odor:COL

ORLESS, CLEAR 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:OPEN FLAMES AND HIGH TEMPERATURES.

Hazardous Decomposition Products:BY HIGH TEMPS FORMING: HYDROCHLORIC &
HYDROFLUORIC ACIDS-POSSIBLY CARBONYL HALIDES.

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

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Waste Disposal Methods:COMPLY WITH FEDERAL, STATE AND LOCAL
REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED WASTE
FACILITY. REPORTABLE QUANTITY: 5000 LBS/2250 KG.

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