

DUPONT E I DE NEMOURS & CO, INC, POLYMER PRODUCTS -- FREON 12 FLUOROCARBON --
6830-00-088-3385

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

Product ID:FREON 12 FLUOROCARBON

MSDS Date:10/07/1996

FSC:6830

NIIN:00-088-3385

MSDS Number: CHLZV

=== Responsible Party ===

Company Name:DUPONT E I DE NEMOURS & CO, INC, POLYMER PRODUCTS

Address:1007 N MARKET ST

City:WILMINGTON

State:DE

ZIP:19898

Country:US

Info Phone Num:800-441-7515/800-523-0372

Emergency Phone Num:800-441-3637/C

HEMTREC 800-424-9300

Preparer's Name:DR W BROCK

CAGE:9V583

=== Contractor Identification ===

Company Name:DUPONT E I DE NEMOURS AND CO INC, POLYMER PRODUCT-TEFLON
CO.

Address:1007 MARKET ST

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-523-0372/346-4748

CAGE:9V583

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

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

CAS:75-71-8

RTECS #:PA8200000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIE

D

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

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

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 DEPRES

SION

W/ANESTHETIC EFFECTS. TEMPORARY ALTERA TION 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.

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

First Aid:INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSONS CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFI

CULT, GIVE OXYGEN. CALL DR. SKIN: FLUSH W/WATER. TREAT FOR FROSTBITE IF NECESSARY BY GENTLY WARMING AFFECTED AREA. EYE: IMMED FLUSH W/PLENTY OF WATER 15 MIN. CALL DR. NOTES TO PHYSICIAN: BECAUSE OF A POSSIBLE DISTURBANCE OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH

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

Flash Point:WILL NOT BURN

Extinguishing Media:AS FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures:SCBA IS REQUIRED IF CYLINDERS RUPTURE OR C

ONTENTS 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-ESPECIAL

LY LOW PLACES WHERE
HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. FOR LRG SPILL USE
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 SUPPORT.

===== 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 RELEASED. 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:=-30.C, -22.F

Decomp Temp:>760.C, 1400.F

Vapor Pres:94.5 PSIG

Vapor Density:4.26 @ 25C

Spec Gravity:1.315 G/CC @25C

pH:NEUTRL

Solubility in Water:0.028%

Appearance and Odor:COLORLESS, CLEAR LIQUEFIED GAS, SLIGHT ETHEREAL
ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
ALKALI OR ALKALINE E

ARTH 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 =====

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.

Disclaimer (provided w
ith this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.