

E I DUPONT DE NEMOURS & CO INC -- FREON 113, 8500-1251 -- 6830-00-144-4955

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Product Identification
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Product ID:FREON 113, 8500-1251

MSDS Date:10/30/1991

FSC:6830

NIIN:00-144-4955

MSDS Number: CDLQH

=== Responsible Party ===

Company Name:E I DUPONT DE NEMOURS & CO INC

Address:1007 MARKET ST

City:WILMINGTON

State:DE

ZIP:19898

Country:US

Info Phone Num:800-441-9442

Emergency Phone Num:800-

441-3637;800-424-9300(CHEMTREC)

Preparer's Name:WJ BROCK

CAGE:0ERJ7

=== Contractor Identification ===

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

Address:1007 MARKET STREET

City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-441-7515

CAGE:0ERJ7

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

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Composition/Information on Ingredients
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Ingred Name:1,1,2

-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA
313)

CAS:76-13-1

RTECS #:KJ4000000

Fraction by Wt: 100%

OSHA PEL:1000 PPM

ACGIH TLV:1000PPM/1250STEL

Ozone Depleting Chemical:1

Ingred Name:SUP DAT: SKIN CONT MAY INCL MILD SKIN IRRIT
W/DISCOMFORT/RASH. PRLNG SKIN CONT MAY CAUSE TEMPORARY TINGLING,
(ING 3)

RTECS #:9999999ZZ

Ingred Name:ING 2: NUMBNESS, COLDNESS/DRYING OF SKIN. THERE ARE NO RPTS
OF HUMAN SKIN SENSIT. EYE CONT MAY INCL IRRIT WITH (ING 4)

RTECS #:9999999ZZ

Ingred

Name:ING 3: DISCOMFORT, TEARING/BLURRING OF VISION. MAJOR INGEST
HAZ IS ASPIR OF LIQ INTO LUNG WHICH MAY RSLT IN "CHEM(ING 5)

RTECS #:9999999ZZ

Ingred Name:ING 4: PNEUMONIA". SYMPS INCL COUGHING, GASPING, CHOKING,
SHORTNESS OF BRTH, BLUISH DISCOLORATION OF SKIN, RAPID (ING 6)

RTECS #:9999999ZZ

Ingred Name:ING 5: BRTHG & HEART RATE, & FEVER. PULM EDEMA/BLEEDING,
DROW, CONFUSION, COMA & SEIZURES MAY OCCUR IN MORE (ING 7)

RTECS #:9999999ZZ

Ingred Name:ING 6: SERIOUS CASES. SYMPS MAY
DEVELOP IMMED/AS LATE AS 24

HRS AFTER EXPOS, DEPENDING ON HOW MUCH CHEM ENTERED (ING 8)

RTECS #:9999999ZZ

Ingred Name:ING 7: LUNGS. INHAL/INGEST MAY INCL TEMPORARY NERV SYS
DEPRESS W/ANESTH EFTS SUCH AS DIZZ, HDCH, CONFUSION, (ING 9)

RTECS #:9999999ZZ

Ingred Name:ING 8: INCOORD, & LOSS OF CONSCIOUSNESS. HIGHER EXPOS MAY
CAUSE TEMPORARY ALTERATION OF HEART'S ELEC ACTIVITY W/(ING 10)

RTECS #:9999999ZZ

Ingred Name:ING 9: IRREG PULSE, PALPITATIONS/INADEQ CIRCULATION.
FATALITY MAY

OCCUR FROM GROSS OVEREXP. A STUDY EVALUATED 50(ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10: WORKERS EXPOSED FOR AN AVERAGE OF OVER 2 YRS TO
46-4700 PPM. NO ADVERSE EFTS WERE FOUND EXCEPT FOR 1 (ING 12)
RTECS #:9999999ZZ

Ingred Name:ING 11: CASE OF DRY SKIN. CHLOROFLUOROCARBON MATLS HAVE
PRODUCED SENSIT OF THE MYOCARDIUM TO EPINEPHRINE IN LAB (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12: ANIMALS & COULD HAVE SIMILAR EFTS IN HUMANS.
ADRENOMIMETICS (E.G., EPINEPHRINE) MAY BE CONTR
AINDICATED (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13: EXCEPT FOR LIFE-SUSTAINING USES IN HUMANS
ACUTELY/CHRONICALLY EXPOSED TO CHLOROFLUOROCARBONS .
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC: VOMIT. HOWEVER, CONSULT MD IF NEC. NOTES TO
MD: BECAUSE OF POSS DISTURBS OF CARD RHYTHM, (ING 16)
RTECS #:9999999ZZ

Ingred Name:ING 15: CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD
ONLY BE USED WITH SPECIAL CAUTION IN SITUATIONS OF (ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16: EM
ERGENCY LIFE SUPPORT.
RTECS #:9999999ZZ

Ingred Name:VENT: AMOUNTS ARE RELEASED. MECHANICAL VENTILATION SHOULD
BE USED IN LOW OR ENCLOSED PLACES.
RTECS #:9999999ZZ

Ingred Name:SPILL PROC: USE NIOSH APPRVD SCBA FOR LGE SPILLS. COMPLY
W/FED, STATE, & LOC REGS ON REPORTING RELEASES.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:LD50 (ORAL RAT): 43,000 MG/KG.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carc

inogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: INHAL OF HIGH CONCS OF VAP IS HARMFUL & MAY CAUSE HEART IRREGULARITIES, UNCON/DEATH. INTENTIONAL MISUSE/DELIBERATE INHAL MAY CAUSE DEATH W/OUT WARNING. VAP REDUCES OXYGEN AVAIL FOR BRTHG & IS H VR/AIR. THE CMPD IS A MILD SKIN & EYE IRRIT, & PRODUCED WEAK ALLERGIC SKIN SENSIT IN LAB ANIMALS. (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: EFTS IN ANIMALS FROM HIGH SINGLE

INHAL EXPOS INCL ANESTH EFTS SUCH AS TREMORS, DIZZ, INCOORD, & LOSS OF CONSCIOUSNESS, & IRREGULAR HEARTBEAT. RPTD EXPOS AT HIGH CONCS ALSO PRODUCED CNS EFTS DURING EXPOS BUT NO EVIDENCE OF OTHER SYSTEMIC TOX. HIGH, SINGLE ORAL ADMIN OF LIQ, AT/NEAR LETHAL DOSES, (SUP DAT)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHAL: IF HIGH CONCS ARE INHALED, IMMEDIATE REMOVE TO FRESH AIR;

KEEP CALM. IF NOT BRTHG, GIVE ARTF RESP. IF BRTHG IS DFCLT, GIVE OXYGEN. CALL MD. SKIN: FLUSH W/PLENTY OF WATER FOR 15 MIN. GET MED ATTN IF IRRIT IS PRESENT. EYES: IMMEDIATE FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MIN. CALL MD. INGEST: NO SPECIFIC INTERVENTION IS INDICATED AS CMPD IS NOT LIKELY TO BE HAZ BY INGEST. DO NOT INDUCE (ING 15)

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

Flash Point:WILL NOT BURN

Extinguishing Medi

a:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures:WEAR NIOSH APPROVED PRESSURE DEMAND SCBA & FULL PROTECTIVE EQUIPMENT . USE WATER SPRAY OR FOG TO COOL CONTAINER.

Unusual Fire/Explosion Hazard:DRUMS MAY RUPTURE UNDER FIRE CONDITIONS.

DECOMPOSITION MAY OCCUR. THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE HCL AND PHOSGENE .

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

Spill Release Procedures:NOTE: REVIEW FIRE & EXPLO HAZS & SFTY PREC BEF

ORE PROCEEDING W/CLEAN UP. USE APPROP PERS PROT EQUIP DURING
CLEAN UP. VENT AREA. DO NOT FLUSH INTO SEWERS. DIKE SPILL. COLLECT
ON ABSORB MATL & TRANSFER TO STEEL DRUMS FOR RECOVERY/DISP. (ING
19)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN CLEAN, DRY AREA. DO NOT HEAT
ABOVE 125F.

Other Precautions:NO SMOKING IN AREA OF USE. DO NOT USE IN THE GENERAL
VICINIT
Y OF ARC WELDING, OPEN FLAMES OR HOT SURFACES. HEAT AND/OR
UV RADIATION MAY CAUSE THE FORMATION OF HCL AND/OR PHOSGENE .

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

Respiratory Protection:UNDER NORMAL USE CONDITIONS, NO RESPIRATORY
PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. NIOSH APPROVED SCBA
IS REQUIRED IF A LARGE SPILL OCCURS.

Ventilation:NORMAL VENTILATION FOR STANDARD USE PROCEDURES IS GENERALLY
ADEQUATE. LOCAL EXHAUST SHOULD BE USED WHEN LARGE
(ING 18)

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGLES .

Other Protective Equipment:EMERGENCY EYEWASH AND DELUGE SHOWER MEETING
ANSI DESIGN CRITERIA .

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

VP: 6.46 PSIA @ 77F. HAZ DECOMP PROD: FORMING HYDROCHLORIC &
HYDROFLUORIC ACIDS, & POSS CARBONYL HALIDES. PHOSGENE . EFTS OF
OVEREXP: PRODUCED LETHARGY W/IN SEVERAL MIN. IN A REPRO TOX STUDY
IN RATS, ONLY M

IN EFTS (SLIGHT DECR IN CORPORA LUTEA) WERE
OBSERVED AT 12,5000 PPM. HUMAN HLTH EFTS OF OVEREXP BY (ING 2)

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

Boiling Pt:B.P. Text:118F,48C

Vapor Pres:SUP DAT

Vapor Density:2.9

Spec Gravity:1.77

pH:NEUT

Evaporation Rate & Reference:>1 (CCL*4=1)

Solubility in Water:0.02%

Appearance and Odor:CLEAR, COLORLESS LIQUID, SLIGHT ETHEREAL ODOR

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

Stability Indicat

or/Materials to Avoid: YES

INCOMPATIBLE WITH ALKALI OR ALKALINE EARTH METALS-POWDERED ALUMINUM,
ZINC, BERYLLIUM, ETC.

Stability Condition to Avoid: AVOID OPEN FLAMES AND HIGH TEMPERATURES.

Hazardous Decomposition Products: DECOMP PRODS ARE HAZ. THIS CMPD CAN BE
DECOMPOSED BY HIGH TEMPS (OPEN FLAMES, GLOWING METAL SURF, ETC),
(SUP DAT)

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

Waste Disposal Methods: COMPLY WITH FEDERAL, STATE, AND LOCAL
REGULATIONS. REMOVE
TO A PERMITTED WASTE DISPOSAL FACILITY. EPA
HAZARDOUS WASTE # F001 AND F002 MAY APPLY TO WASTE MATERIALS.

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