

DU PONT E I DE NEMOURS AND CO INC -- FREON 113 (P/N 8500-1251 & 92193F,SEE SUPP) --  
6625-01-103-3583

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

Product ID:FREON 113 (P/N 8500-1251 & 92193F,SEE SUPP)

MSDS Date:05/01/1989

FSC:6625

NIIN:01-103-3583

MSDS Number: BJQYH

=== Responsible Party ===

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

Address:1007 MARKET STREET

Box:1635

City:WILMINGTON

State:DE

ZIP:1989

9

Country:US

Info Phone Num:800-441-7515 800-441-9450

Emergency Phone Num:800-441-3637

Preparer's Name:T. D. ARMSTRONG

CAGE:0BA38

=== 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:DU PONT E I DE NEMOURS AND CO INC CHEM

Address:DELLE DONNE CORPORATE CTR

City:WILMINGTON

State:DE

ZIP:19880-0800

Country:US

Phone:800-441-7515

CAGE:0BA38

Company Name:HEWLETT-PACKARD; MIDWEST SALES REGION  
Address:4887 WASHINGTON VILLAGE DRIVE  
Box:City:DAYTON  
State:OH  
ZIP:45459  
Country:US  
Phone:513-433-2223  
CAGE:3B868

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

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA III)

CAS:76-13-1

RTECS #:KJ4000000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1000PPM/1250STEL

ACGIH TLV:1000PPM/1250STEL9192

Ozone Depleting Chemical:1

=====

=== Hazards Identification =====

LD50 LC50 Mixture:LC50 ORAL RAT 43000 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:PRODUCT IS NEITHER CORROSIVE NOR AN IRRITANT. IT WILL DEFAT & DRY SKIN,POSSIBLY CAUSING DERMATITIS.

VAPOR IS HEAVIER THAN AIR AND CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR BREATHING.

Explanation of Carcinogenicity:FREON 113 IS NOT LISTED AS A CARCINOGEN

BY IARC, NTP OR OSHA.

Effects of Overexposure:BREATHING HIGH CONCENTRATIONS OF VAPOR MAY CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. LIQUID CAN CAUSE DEFATTING OF TISSUE.

Medical Cond Aggravated by Exposure:SKIN DISEASE - FREON 113 IS A DEFATTING AGENT AND CAN CAUSE DERMATITIS ON PROLONGED EXPOSURE. PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO

THE EFFECTS OF THIS AGENT.

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

First Aid:EYE:FLUSH W/ WATER 15 MIN, HOLD LIDS OPEN, SEE A DOCTOR.  
SKIN:WASH WITH SOAP & WATER. TREAT FOR FROST-BITE IF NEEDED.  
INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING, AS NEEDED. DO NOT  
GIVE EPINEPHRI NE OR SIMILAR DRUGS. INGESTED:DO NOT INDUCE  
VOMITING. GET IMMEDIATE MEDICAL CARE. IF IRRITATION PERSISTS,OR  
IS SEVERE,SEE A DOCTOR.

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

Flash Point:NON-FLAMMABLE  
Extinguishing Media:PRODUCT IS NON FLAMMABLE. EXTINGUISH FIRE WITH  
MEDIA APPROPRIATE FOR SOURCE OF FIRE.  
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED  
CONTAINERS WITH WATER SPRAY. CONTAIN RUNOFF.  
Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE  
HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:VENTILATE AREA. DO NOT FLUSH INTO SEWERS.  
COLLECT ON ABSORBENT MATERIAL AND TRANSFER TO STEEL DRUMS FOR  
RECOVERY OR DISPOSAL.  
Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE IN A CLEAN, COOL, DRY AND  
WELL-VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FROM  
PHYSICAL DAMAGE AND KEEP CLOSED.  
Other Precautions:TANK-CLEANING PERSONNEL SHOULD USE ONLY FORMAL TANK  
ENTRY PROCEDURE BASED ON RECOGNIZED SAFETY PRINCIPLES. APPLY ALL  
SAFETY PRECAUTIONS TO EMPTY CONTAINERS AS THEY MAY CONTAIN PRODUCT  
RESIDUES/VAPORS.

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

Respiratory Protection:RESPIRATOR WILL NOT NORMALLY BE NECESSARY. USE  
NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR OR SELF CONTAINED  
BREATHING APPARATUS IF EXPOSURE IS ABOVE THE TLV/PEL. SEE 29 CFR  
1910.134 FOR REG

ULATIONS PERTAINING TO RESPIRATOR USE.

Ventilation:PROVIDE LOCAL EXHAUST AT FILLING ZONES AND OTHER OPERATING SPACES WHERE LEAKAGE IS PROBABLE. MECHANICAL FOR OTHER.

Protective Gloves:LINED BUTYL RUBBER, PVA OR NEOPRENE

Eye Protection:SAFETY GLASSES OR SPLASH GOGGLES

Other Protective Equipment:USE IMPERVIOUS CLOTHING IF THERE IS DANGER OF REPEATED OR PROLONGED CONTACT WITH LIQUID.

Work Hygienic Practices:USE GOOD CHEMICAL HYGIENE PRACTICE. AVOID CONTACT. REMOVE AND WASH CLOTHING PROMPTLY UPON CONTAMINATION.

Supplemental Safety and Health

FREON 113 IS PART OF HEWLETT-PACKARD P/N 8500-1251, HEAD CLEANER KIT.

THIS PART NUMBER WAS REPLACED BY P/N 92193F CONTAINING ALSO FREON 113, WHICH WAS REPLACED BY P/N 92281B WHICH CONTAINS ISOPROPYL ALCOHOL.

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

HCC:N1

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

Vapor Pres:334 MM

Vapor Density:6.6

Spec Gravity:1.57

pH:NEUTRL

Evaporation Rate & Reference:0.1 (CARBON TET = 1)

Appearance and Odor:CLEAR COLORLESS LIQUID, SLIGHT ETHEREAL ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ALKALI AND ALKALINE EARTH METALS

Stability Condition to Avoid:FLAME,HIGH TEMPERATURES

Hazardous Decomposition Products:DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROCHLORIC AND HYDROFLUORIC ACIDS.

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

Waste Disposal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL REGULATIONS. MANUFACTURER SUGGESTS THAT RECLAIMATION BY DISTILLATION OR DISPOSAL BY A PERMITTED FACILITY.

Disclaimer (provided with 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 discl

aims 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.