

DU PONT E I DE NEMOURS AND CO INC -- FREON TF CLEANING AGENTS FREON PRECISION CL --
6850-00-984-5853

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

Product ID:FREON TF CLEANING AGENTS FREON PRECISION CL

MSDS Date:10/30/1991

FSC:6850

NIIN:00-984-5853

MSDS Number: BLFGH

=== Responsible Party ===

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

Address:BRANDYWINE BLDG 15305

City:WILMINGTON

State:DE

ZIP:19898

Country:US

Info Phone Num:800-441-7515

Emergency Phone Num:302-774-68

22/800-441-3637

Preparer's Name:W.J. BROCK

CAGE:2S827

=== 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 FLUOROPRODUCTS

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:1-800-441-7515

CAGE:2S827

===== 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:LD50 (ORAL RAT) IS 43,000 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

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

Health Hazards Acute and Chronic:ACUTE-EYE/SKIN: I
RRITATION.

INHALATION: MAY CAUSE TEMPORARY NERVOUS SYSTEM DEPRESSION WITH
ANESTHETIC EFFECTS. HIGH CONCENTRATIONS OF VAPORS MAY CAUSE HEART
IRREGULARITIES, ABNORMAL LIVER FUNCTION OR FATALITY. INGESTION:
MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. CHRONIC-NONE.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%
OR GREATER IS LISTED AS A CARCINOGEN.

Effects of Overexposure:INHALATION: DIZZINESS, HEADACHE, COUGHING,
SHORTNESS OF BREATH, WHEEZING. EYES:
REDNESS, BLURRED VISION,
TEARING. SKIN: REDNESS, RASH, ITCHING.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PREEXISTING
DISEASES OF THE CARDIOVASCULAR SYSTEM MAY HAVE INCREASED
SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

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

First Aid:EYES:FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEE DOCTOR.
SKIN: WASH WITH SOAP AND WATER. INHALATION:REMOVE TO FRESH AIR.
GIVE CPR/OXYGEN IF NEEDED.**DO NOT
GIVE EPINEPHRINE OR SIMILAR
DRUGS**.INGEST ION:DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

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

Flash Point:NONE

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE
CONDITIONS.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A
FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL
FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:DRUMS MAY RUPTURE UND

ER FIRE CONDITIONS

OR AT ELEVATED TEMPERATURES. DECOMPOSITION MAY OCCUR.

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

Spill Release Procedures:WEAR APPROPRIATE PROTECTIVE GEAR. ABSORB WITH
INERT MATERIALS. PLACE IN A CONTAINER FOR LATER DISPOSAL.

Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORAGE-STORE IN A DRY,WELL VENTILATED
AREA AWAY FROM HIGH HEAT & FLAMES.DO NOT HEAT ABOVE
125 DEG F.

Other Precautions:KEEP THIS AND ALL CHEMICALS OUT OF REACH OF CHILDREN.
THIS PRODUCT FOR INDUSTRIAL USE ONLY. AVOID BREATHING VAPORS/MISTS.
AVOID CONTACT WITH EYES AND SKIN.

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

Respiratory Protection:UNDER NORMAL MANUFACTURING CONDITIONS, NO
RESPIRATORY PROTECTION IS NEEDED.

Ventilation:LOCAL EXHAUST WHEN LARGE AMOUNTS ARE RELEASED. FOR LOW
PLACES, USE MECHANICAL VENTILATION.

Protective Gloves:BUTYL

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:APRON AND WORK CLOTHING TO MINIMIZE
PROLONGED OR REPEATED CONTACT. EYE WASH STATION & SAFETY SHOWER
RECOMMENDED.

Work Hygienic Practices:WASH THOROUGHLY AFTER USE AND BEFORE EATING,
SMOKING OR USING TOILET FACILITIES. DO NOT BREATHE VAPORS OR MIST.

Supplemental Safety and Health

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

HCC:N1

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

Decomp Temp:Decomp Text:572F,300C

V

apor Pres:6.46 PSIA
Vapor Density:2.9
Spec Gravity:1.57 G/CC @25C
Evaporation Rate & Reference:>1 (CARBON TETRACHLOR=1)
Solubility in Water:0.02 % @25C
Appearance and Odor:CLEAR, COLORLESS LIQUID, SLIGHT ETHEREAL ODOR
Percent Volatiles by Volume:100.0

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

Stability Indicator/Materials to Avoid:YES
ALKALI OR ALKALINE EARTH METALS (POWDERED AL, ZN, BE, ETC.)
Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES
Hazardous Decomposition Products:MAY DECOMPOSE TO HYDROCHLORIC AND
HYDROFLUORIC ACIDS & CARBONYL HALIDES AT ELEVATED TEMPERATURES OR
WITH OPEN FLAME.

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

Waste Disposal Methods:MATERIAL MAY BE DISPOSED OF BY A LICENSED
RECLAIMER OR INCINERATION FACILITY. COMPLY WITH LOCAL, STATE AND
FEDERAL REGULATIONS. EPA HAZARDOUS WASTE NOS. F001 AND F002 MAY
APPLY TO WASTE MATERIALS.

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