

DU PONT E I DE NEMOURS AND CO INC -- SUVA 124 -- 6830-01-391-3107

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

Product ID:SUVA 124
MSDS Date:10/20/1999
FSC:6830
NIIN:01-391-3107
Status Code:A
MSDS Number: CJTHQ
=== Responsible Party ===
Company Name:DU PONT E I DE NEMOURS AND CO INC
Address:1007 MARKET STREET
City:WILMINGTON
State:DE
ZIP:19898
Country:US
Info Phone Num:1-800-441-9442
Emergency Phone Num:180
0-441-3637
Chemtrec Ind/Phone:(800)424-9300
CAGE:2S827
=== Contractor Identification ===
Company Name:DU PONT FLUOROPRODUCTS
Address:1007 MARKET STREET
Box:City:WILMINGTON
State:DE
ZIP:19898
Country:US
Phone:1-800-441-7515
Contract Num:SP0450-99-M-JT26
CAGE:2S827

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

Ingred Name:ETHANE, 2-CHLORO-1,1,1,2-TETRAFLUORO- OR HCFC-124
CAS:2837-89-0
= Wt:94.7
Other REC Limits:1000 PPM AEL(DUPONT)

Ingred Name:ETHANE, 1-CHLORO-1,1,1,2-TET

RAFLUORO- OR HCFC-124A

CAS:354-25-6

= Wt:5.

Other REC Limits:1000 PPM AEL(DUPONT)

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

Health Hazards Acute and Chronic:INHALATION: GROSS OVER EXPOSURE MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION, IRREGULAR HEART BEAT. SUFFOCATION, IF AIR IS DISPLACED BY VAPORS. SKIN CONTACT: IMMEDIATE EFFECTS OF OVEREXPOSURE MAY INCL

U DE: FROSTBITE, IF LIQUID OR

ESCAPING VAPOR CONTACTS THE SKIN. EYE CONTACT: "FROSTBITE-LIKE EFFECTS MAY OCCUR IF THE LIQUID OR ESCAPING VAPORS CONTACT THE EYES.

Explanation of Carcinogenicity:NONE OF THE COMPONENTS PRESENT IN THIS MATERIAL AT CONCENTRATIONS EQUAL TO OR GREATER THAN 0.1% ARE LISTED BY IARC, NTP, OSHA OR ACGIH AS A CARCINOGEN.

Effects of Overexposure:INHALED: CNS DEPRESSION-DIZZINESS, CONFUSION, INCOORDINATION, DROWSINESS, UNCONSCIOUSNESS; IRREGUALR HE

ARTBEAT-STRANGE SENSATION IN CHEST, "HEARTM THUMPING", APPREHENSION, LIGHTHEADEDNESS, FEELING OF FAINTING, DIZZINESS, WEAKNESS, SOMETIMES PROGRESSING TO LOSS OF CONSCIOUSNESS & DEATH. SKIN-FROSTBITE. EYES-FROSTBITE-LIKE EFFECTS.

Medical Cond Aggravated by Exposure:INCREASED SUSCEPTIBILITY TO THE EFFECTS OF THIS MATERIAL MAY BE OBSERVED IN PERSONS WITH PRE-EXISTING DISEASE OF THE : CENTRAL NERVOUS SYSTEM, CARDIOVASCULAR SYSTEM.

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

First Aid:INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSON CALM. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING DIFFICULT. CALL A PHYSICIAN. SKIN CONTACT: FLUSH SKIN WITH WATER F OR 15 MINUTES AFTER EXCESSIVE CONTACT. SEEK MEDICAL ASSISTANCE IF IRRITATION IS PRESENT. WASH CONTAMINATED CLOTHES BEFORE REUSE. TREAT FOR FROSTBITE IF NEEDED BY GENTLY WARMING AFFECTED AREA. EYE CONT ACT: IMMEDIATELY FLUSH EYES WITH PLEN

TY OF

WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. INGESTION:
INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE.

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

Flash Point:WILL NOT BURN

Autoignition Temp:=715.C, 1319.F

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING MATERIAL.

Fire Fighting Procedures:COOL TANK/CONTAINER WITH WATER SPRAY.

SELF-CONTAINED BREATHING APPARATUS (SCBA) MAY BE REQUIRED IF
CYLINDERS RUPTURE OR RELEASE UNDER FI

RE CONDITIONS. WATER RUNOFF

SHOULD BE CONTAINED AND NEUTRALIZED PRIOR TO RELEASE.

Unusual Fire/Explosion Hazard:CYLINDER MAY RUPTURE UNDER FIRE
CONDITIONS DECOMPOSITION MAY OCCUR.

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

Spill Release Procedures:USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
DURING CLEAN UP. VENTILATE AREA, ESPECIALLY LOW OR ENCLOSED AREA
WHERE VAPORS MAY COLLECT. REMOVE OPEN FLAMES. USE SELF-CONTAINED
BREATHING APPARATUS (SCB A)

IF LARGE SPILL OR LEAK OCCURS. COMPLY

WITH FEDERAL, STATE & LOCAL REGULATIONS FOR REPORTING RELEASES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A CLEAN, DRY PLACE. DO NOT
HEAT ABOVE 52C (126F). AVOID BREATHING VAPORS OR MIST. AVOID
CONTACT WITH EYES OR SKIN. USE WITH SUFFICIENT VENTILATION TO KEEP
EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS.

Other Precautions:

NOTE TO PHYSICIANS: BECAUSE OF POSSIBLE DISTURBANCES

OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS ADRENILINE, SHOULD
ONLY 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.

Venti

ation:USE SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS. LOCAL EXHAUST IF LARGE AMOUNTS RELEASED. MECHANICAL IN LOW OR ENCLOSED AREAS.

Protective Gloves:LINED BUTYL GLOVES SHOULD BE USED TO AVOID PROLONGED OR REPEATED EXPOSURE.

Eye Protection:CHEMICAL SPLASH GOGGLES SHOULD BE AVAILABLE FOR USE AS NEEDED.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

NO

NE SPECIFIED BY MANUFACTURER.

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

HCC:G3

Boiling Pt:=-11.1C, 12.F

Melt/Freeze Pt:=-198.7C, -326.F

Vapor Density:6.888 G/L

Solubility in Water:1.71 WT @ 24 C (75 F)

Appearance and Odor:LIQUIFIED GAS, ETHER (SLIGHT) CLEAR, COLORLESS

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

Stability Indicator/Materials to Avoid:YES

INCOMPATIBLE WITH ALKALI OR ALKALINE EARTH METALS POWDERED AL, ZN, BE, ETC.

Stability

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

Hazardous Decomposition Products:DECOMPOSITION PRODUCTS ARE HAZARDOUS.

THIS MATERIAL CAN BE DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROCHLORIC & HYDROFLUORIC ACIDS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:ETHANE, 2-CHLORO-1,1,1,2-TETRAFLUORO, HCFC-124- :l

NHALATION: 4 HR, ALC, RAT: 230,000 - 300,000 PPM.

CARDIAC SENSITIZATION. LOAEL: 25,000 PPM. CARCINOGENIC, DEVELOPMENTAL, REPRODUCTIVE, MUTAGENIC EFFEC TS: IN ANIMAL TESTING MATERIAL HAS NOT CAUSE CANCER. NO ANIMAL DATA AVAILABLE ON REPRODUCTIVITY TOXICITY. MATERIAL HAS NOT BEEN TESTED ON ITS ABILITY TO CAUSE GENETIC DAMAGE. HCFC-124A: INHALATION 2 HR ALC: >200,000 PPM IN GUINEA PIGS. SINGLE INHALATION EXPOSURE CAUSED WEAKNESS. REPEATED INHALATION AT LOWER CONCENTRATIONS WAS WITHOUT EFFECT.

=====
Ecological Information
=====

Ecological:NONE SPECIFIED BY MANUFACTURER.

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

Waste Disposal Methods:TREATMENT, STORAGE, TRANSPORTATION AND DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE & LOCAL REGULATIONS. RECOVER BY DISTILLATION OR REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY.

=====
MSDS Transport Information
=====

Transport Information:US DOT/IMO PROPER SHIPPING NAME:
1-CHLORO-1,2,2,2-TETRAFLUOROETHANE (DLA-HMIS THINKS THIS IS A TYPO & SHOULD BE 1-CHLORO-1,1,1,2-TETRAFLUOROETHANE). HAZARD CLASS: 2.2. UN NO.: 1021. DOT/IMO LABEL: NON FLAMMABLE GAS.

=====
Regulatory Information
=====

SARA Title III Information:SECTIONS 311/312: ACUTE:YES; CHRONIC: NO;
FIRE: NO, REACTIVITY: NO; PRESSURE: YES. SARA EXTREMELY HAZARDOUS SUBSTANCE LIST: NO. S
ARA TOXIC CHEMICAL LIST: NO.
Federal Regulatory Information:CERCLA HAZARDOUS SUBSTANCE LIST: NO.
TSCA INVENTORY STATUS: REPORTED/INCLUDED.
State Regulatory Information:NONE SPECIFIED BY MANUFACTURER.

=====
Other Information
=====

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 im

plied, 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.