

DU PONT E I DE NEMOURS AND CO INC, CHEM. FLUOROCH. -- HFC 134 A,VT 1505,R-134 A --
6830-01-390-9622

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

Product ID:HFC 134 A,VT 1505,R-134 A

MSDS Date:04/12/1996

FSC:6830

NIIN:01-390-9622

Status Code:A

MSDS Number: CHZCJ

=== Responsible Party ===

Company Name:DU PONT E I DE NEMOURS AND CO INC, CHEM. FLUOROCH.

Address:1007 NARKET STREET

City:WILMINGTON

State:DE

ZIP:1

9898

Country:US

Info Phone Num:800-441-9442/7515

Emergency Phone Num:800-441-3637/800-424-9300(CHEMTREC)

CAGE:2S827

=== Contractor Identification ===

Company Name:CONTRACTED OPERATIONS LOUISVILLE PACKAGING

Address:7753 NATIONAL TURNPIKE

Box:UNKNOW

City:LOUISVILLE

State:KY

ZIP:40214

Country:US

Phone:502-363-8000/2663

CAGE:089V0

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

Company Name:E.I. DUPONT D

E 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:1,1,1,2-TETRAFLUOROETHANE
CAS:811-97-2
Fraction by Wt: 100%
Other REC Limits:NONE RECOMMENDED

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Hazards Identification
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Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Ha

zards Acute and Chronic:TARGET ORGANS: EYE, SKIN, CNS,
RESPIRATORY TRACT, HEART. ACUTE- OVEREXPOSURE BY INHALATION TO VERY
HIGH CONCENTRATIONS MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS
OR DEATH. LIQUID CONTACT/ESCAPING VAPORS CAN CAUSE EYE AND SKIN
FROSTBITE. INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE OF
EXPOSURE. CHRONIC- UNKNOWN.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:FROSTBITE, ASPHYXIATION, IRRITATION, HEART
IRREGULARITIES, UNCONSCIOUSNE
SS, DEATH

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PRE-EXISTING
DISEASES OF THE CENTRAL NERVOUS SYSTEM OR CARDIOVASCULAR SYSTEM MAY
HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE
EXPOSURES.

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First Aid Measures
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First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES: IMMEDIATELY
FLUSH WITH WARM WATER FOR 15 MINUTES. CALL PHYSICIAN. INHALED:
REMOVE TO FRESH AIR. PROVIDE OXYGEN/CPR IF NEEDED. SKIN: TREA

T FOR

POSSIBLE FROSTBITE USING WARM WATER (105F), THEN FLUSH SKIN WITH WATER. ORAL: UNLIKELY TO OCCUR. NOTE TO PHYSICIAN: CATECHOLAMINE DRUGS SHOULD BE USED WITH SPECIAL CAUTION ONLY IN EMERGENCY LIFE SUPPORT.

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Fire Fighting Measures
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Flash Point: NONE

Autoignition Temp: Autoignition Temp Text: >1369F

Lower Limits: NOT RELEVANT

Upper Limits: NOT RELEVANT

Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUND

ING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures: WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard: CYLINDERS MAY RUPTURE. DECOMPOSITION MAY OCCUR FORMING TOXIC GASES.

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Accidental Release Measures
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Spill Release Procedures: WEAR PROTECTIVE EQUIPMENT. VENTILATE AREA ESPECIALLY LOW OR ENCLOSED PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. SPILLS AND RELEASES MAY HAVE TO BE REPORTED TO AUTHORITIES.

Neutralizing Agent: NOT RELEVANT

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Handling and Storage
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Handling and Storage Precautions: STORE IN COOL, VENTILATED, DRY AREA AWAY FROM DIRECT SUNLIGHT, FLAMES AND INCOMPATIBLE MATERIALS. PROTECT CYLINDERS AGAINST PHYSICAL DAMAGE.

Other Precautions: AVOID BREATHING VAPORS. AVOID EYE OR SKIN CONTACT. WASH

WITH SOAP AND WATER BEFORE EATING OR DRINKING. USE WITH ADEQUATE VENTILATION. DO NOT MIX WITH AIR FOR LEAK TESTING ABOVE ATMOSPHERIC PRESSURE. KEEP OUT OF REACH OF CHILDREN.

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Exposure Controls/Personal Protection
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Respiratory Protection: NOT NORMALLY REQUIRED. WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE OR SUPPLIED-AIR RESPIRATOR IF A LARGE RELEASE OCCURS.

Ventilation: NORMAL VENTILATION. LOCAL EXHAUST NE

EDED WHEN LARGE AMOUNTS
ARE RELEASED.

Protective Gloves:LINED BUTYL WHEN HANDLING LIQUID

Eye Protection:CHEMICAL SPLASH GOGGLES WHEN HANDLE LIQ.

Other Protective Equipment:EYEBATH, SAFETY SHOWER, PROTECTIVE CLOTHING

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES.

Supplemental Safety and Health

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

HCC:G3

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:-16F,-27C

Vapor Pres:49

63 @ 77F

Vapor Density:3.6

Spec Gravity:1.21 LIQUID

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:GAS

Solubility in Water:0.15% @ 25C/77F

Appearance and Odor:COLORLESS LIQUEFIED GAS - FAINT ETHEREAL ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

FRESHLY ABRADED ALUMINUM SURFACES, CHEMICALLY ACTIVE METALS: POTASSIUM,
CALCIUM, POWDERED ALUMINUM, MAGNESIUM, ZINC

Stability Condition t

o Avoid:OPEN FLAME, HIGH TEMPERATURES, GLOWING

METAL SURFACES, LIGHTED CIGARETTES, OXYGEN OR AIR (ABOVE
ATMOSPHERIC PRESSURE)

Hazardous Decomposition Products:MAY FORM HYDROGEN FLUORIDE AND
POSSIBLY CARBONYL FLUORIDE.

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

Waste Disposal Methods:DISPOSAL MUST COMPLY WITH LOCAL, STATE AND
FEDERAL REGULATIONS.

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