Product ID:SUVA MP 39,8951-3130,R-401 A

MSDS Date:08/31/1988

FSC:6830

NIIN:01-391-3101

MSDS Number: BXHQG === Responsible Party ===

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

Address:1007 MARKET STREET

City:WILMINGTON

State:DE ZIP:19898 Country:US

Info Phone Num:800-441-9442

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

CAGE:18873

=== 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

CAGE:2S827

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

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

Ingred Name: CHLORODIFLUOROMETHANE (SARA 313) (CERCLA)

CAS:75-45-6

RTECS #:PA6390000

Fract

ion by Wt: 52%

Other REC Limits: NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9495 Ozone Depleting Chemical:2

Ingred Name:2-CHLORO-1,1,1,2-TETRAFLUOROETHANE (SARA 313)

CAS:2837-89-0 Fraction by Wt: 33%

Other REC Limits: NONE RECOMMENDED

Ingred Name: ETHANE, 1,1-DIFLUORO

CAS:75-37-6

RTECS #:KI1410000 Fraction by Wt: 15%

Other REC Limits: NONE RECOMMENDED

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

LD50 LC50 Mixture: INHALE 4-HOUR LC50: 220,000 IN RATS.

Routes of

Entry: Inhalation:YES Skin:NO Ingestion:NO

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

Health Hazards Acute and Chronic:TARGET ORGANS:LUNGS, CNS. ACUTE-INHALATION OF HIGH CONCENTRATIONS OF VAPOR MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS/DEATH. INTENTIONAL MISUSE IS FATAL. VAPOR REDUCES OXYGEN & IS HEAVIER THAN A IR. EYE/SKIN CONTACT WITH LIQUID CAN CAUSE FROSTBITE. VAPORS MAY CAUSE EYE IRRITATION. INGESTION NOT LIKELY. CHRONIC-UNK

Explanation of Carcinogenic

ity:NONE

Effects of Overexposure:TEMPORARY NERVOUS SYSTEM DEPRESSION WITH ANAESTHETIC EFFECTS SUCH AS DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION, LOSS OF CONSCIOUSNESS, IRREGULAR PULSE, PALPITATIONS, INADEQUATE CIRCULATION, SKIN FROSTBILTE, EYE IRRITATION

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

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First Aid:GET MEDICAL ATTENTION IF NEEDED. EYE/SKIN:IMMEDIATELY FLUSH WITH PLENTY OF WATER. TREAT FOR FROSTBITE, IF NECESSARY. INHALED:REMOVE TO FRESH AIR & PROVIDE OXYGEN/CPR IF NEEDED. ORAL:INGESTION IS NOT C ONSIDERED A POTENTIAL ROUTE OF EXPOSURE.
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Flash Point:NONE Lower Limits:WATER SPRAY, Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL
FOR SURROUNDING 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:THIS PRODUCT CAN BE DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METALS) FORMING HYDROGEN FLUORIDE, HYDROGEN CHLORIDE AND TRACES OF CARBONYL HALIDES.
=========== Accidental Release Measures
Spill Release Procedures: VENTILATE AREA, ESPECIALLY LOW PLACES WHERE VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. USE SELF-CONTAINED BREATHING APPARATUS FOR LARGE SPILLS OR RELEASES.  Neutralizing Agent: NOT RELEVANT
=========== Handling and Storage ===========
Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED AREA, AWAY FROM HEAT AND FLAMES. DO NOT HEAT ABOVE 125F. Other Precautions:AVOID BREATHING VAPORS. AVOID EYE OR SK IN CONTACT.
WASH WITH SOAP AND WATER BEFORE EATING OR DRINKING. USE WITH ADEQUATE VENTILATION. NEVER USE IN CONFINED OR CLOSED SPACES WITHOUT PROPER PROTECTIVE E QUIPMENTS.
====== Exposure Controls/Personal Protection ========
Respiratory Protection:WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE OR SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN PRESSURE-DEMAND OR

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

OTHER POSITIVE PRESSURE MODE IF A LAR

GE RELEASE OCCURS. Ventilation: NORMAL VENTILATION IS SUFFICIENT. LOCAL EXHAUST WHEN LARGE AMOUNTS ARE RELEASED, MECHANICAL VENTILATION IN LOW PLACES Protective Gloves:LINED BUTYL GLOVES Eye Protection: CHEMICAL SPLASH GOGGLES/FACE SHIELD Other Protective Equipment: EYEBATH, SAFETY SHOWER, PROTECTIVE CLOTHING Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING. Supplemental Safety and Health NOTE TO PHYSICIAN:BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD BE USED WITH SPECIAL CAUTION ONLY IN SITUATIONS OF EMERGENCY LIFE SUPPORT. ======== Physical/Chemical Properties =========== HCC:G3 NRC/State Lic Num:NOT RELEVANT Boiling Pt:B.P. Text:-27F,-33C Vapor Pres:5749 @77F Spec Gravity: 1.188 LIQUID Viscosity:NOT RELEVANT Evaporation Rate & Evaporation R Solubility in Water: 0.1% @ 77F (25C) Appearance and Odor: CLEAR, COL ORLESS LIQUEFIED GAS - SLIGHT ETHEREAL ODOR Percent Volatiles by Volume:100 ======== Stability and Reactivity Data ===========

Stability Indicator/Materials to Avoid:YES

ALKALI OR ALKALINE EARTH METALS, POWDERED ALUMINUM, ZINC, BERYLLIUM,

Stability Condition to Avoid: OPEN FLAMES, EXCESSIVE HEAT, GLOWING METAL **SURFACES** 

Hazardous Decomposition Products: MAY FORM HYDROGEN FLUORIDE, HYDROGEN CHLORIDE AND TRACES OF CARBONYL HALIDES.

====== Dispos

al Considerations =========

Waste Disposal Methods:RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED WASTE DISPOSAL FACILITY. CONSULT LOCAL, STATE AND FEDERAL AUTHORITIES.

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