

E I DUPONT DE NEMOURS & CO, FREON PROD -- HALON 1301 FIRE EXTINGUISHANT --
6830-01-376-8401

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

Product ID:HALON 1301 FIRE EXTINGUISHANT

MSDS Date:11/09/1995

FSC:6830

NIIN:01-376-8401

Status Code:A

MSDS Number: CJZXF

=== Responsible Party ===

Company Name:E I DUPONT DE NEMOURS & CO, FREON PROD

Address:1007 MARKET ST

City:WILMINGTON

State:DE

ZIP:19899

Country:US

Info

Phone Num:800-441-3637-MED 800-424-9300-TRAN

Emergency Phone Num:PROD: 800-443-9442 MED:800-441-3637

Resp. Party Other MSDS Num.:CC0111 CORP MSDS NBR DU001083

Preparer's Name:DUPONT FLUOROCHEMICALS

Chemtrec Ind/Phone:(800)424-9300

CAGE:5P414

=== Contractor Identification ===

Company Name:E I DUPONT DE NEMOURS & CO, FREON PROD (REPLACED BY 73925)

Address:1007 MARKET ST

Box:City:WILMINGTON

State:DE

ZIP:19899

Country:US

Phone:800-441-3637-MED 800-424-9300-TRAN

CAGE:5P414

Company Name:KIDDE FENWAL

INC

Address:400 MAIN ST

Box:City:ASHLAND

State:MA

ZIP:01721-2150

Country:US

Phone:508-881-2000

CAGE:0KDP7

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

Ingred Name:METHANE, BROMOTRIFLUORO-

CAS:75-63-8

RTECS #:PA5425000

= Wt:100.

OSHA PEL:6100 MG/M3;1000 PPM

ACGIH TLV:6090 MG/M3;1000 PPM

Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:INHALATION, RATS LC50: >770,000 PPM

Routes of Entry: Inhalation:YES S

kin:YES Ingestion:NO

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

Health Hazards Acute and Chronic:INHALATION OF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL AND MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. INTENTIONAL MISUSE OR DELIBERATE INHALATION MAY CAUSE DEATH WITHOUT WARNING. VAPOR REDUCES OXYGEN AVAILABLE FOR BREATHING AND IS HEAVIER THAN AIR. SKIN OR EYE CONTACT WITH THE LIQUID MAY CAUSE FROSTBITE.

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:HUMAN HEALTH EFFECTS OF OVEREXPOSURE BY INHALATION MAY INCLUDE NONSPECIFIC DISCOMFORT, SUCH AS NAUSEA, HEADACHE, OR WEAKNESS, OR TEMPORARY CENTRAL NERVOUS SYSTEM DEPRESSION WITH EFFECTS SUCH AS DIZZINESS, HEADACHE, CONFUSION, BY INHALATION MAY CAUSE TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY WITH IRRE

GULAR PULSE, PALPITATIONS, OR INADEQUATE CIRCULATION. SKIN OR EYE CONTACT WITH THE LIQUID MAY CAUSE FROSTBITE.

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 EXPOSURES.

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

First Aid:INHALATION: IF HIGH CONCENTRATION ARE INHALED, IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSON CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. SKIN CONTACT: IN CASE OF SKIN CONTACT, FLUSH SKIN WITH PLENTY OF WATER FOR 15 MINUTES. TREAT FOR FROSTBITE IF NECESSARY BY GENTLY WARMING AFFECTED AREA. EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. INGESTION: IS NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE.

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= Fire Fighting Measures =====

Flash Point:WILL NOT BURN

Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA. AUTODECOMPOSITION

Fire Fighting Procedures:USE WATER SPRAY OR FOG TO COOL CONTAINERS. SELF-CONTAINED BREATHING APPARATUS (SCBA) IS REQUIRED IF CYLINDERS RUPTURE OR RELEASE UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard:CYLINDERS ARE EQUIPPED WITH TEMPERATURE AND PRESSURE RELIEF DEVICES BUT MAY STILL RUPTURE UNDER FIRE CONDITIONS. DECOM

POSITION MAY OCCUR. AUTODECOMPOSITION >950C (>1562F).

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

Spill Release Procedures: VENTILATE AREA-ESPECIALLY LOW OR ENCLOSED PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. USE SELF-CONTAINED BREATHING APPARATUS (SCBA) FOR LARGE LEAK OR SPILL. NOTE: REVIEW FIRE FIGHTING MEASURES AND HANDLING (PERSONNEL) SECTIONS BEFORE PROCEEDING WITH CLEAN-UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING

CLEAN-UP.

Neutralizing Agent: NONE SPECIFIED BY RESPONSIBLE PARTY.

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

Handling and Storage Precautions: AVOID BREATHING VERY HIGH CONCENTRATIONS OF VAPORS. AVOID CONTACT OF EYES OR SKIN WITH LIQUID. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS. STORE IN CLEAN, DRY AREA. DO NOT HEAT ABOVE 125 DEG F.

Other Precautions: NOTE TO PHYSICIANS: BECAUSE OF POSSIBLE DISTURBANCES OF

HEART RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, 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 SPILL OCCURS.

Ventilation: NORMAL VENTILATION FOR STANDARD USE PROCEEDS GENERALLY

IS

ADEQUATE. LOCAL EXHAUST USED WHEN LARGE AMOUNTS RELEASED.

Protective Gloves: IMPERVIOUS GLOVES.

Eye Protection: CHEMICAL SPLASH GOGGLES SHOULD BE WORN AS NEEDED TO

PREVENT EYE CONTACT.

Other Protective Equipment: NONE SPECIFIED BY RESPONSIBLE PARTY.

Work Hygienic Practices: NONE SPECIFIED BY RESPONSIBLE PARTY.

Supplemental Safety and Health

MECHANICAL VENTILATION USED IN LOW OR ENCLOSED PLACES.

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

HCC: G3

Boiling Pt: -57.6C,

-72.F
Decomp Temp:Decomp Text:AUTODECOMP:>950C(>1562F)
Vapor Pres:235 PSIA AT 25C(77F)
Vapor Density:5.14(AIR=1)
pH:NEUTRAL
Evaporation Rate & Reference:(CC14=1)>1
Solubility in Water:0.03WT%@25C(77F)
Appearance and Odor:CLEAR, COLORLESS, LIQUIFIED GAS SLIGHT ETHEREAL.
Percent Volatiles by Volume:100%

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

Stability Indicator/Materials to Avoid:YES
INCOMPATIBLE WITH ALKALI OR ALKALINE EARTH METALS-POWDERED A1, ZN, BE,
ETC.

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Stability Condition to Avoid:AVOID EXTENDED CONTACT WITH OPEN FLAMES OR
TEMPERATURE >1000 DEG F.

Hazardous Decomposition Products:DECOMPOSITION PRODUCTS ARE HAZARDOUS.
THIS MATERIAL MAY BE DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES,
GLOWING METAL SURFACES, ETC.) FORMING FREE BROMINE AND POSSIBLY
CARBONYL HALIDES.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:EFFECTS SEEN IN ANIMAL

S FROM A SINGLE

EXPOSURE BY INHALATION INCLUDE CENTRAL NERVOUS SYSTEM DEPRESSION
EFFECTS AT HIGH CONCENTRATIONS. LUNG IRRITATION & DEGENERATION OF
THE LIVER & KIDNEYS WERE SEEN IN ANIMALS EXPOSED REPEATEDLY BY
INHALATION TO LETHAL OR NEAR LETHAL CONCENTRATIONS. CARDIAC
SENSITIZATION WAS OBSERVED IN DOGS EXPOSED TO CONCENTRATIONS OF
7.5% & HIGHER. ANIMAL TESTING INDICATES THAT THIS COMPOUND DOES
NOT HAVE MUTAGENIC OR EMBRYOTOXIC EFFECTS. NO ANIMAL TEST REPORTS

ARE AVAILABLE TO DEFINE CARCINOGENIC OR REPRODUCTIVE HAZARDS. THE
COMPOUND DOES NOT PRODUCE DAMAGE IN BACTERIAL CELL CULTURES.

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

Ecological:NONE SPECIFIED BY RESPONSIBLE PARTY.

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

Waste Disposal Methods:COMPLY WITH ALL FEDERAL, STATE & LOCAL
REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED WASTE
DISPOSAL.

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MSDS Transport Information =====

Transport Information:DOT/IMO: PROPER SHIPPING NAME:

BROMOTRIFLUOROMETHANE. HAZARD CLASS: 2.2. UN NO.: 1009. DOT/IMO LABEL: NON-FLAMMABLE GAS. SHIPPING CONTAINERS: CYLINDERS, TON TANKS.

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

SARA Title III Information:SECTIONS 311/312: ACUTE: YES; CHRONIC: NO; FIRE: NO; REACTIVITY: NO; PRESSURE: YES.

Federal Regulatory Information:LISTS: EXTREMELY HAZARDS SUBSTANCE: NO.

CERCLA HAZARDOUS SUBSTANCE: NO. TOXIC CHEMICALS: YES. TSCA INVENTORY STATUS: REPORTED/INCLUDED.

State Regulatory Information:NONE SPECIFIED BY RESPONSIBLE PARTY.

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

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