Product ID:HALON 1301 (FIRE EXTINGUISHANT) MSDS Date:11/09/1995 FSC:6830 NIIN:01-294-4455 Status Code:A MSDS Number: CJFMP === Responsible Party === Company Name: IE DUPONT DE NEMOURS CO INC Address:1007 MARKET STREET **City:WILMINGTON** State:DE ZIP:19898 Country:US Info Phone Num:1-800-441-9442 Emergency Phone Num:800-441-3637 Chemtrec Ind/Phone:(800)424-9300 CAGE:0UFA8 === Contractor Identification === Company Name: DDRV STOCK MAINTENANCE DIV/DDRV-H Address:8000 JEFFERSON-DAVIS HIGHWAY Box:City:RICHMOND State:VA ZIP:23297 Country:US Phone:804-279-3125 CAGE:02LX8 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: FIRE-X CORP Address:3305 CROFT ST Box:City:NORFOLK State:VA ZIP:23513-4903 Country:US Phone:775-855-0196 CAGE:6K586 Compan

y Name: FIRE-X OF VA (804-266-8844) Address:6107 STAPLES MILL RD Box:9757 City:RICHMOND State:VA ZIP:23225 Country:US Phone:804-266-8844 CAGE:0FA36 Company Name: IE DUPONT DE NEMOURS CO INC Address:1007 MARKET STREET Box:City:WILMINGTON State:DE ZIP:19898 Country:US Phone:1-800-441-9442 CAGE:0UFA8 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

Ingred Name:TRIFLUOROBROMOMETHANE (HALON 1301) (SARA III) CAS:75-63-8 RTECS #:PA5425000 Fraction by Wt: 100% Other REC Limits:NONE SPECIFIED OSHA PEL:1000 PPM ACGIH TLV:1000 PPM; 9192 Ozone Depleting Chemical:1

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:HEALTH HAZARDS: INHALATION OF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL & MAY CAUSE HEART

IRREGULARITIES, UNCONSCIOUSNESS & DEATH. INTENTIONAL MISUSE CAN BE FATAL. VAPOR REDUCES OXYGEN AVAILABLE FOR BRE ATHING & IS HEAVIER THAN AIR. LIQUID CONTACT CAN CAUSE FROSTBITE.

Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Effects of Overexposure:INHALATION: NONSPECIFIC DISCOMFORT, SUCH AS NAUSEA, HEADACHE OR WEAKNESS; OR TEMPORARY CNS DEPRESSION WITH EFFECTS SUCH AS DIZZINESS, HEAD

ACHE, CONFUSION, INCOORDINATION &

LOSS OF CONSCIOUSNESS. HIGHE R EXPOSURES BY INHALATION MAY CAUSE TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY WITH IRREGULAR PULSE, PALPITATIONS, OR INADEQUATE CIRCULATION.

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

First Aid:EYE: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. CALL A DOCTOR. SKIN: FLUSH WITH WATER. TREAT FOR FROSTBITE IS NECESSARY. INHALE: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE CPR. IF BREATHIN G IS DIFFICULT, GIVE OXYGEN & CALL A DOCTOR. INGEST: INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE.

Flash Point:WILL NOT BURN

Extinguishing Media: AS APPROPRIATE FOR COMBUSTIBLES IN AREA. Fir

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

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

Spill Release Procedures:SPILL-VENTILATE AREA, ESPECIALLY LOW PLACES WHERE HEAVY VAPOR

S MIGHT COLLECT. REMOVE OPEN FLAMES. USE SELF CONTAINED BREATHING APPARATUS FOR LARGE SPILLS. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:STORAGE-STORE IN A CLEAN, DRY AREA. DO NOT HEAT ABOVE 125F.

Other Precautions: AVOID BREATHING VERY HIGH CONCENTRATIONS OF VAPORS. AVOID CONTACT OF EYES OR SKIN WITH LIQUID. PYROLYSIS PRODUCTS MAY PRODUCE IRRITATING & CORROSIVE GASES.

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

Respiratory Protection: UNDER NORMAL CONDITIONS NO RESPIRATORY PROTECTION IS REQUIRED. SCBA IS REQUIRED IF A SPILL OCCURS.

Ventilation:NORMAL VENTILATION IS O.K. FOR NORMAL PROCEDURE. USE LOCAL

EXHAUST FOR LARGE AMOUNTS & MECHANICAL FOR USE IN LOW PLACES. Protective Gloves: IMPERVIOUS GLOVES SHOULD BE USED TO AVOID PROLONGED

OR REPEATED EXPOSURE.

Eye Protection: CHEMICAL SPLASH GOGGLES SHOULD BE WORN

Other Protective Eq

uipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

NOTE TO PHYSICIAN: BECAUSE OF POSSIBLE DISTURBANCE OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD BE CONSIDERED ONLY AS A LAST RESORT IN LIFE-THREATENING EMERGENCIES.

HCC:G3

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NRC/State Lic Num:NONE Boiling Pt:=-58.C, -72.4F Vapor Pres:235 PSIA AT 25C Vapor Density:5.14 Spec Gravity:1.54 pH:NEUTRAL Evaporation Rate & amp; Reference:>1 (CC14=1) Solubility in Water:0.03 WT.% AT 25C Appearance and Odor:COLORLESS, LIQUIFIED GAS, SLIGHT ETHEREAL ODOR Percent Volatiles by Volume:100%

Stability Indicator/Materials to Avoid:YES ALKALI OR ALKALINE EARTH METALS-POWDERED AL, ZN, BE, ETC. Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES Hazardous Decomposition Products:HALON 1301 MAY BE DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, ETC) FORMING FREE BROMINE AND POSSIBLY CARBONYL HALIDES.

Toxicological Information: INHALATION 1-HOUR LC50: >770,000 PPM IN RATS.

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO PERMITTED WASTE DISPOSAL F ACILITY.

Transport Information:DOT/IMO PROPER SHIPPING NAME: BROMOTRIFLUOROMETHANE, HAZARD CLASS 2.2, UN1009.

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