Product ID:HALON 1301,FREON FE 1301

MSDS Date:05/07/1993

FSC:6830

NIIN:01-275-1637

MSDS Number: CHHSW === Responsible Party ===

Company Name: ANSUL FIRE PROTECTION, WORMALD U.S.INC.

Address: ONE STANTON STREET

City:MARINETTE

State:WI

ZIP:54143-2542 Country:US

Info Phone Num:715-735-7411

Emergency Phone Num:715-735-7411/800-424-9300(CHEMTREC)

CAGE:03670

=== Contractor Identification === Company Name:ANSUL INC Address:ONE STANTON STREET

Box:City:MARINETTE

State:WI

ZIP:54143-2542 Country:US

Phone:715-735-7411

CAGE:03670

Company 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

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

Ingred Name:TRIFLUOROBROMOMETHANE (HALON 1301) (SARA III)

CAS:75-63-8

RTECS #:PA5425000

Fraction

by Wt: >99%

Other REC Limits: NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9293 Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:(RAT) 2112 MG/L 4 HRS.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE-EYES/SKIN:LIQUID CAN CAUSE FROSTBITE. INHALATION:VAPOR IS HEAVIER THAN AIR & CAN CAUSE SUFFOCATION. VERY HIGH CONCE

NTRATIONS CAN CAUSE GIDDINESS,

SHORTNESS OF BREATH, NARCOSIS, CARDIAC IRREGULAR ITIES, UNCONSCIOUSNESS OR EVEN DEATH. ORAL:NOT LIKELY. CHRONIC- NONE KNOWN.

Explanation of Carcinogenicity: THERE ARE NO INGREDIENTS ABOVE 0.1% WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP, IARC OR OSHA.

Effects of Overexposure:DIZZINESS, IMPAIRED COORDINATION, REDUCED MENTAL ACUITY AND CARDIAC EFFECTS CAN OCCUR. UNCONSCIOUSNESS OR EVEN DEATH IN HIGH CONCENTRATIONS WITH LONGER EXPOSURES.

Medical C

ond Aggravated by Exposure:PERSONS WITH PRE-EXISTING CARDIAC DISEASES MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

First Aid:OBTAIN MEDICAL HELP IF SYMPTOMS PERSIST. INHALATION:REMOVE TO FRESH AIR. EYES/SKIN:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. TREAT FOR FROSTBITE IF NECESSARY. INGESTION: NOT LIKE LY. NOTE TO PHYSICIAN:DO NOT GIVE ADRENALINE OR SIMILAR SYMPTOMATIC DRU

GS. DO NOT ALLOW VICTIM TO EXERCISE UNTIL 24 HOURS FOLLOWING SPECIFIC EXPOSURES. FREEZE BURNS OF MUCOSAL TISSUE CAN DEVELOP.

Extinguishing Media:THIS IS A FIRE EXTINGUISHING AGENT. USE WATER TO COOL FIRE-EXPOSED CYLINDERS OR OTHER CONTAINERS.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WHEN ENTERING UNVENTILATED FIRE AREAS WHERE PRODUCT HAS BEEN USED. Unusual Fire/Explosion Hazard: CONTAINERS ARE EQUIPPED WITH PRESSURE AND TEMPERATURE RELIEF DEVICES, BUT RUPTURE MAY OCCUR UNDER FIRE CONDITIONS & MAY PRODUCE TOXIC FUMES IN FIRES OVER 900F. ======== Accidental Release Measures ============ Spill Release Procedures: EVACUATE AREA. VENTILATE HTE AREA. COOL OR REMOVE HOT METAL SURFACES AND OPEN FLAMES. Neutralizing Agent: NOT APPLICABLE. ============= Handling and Storage ================ andling and Storage Precautions: STORAGE-STORE AS A LIQUIFIED COMPRESSED GAS IN DOT APPROVED PRESSURE VESSELS AWAY FROM HIGH TEMPERATURES. KEEP AWAY FROM INCOMPATIBLE MATERIALS. Other Precautions: AVOID BREATHING VAPORS OR MISTS. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR DRINKING. REMOVE CONTAMINATED CLOTHING PROMPTLY. KEEP OUT OF REACH OF C HILDREN. ===== Exposure Controls/Personal Protection ======== ratory Protection: NON REQUIRED UNDER NORMAL CONDITIONS. IF HIGH VAPOR OR MIST CONCENTRATIONS EXPECTED, USE NIOSH-APPROVED RESPIRATOR FOR ORGANIC VAPORS AND MISTS. WEAR SUPPLIED-AIR RESPIRATOR PROTECTION IN CONFINED OR ENCLOSED SPACES, IF NEEDED. Ventilation: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S). Protective Gloves: PLASTIC GLOVE RECOMMENDED Eve Protection: SAFETY GLASSES Other Protective Equipment: EYE WASH STATION , EMERGENCY SHOWER, NORMAL WORK CLOTHING COVERING ARMS AND LEGS Work Hygienic Practices: WASH THOROUGHLY BEFORE EATING OR DRINKING. DO NOT BREATHE DUSTS. AVOID CONTACT WITH EYES AND SKIN.

Supplemental Safety and Health

USE IN A WELL VENTILATED AREA ONLY. DO NOT RELEASE TO ENVIRONMENT.

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

HCC:G3

Boiling Pt:B.P. Text:-72F,-58C

Decomp Temp:Decomp Text:>900F,>482C

Vapor Pres:10292 @70F

Vapor Density:5.2 Spec Gravity:1.57

Evap

oration Rate & Description of the Control of the Co
======== Stability and Reactivity Data =========
Stability Indicator/Materials to Avoid:YES ACTIVE METALS AND FIRES INVOLVING METAL HAYDRIDES. Stability Condition to Avoid:EXCESSIVE HEAT (ABOVE 900F) Hazardous Decomposition Products:HYDROGEN FLUORIDE & HYDROGEN BROMIDE.THEY HAVE A SHARP IRRITATING ODOR & IN EVE N LOW CONCENTRATIONS CAUSE INJURY/ DEATH.
======== Disposal Considerations ===========
Waste Disposal Methods:RETURN TO DRMO OR MANUFACTURER FOR RECYCLING OR REUSE.
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