

ANSUL FIRE PROTECTION, WORMALD U.S.INC. -- HALON 1301, FREON FE 1301 -- 6830-01-252-2428

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

Product ID:HALON 1301, FREON FE 1301

MSDS Date:01/15/1991

FSC:6830

NIIN:01-252-2428

MSDS Number: CHHSL

=== 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:71

5-735-7411

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: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:FIRE-X CORP

Address:3305 CROFT ST

Box:City:NORFOLK

State:VA

ZIP:23513-4903

Coun

try:US
Phone:775-855-0196
CAGE:6K586
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%
OSHA PEL:1000 PPM
ACGIH TLV:1000 PPM; 9192
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:LC50=416 GM/CUM (RAT)
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYES- THE LIQUID FORM OF THIS MATERIAL
CAN PRODUCE CHILLING SENSATIONS AND DISCOMFORT. SKIN- EVAPORATION
OF LIQUID FROM THE SKIN CAN PRODUCE CHILLING SENSATIONS. FROSTBITE
CAN OCCUR. INHALATION- VAPOR IS HEAVIER THAN AIR AND CAN CAUSE
SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR BREATHING.
MAY LEAD TO
NARCOSIS, DEATH.
Effects of Overexposure:ACUTE: DIZZINESS, IMPAIRED COORDINATION,
REDUCED MENTAL ACUITY, AND CARDIAC EFFECTS CAN OCCUR.
UNCONSCIOUSNESS OR EVEN DEATH IN HIGH CONCENTRATIONS WITH LONGER
EXPOSURES. CHRONIC: NONE KNOWN WHEN OCCUPATIONAL EXPOSURE ARE
BELOW THE TLV.
Medical Cond Aggravated by Exposure:CARDIAC PROBLEMS. ALSO,PRODUCT IS
AN ASPHYXIAN & CAN INDUCE CARDIAC MUSCLE SENSITIZATION TO
CIRCULATING EPINEPHRINE-LIKE COMPOUNDS.

=====

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

First Aid:EYE:FLUSH WITH PLENTY OF WATER FOR 15MIN WHILE HOLDING LIDS OPEN; SKIN:WASH WITH COPIOUS AMOUNTS OF SOAP & WATER FOR AT LEAST 15MIN,IF REDNESS,ITCHING OCCURS,GET MEDICAL ATTN,TREAT FROSTBITE IF NECESSARY; INH:REMOVE TO FRESH AIR,IF COUGH OR OTHER RESPIRATORY SYMPTOMS OCCUR,CONSULT MEDICAL PERSONNEL; ING:NOT LIKELY TO OCCUR.

=====
Fire Fighting Measures
=====

Flash Point:NONFLAMMABLE

Extinguishing Media:THIS IS A FIRE EXTINGUISHING AGENT.

Fire Fighting Procedures:USE WATER TO COOL FIRE-EXPOSED CYLINDERS OR OTHER CONTAINERS. SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE AND PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:CONTAINERS ARE EQUIPPED WITH PRESSURE AND TEMPERATURE RELIEF DEVICES, BUT RUPTURE MAY OCCUR UNDER FIRE CONDITIONS AND TOXIC DECOMPOSITION BY-PRODUCTS CAN FORM.

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

Spill Release Procedures:EVACUATE AREA,VENTILATE TO OUTSIDE ATMOSPHERE.COOL OR REMOVE HOT,METAL SURFACES OR SOURCE OF NON-EXTINGUISHED FLAMES.

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

Handling and Storage Precautions:STORE AS A LIQUEFIED COMPRESSED GAS IN DOT APPROVED PRESSURE VESSELS AWAY FROM HIGH TEMPERATURE.

Other Precautions:IF CYLINDER IS NOT CONNECTED TO A SYSTEM,IT MUST BE SAFETY CAPPED TO PROTECT AGAINST ACTUATION OF VALVE & RELEASE OF AGENT.

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

Respiratory Protection:NOT NORMALLY NECESSARY IF CONTROLS ARE ADEQUATE. FOR HIGH CONCENTRATIONS EXCEEDING 10%,OR IF EXPOSURE IS PROLONGED,USE POSITIVE PRESSURE AIR-SUPPLIED RESPIRATOR.

Ventilation:MECHANICAL & LOCAL EXHAUST.

Protective Gloves:PLASTIC

Eye Protection:GOGGLES/FACE SHIELD

Other Protective Equipment:SAFETY SHOWER & EYE BATH

Supplemental Safety and Health

NONE

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

al Properties =====

HCC:G3

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

Melt/Freeze Pt:M.P/F.P Text:-270F,-168C

Vapor Pres:199 PSI

Vapor Density:5.2

Spec Gravity:1.57

Solubility in Water:NEGLIGIBLE

Appearance and Odor:SWEET ODOR, COLORLESS GAS.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ACTIVE METALS, FIRES OF METAL HYDRIDES, STRONG OXIDIZING AGENTS.

Stability Condition to Avoid:EXTREMELY HIGH

TEMPERATURES

Hazardous Decomposition Products:CO, CO2,OXIDES OF BROMIDE & FLORIDE,
HYDROGEN BROMIDE.

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

Waste Disposal Methods:KEEP IN COVERED DRUMS,PENDING DISPOSAL. HANDLE &
DISPOSE IN FULL COMPLIANCE WITH ALL APPLICABLE
INTERNATIONAL,FEDERAL,STATE, & LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of D

efense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.