

ANSUL FIRE PROTECTION, WORMALD U.S.INC. -- HALON 1301,FREON FE 1301 -- 6830-01-275-1637

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

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:TRIFLUOROBROMOMETHAN

E (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 CONCENTRATIONS CAN CAUSE GIDDINESS,
SHORTNESS OF BREATH, NARCOSIS, CARDIAC IRREGULARITIES,
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 Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING CARDIAC
DISEASES MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

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

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

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

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

TUS 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.

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

Handling 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.

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

Respiratory 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

Eye Prote

ction: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,>482

C

Vapor Pres:10292 @70F

Vapor Density:5.2

Spec Gravity:1.57

Evaporation Rate & Reference:GAS AT ROOM TEMPERATURE

Solubility in Water:NEGLIGIBLE

Appearance and Odor:COLORLESS GAS - SWEET ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ACTIVE METALS AND FIRES INVOLVING METAL HYDRIDES.

Stability Condition to Avoid:EXCESSIVE HEAT (ABOVE 900F)

Hazardous Decomposition Products:HYDROGEN FLUORIDE &
HYDROGEN

BROMIDE.THEY HAVE A SHARP IRRITATING ODOR & IN EVEN LOW
CONCENTRATIONS CAUSE INJURY/ DEATH.

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

Waste Disposal Methods:RETURN TO DRMO OR MANUFACTURER FOR RECYCLING OR
REUSE.

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