

ANSUL FIRE PROTECTION,WORMALD U.S.INC. -- HALON 1301, FREON FE 1301 -- 8120-01-257-4591  
===== Product Identification =====

Product ID:HALON 1301, FREON FE 1301  
MSDS Date:01/15/1991  
FSC:8120  
NIIN:01-257-4591  
MSDS Number: BPCDY  
=== 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 CHEMTRA  
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

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

Ingred Name:TRIFLUOROBROMOMETHANE (HALON 1301) (SARA III)  
CAS:75-63-8  
RTECS #:PA5425000  
Fraction by Wt: 99.0%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1000 PPM  
ACGIH TLV:1000 PPM; 9

Ozone Depleting Chemical:1

Ingred Name:OTHER INGREDIENTS

Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:LC50 INH RAT >800,000 PPM

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:INHALATION: VAPOR IS HEAVIER THAN AIR  
AND CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR  
BREATHING. BREATHING HIGH CONCENTRATIONS  
OF VAPOR MAY CAUSE

LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY LEAD TO  
NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH.

SKIN/EYE: LIQUID CAN DEFAT TISSUE.

Explanation of Carcinogenicity:THIS COMPOUND IS NOT LISTED AS A  
CARCINOGEN BY IARC, NTP OR OSHA.

Effects of Overexposure:BREATHING HIGH CONCENTRATIONS OF VAPOR MAY  
CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY  
LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH.

Medical Cond Aggravated by Exposure:IN SUSCEPTIBLE INDIVIDUALS, CARDIAC  
SENSITIZATION TO CIRCULATING EPINEPHRINE COMPOUNDS CAN RESULT IN  
POTENTIALLY FATAL HEART ARRHYTHMIAS.

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

First Aid:INHALATION: REMOVE TO FRESH AIR, CALL A PHYSICIAN. IF NOT  
BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT,  
GIVE OXYGEN. DO NOT GIVE EPINEPHRINE OR SIMILAR DRUGS. EYE: FLUSH  
WITH WATER . SKIN: FLUSH WITH WATER

R. IF IRRITATION PERSISTS, GET  
MEDICAL ATTENTION. ORAL: GET MEDICAL ATTENTION IMMEDIATELY. DO NOT  
INDUCE VOMITING AS THE HAZARD OF ASPIRATING INTO THE LUNGS IS TOO  
GREAT.

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

Flash Point:NONE

Extinguishing Media:USE WATER TO COOL FIRE EXPOSED CYLINDERS.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED  
CONTAINERS WITH WATER SP

RAY.  
Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE  
HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:VENTILATE ENCLOSED AREAS IN CASE OF  
INADVERTENT OR DELIBERATE DISCHARGE OF HALON  
Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE IN A CLEAN, COOL, DRY AND  
WELL-VENTILATED AREA OF LOW FIRE R  
ISK. PROTECT CONTAINERS FROM  
PHYSICAL DAMAGE AND KEEP CLOSED.  
Other Precautions:AVOID BREATHING VAPOR, LIQUID CONTACT WITH EYES, SKIN  
OR CLOTHING. TANK-CLEANING PERSONNEL SHOULD USE ONLY FORMAL TANK  
ENTRY PROCEDURE BASED ON RECOGNIZED SAFETY PRINCIPLES. EMPTY  
CONTAINERS MAY CONTA IN PRODUCT RESIDUES/VAPORS.

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

Respiratory Protection:NONE REQUIRED FOR ADEQUATELY VENTED WORK  
SITUATIONS. FOR ACCIDENTAL OR NON-VEN  
TILATED SITUATIONS, USE A  
SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED-AIR RESPIRATOR,  
APPROVED BY NIOSH.  
Ventilation:PROVIDE LOCAL EXHAUST AT FILLING ZONES AND OTHER OPERATING  
SPACES WHERE LEAKAGE IS PROBABLE. MECHANICAL FOR OTHER.  
Protective Gloves:PLASTIC  
Eye Protection:CHEMICAL GOGGLES; EYE WASH AND SHOWER  
Other Protective Equipment:USE IMPERVIOUS CLOTHING IF THERE IS REPEATED  
OR PROLONGED CONTACT WITH LIQUID.  
Work Hygienic Practices:REMOVE AND WASH CLOTHING PROMPTLY UPON  
  
CONTAMINATION. USE ORDINARY GOOD HYGIENE AND GOOD HOUSEKEEPING.  
Supplemental Safety and Health  
AVOID DIRECT CONTACT.

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

HCC:G3  
Boiling Pt:B.P. Text:-72F,-58C  
Vapor Pres:199.0 PSI  
Vapor Density:5.2  
Spec Gravity:1.57  
Solubility in Water:NEGLIGIBLE  
Appearance and Odor:COLOR 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:HIGH HEAT, DO NOT HEAT ABOVE 900 F

Hazardous Decomposition Products:DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROBROMIC AND HYDROFLUORIC ACIDS

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

Waste Disposal Methods:COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY. MATERIAL USUALLY DISPERSES IN THE ATMOSPHERE.

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