

GREAT LAKES CHEMICAL CORPORATION -- HALON 1301 -- 6830-01-073-6543

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

Product ID:HALON 1301  
MSDS Date:09/01/1990  
FSC:6830  
NIIN:01-073-6543  
Status Code:A  
MSDS Number: CKCTT  
=== Responsible Party ===  
Company Name:GREAT LAKES CHEMICAL CORPORATION  
Address:HWY 52 NW  
Box:2200  
City:WEST LAFAYETTE  
State:IN  
ZIP:47906  
Country:US  
Info Phone Num:501-862-5141  
Emergency Phone Num  
:501-862-5141  
Preparer's Name:RESEARCH SERVICES DEPT  
CAGE:06284  
=== Contractor Identification ===  
Company Name:GREAT LAKES CHEMICAL CORPORATION  
Address:HWY 52 NW  
Box:2200  
City:WEST LAFAYETTE  
State:IN  
ZIP:47906  
Country:US  
Phone:501-862-5141  
CAGE:06284  
Company Name:KEYSTONE FIRE PROTECTION CO.  
Address:108 PARK DRIVE, SUITE 3  
Box:City:MONTGOMERYVILLE  
State:PA  
ZIP:18936  
Country:US  
Phone:215-641-0100/ FAX 215-641-9638  
Contract Num:SP0450-00-M-D564  
CAGE:1U693

===== Composition/Information on

Ingredients =====

Ingred Name:BROMOTRIFLUOROMETHANE  
CAS:75-63-8  
RTECS #:PA5425000  
OSHA PEL:6100 MG/M3;1000 PPM  
ACGIH TLV:6090 MG/M3;1000 PPM  
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:RAT LETHAL CONC >800,000PPM FOR 15MINS.  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:HALON 1301 HAS ANESTHETIC & CARDIAC EFFECTS IN HUMANS AT CONCEN >10% BY VOL, CONC BELOW 10% ARE CONSIDERED SAFE FOR 0-5MIN EXPOSURE.HALON 1301 IS CLASSIFIED AS GROUP 6(LEAST TOXIC) IN THE UNDERWRITERS LAB CLASSIFICATION OF COMPARATIVE LIFE HAZ OF FIRE EXTINGUISHING AGENTS.SMOKING IN AREAS WHERE THIS CHEM IS RELEASED CAN CAUSE FORMATION OF TOXIC & IRRIT HALOGENS & HALOGEN ACIDS WHICH COULD BE INHAL W/THE SMOKE.  
Explanation of Carcinogenicity:CARCINOGENICITY:NTP/IARC/OSHA:NO.  
Effects of Overexposure:THE ANESTHETIC EFFECT OF HALON 1301 AT LEVELS BELOW 10% IS SIMILAR TO A FEELING OF MILD INTOXICATION. AMESTHETIC EFFECTS END RAPIDLY AFTER EXPOSURE IS TERMINATED.PROLONGED EXPOSURE TO CONCENTRATIONS A BOVE 10%(15-20%) MAY LEAD TO UNCONSCIOUSNESS AND POSSIBLY DEATH.  
Medical Cond Aggravated by Exposure:CARDIAC CONDITIONS MAY BE AGGRAVATED BY OVEREXPOSURE.

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

First Aid:INHALTION:REMOVE PERSON TO FRESH AIR;IF NOT BREATHING, GIVE A RTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. SKIN:FLUSH WITH WATER. GET MEDICAL ATTENTION IF FROST BITE OCCURS. EYES: FLUSH WITH WATER, GET MEDICAL ATTENTION. NOTE:EPINEPHRINE IS CONTRAINDICATED IN THE TREATMENT OF OVER-EXPOSURE TO THIS PRODUCT.

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

Flash Point:NON-FLAMMABLE  
Extinguishing Media:HALON 1301 IS A FIRE EXTINGUISHING AGENT. USE WATER SPRAY TO COOL CYLINDERS

INVOLVED IN FIRES. USE MEDIA SUITABLE FOR  
FLAMMABLE MATERIALS IN THE AREA.

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:PREDOMINANT DECOMPOSITION PRODUCTS ARE  
HYDROGEN FLUORIDE AND HYDROGEN BROMIDE IN FIRE SITUATIONS. THE  
PRODUCTS ARE IRRITATING AND POTENTIALLY TOXIC IF FIRE  
EXTINGUISHMENT IS DELAYED. ABOVE 1000F, HALO N 1301 MAY RELEASE  
HYDROGEN FLUORIDE, HYDROGEN BROMIDE, CARBONYL FLUORIDE AND CARBONYL  
BROMIDE.

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

Spill Release Procedures:EVACUATE AREA. WEAR SELF-CONTAINED BREATHING  
APPARATUS, VENTILATE ENCLOSED AREAS IN CASE OF DISCHARGE.

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

Handling and Storage Precautions:PROTECT CYLINDERS FROM PHYSICAL  
DAMAGE. STORAGE TEMPERATURE SHOULD NOT EXCEED 125F. CYLINDERS  
SHOULD BE SECURED FOR STORAGE WITH VALVE PROTECTION CAP IN PLACE.

Other Precautions:AVOID EXPOSURE TO  
THE PRODUCT AND DECOMPOSITION  
PRODUCTS WHEN WEARING CONTACT LENSES; CLOUDING OF LENSES MAY OCCUR.

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

Respiratory Protection:WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING  
APPARATUS AT CONCENTRATIONS GREATER THAN 10,000PPM AS RECOMMENDED  
BY NIOSH. CONSULT ANSI STANDARD AND OSHA REGULATIONS CONCERNING THE  
USE OF RESPIRATORY EQUIPMENT. AVOID PROLONGED EXPOSURE TO  
EXCESSIVE CONCENTRATIONS.

Ventilation:LOC EXHAUST-  
MATERIAL TRANSFER & HANDLING SHOULD BE  
CONDUCTED W/AN EXHAUST SYSTEM. MECHANICAL-ALL INDOOR AREAS SHOULD  
BE WELL VENTILATED.OTHER & SPECIAL:NONE.

Protective Gloves:LINED NEOPRENE OR LEATHER IF FROSTBITE IS A  
POSSIBILITY

Eye Protection:CHEMICAL SAFETY GOGGLES IF FROSTBITE IS POSSIBILITY.  
DON'T WEAR CONTACT LENSES.

Other Protective Equipment:NONE

Work Hygienic Practices:DETERMINE THAT PIPING IS EMPTY BEFORE DOING  
MAINTENANCE WORK. PERIODICALLY CHECK CYLINDERS TO ENSURE VALVES

ARE  
NOT LEAKING.  
Supplemental Safety and Health  
KEYSTONE P/N: 486365

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

HCC:G3  
Boiling Pt:=-57.6C, -72.F  
Melt/Freeze Pt:=-167.6C, -270.F  
Vapor Pres:6200  
Vapor Density:5.1  
Spec Gravity:1.57  
Evaporation Rate & Reference:N/A(BUAC=1)  
Solubility in Water:0.03% BY WEIGHT  
Appearance and Odor:ODORLESS, COLORLESS GAS

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

Stability Indicator/Materials to Avoid:YES  
A  
CTIVE METALS, FIRES OF METAL HYDRIDES, AND MATERIAL CONTAINING OWN  
OXYGEN. PRODUCT WILL NOT EXTINGUISH FIRES OF THESE MATERIALS.  
PRODUCT MAY DEGRADE CERTAIN POLYMERIC MATERIALS.  
Stability Condition to Avoid:NONE  
Hazardous Decomposition Products:IN PRESENCE OF FLAMES OR HOT  
SURFACES:HYDROGEN FLUORIDE,HYDROGEN BROMIDE,BROMINE, CARBONYL  
FLUORIDE, & CARBONYL BROMIDE.SMOKING CAN CAUSE FORMATION OF THESE  
CHEMS & MUST BE AVOIDED IN THE AREA OF RELEAS

===== Toxicologi  
cal Information =====

Toxicological Information:APPROXIMATE LETHAL CONCENTRATIN OF HALON 1301  
TO THE RAT IS GREATER THAN 800,000 PPM FOR 15MINS.THE ACUTE INHAL  
LC50 W/RATS IS GREATER THAN 800,000PPM FOR 4 HOURS.THE COMPOUND IS  
REPORTED TO BE NON-MU TAGENIC IN THE AMES TEST.

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

Waste Disposal Methods:RETURN CYLINDERS TO GREAT LAKES CHEMICAL  
CORPORATION, EL DORADO, ARKANSAS.

===== MSDS

Transport Information =====

Transport Information:DOT:COMPRESSED GAS, N.O.S.(BROMOTRIFLUOROMETHANE)  
NON-FLAMMABLE GAS, UN 1956. EXPORT:BROMOTRIFLUOROMETHANE,  
NON-FLAMMABLE GAS, UN 1009, IMO CLASS 2.2.

===== Regulatory Information =====

SARA Title III Information:THIS CHEMICAL IS SUBJECT TO THE REPORTING  
REQMTS OF SEC 313 OF TITLE III OF THE SUPERFUND AMENDMENTS &  
REAUTHORIZATION ACT OF 1986, AND 40CFR 372.(THE FIRST REPORT IS D  
UE  
JULY 1, 1992 TO COVER THE 199 1 REPORTING YEAR.)

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