

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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