

GREAT LAKES CHEMICAL CORP -- HALON 1301 AND GLC-13B1 -- 6830-01-376-8400

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

Product ID:HALON 1301 AND GLC-13B1

MSDS Date:06/01/1993

FSC:6830

NIIN:01-376-8400

Status Code:A

MSDS Number: CKBMP

=== Responsible Party ===

Company Name:GREAT LAKES CHEMICAL CORP

Address:1 GREAT LAKES BLVD

City:WEST LAFAYETTE

State:IN

ZIP:47906

Country:US

Info Phone Num:765-497-6100

Emerge

ncy Phone Num:501-862-5141

Resp. Party Other MSDS Num.:NONE

Preparer's Name:RESEARCH SERVICES DEPT

CAGE:2E394

=== Contractor Identification ===

Company Name:GREAT LAKES CHEMICAL CORP

Address:1801 HWY 52 NW

Box:2200

City:WEST LAFAYETTE

State:IN

ZIP:47996-2200

Country:US

Phone:765-497-6100/800-949-5167

CAGE:2E394

Company Name:KIDDE FENWAL INC DIV CHEMETRON FIRE SYSTEMS

Address:4801 SOUTHWICK DR 3RD FLOOR

Box:City:MATTESON

State:IL

ZIP:60443

Country:US

Phone:708-748-1503

CAGE:1CSX7

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Composition/Information on Ingredients =====

Ingred Name:BROMOTRIFLUOROMETHANE

CAS:75-63-8

RTECS #:PA5425000

= Wt:100.

Code:F

Other REC Limits:50,000 PPM NIOSH

OSHA PEL:6100 MG/M3;1000 PPM

ACGIH TLV:6090 MG/M3;1000 PPM

Ozone Depleting Chemical:1

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

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

Health Hazards Acute and Chronic:APPROX. LETHAL CONCENTRATIONS OF HALON

1301/GLC-13B1 TO THE RAT IS GREATER THAN 800,000 PPM FOR 15 MIN. THE ACUTE INHALATION LC50 W/RATS IS GREATER THAN 800,000 PPM FOR 4 HRS. THE COMPOUND IS REPORTED TO BE NON-MUTAGENIC IN THE AMES TEST. HALON 1301/GLC-13B1 HAS ANESTHETIC & CARDIAC EFFECTS IN HUMANS AT CONCENTRATIONS ABOVE 10% BY VOLUME, CONCENTRATIONS BELOW 10% ARE CONSIDERED SAFE FOR 0-5 MIN EX POSURE. HALON 1301 & GLC-13B1 IS CLASSIFIED AS GROUP 6 (LEAST TOXIC) IN THE UNDERWRITERS LABORATOR

IES CLASSIFICATION OF COMPARATIVE LIFE HAZARDS OF FIRE EXTINGUISHING AGENTS. (CONTINUED IN "SIGNS AND SYMPTOMS OF OVEREXPOSURE" FIELD/SCREEN.)

Explanation of Carcinogenicity:NTP: NO. IARC MONOGRAPHS: NO. OSHA REGULATED: NO.

Effects of Overexposure:SMOKING WHERE THIS CHEMICAL IS RELEASED CAN CAUSE FORMATION OF TOXIC AND IRRITATING HALOGENS AND HALOGEN ACIDS WHICH COULD BE INHALED WITH THE SMOKE. AVOID EXPOSURE TO THE PRODUCT AND DECOMPOSITION PR ODUCTS WHEN WEARING CONT ACT LENSES;

CLOUDING OF LENSES MAY OCCUR. THE ANESTHETIC EFFECT OF HALON 1301 & GLC-13B1 AT LEVELS BELOW 10% IS SMILAR TO FEELING OF MILD INTOXICATION. ANESTHETIC EFFECTS END RAPIDLY AFTER EXPOSURE IS TERMINATED. PROLONGED EXPOSURE TO CONCENTRATIONS ABOVE 10% (15-20%) MAY LEAD TO UNCONSCIOUSNESS & POSSIBLY DEATH.

Medical Cond Aggravated by Exposure:CARDIAC CONDITIONS MAY BE AGGRAVATED BY OVEREXPOSURE.

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

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First Aid:INHALATION: MOVE PERSON TO FRESH AIR; IF NOT BREATHING, GIVE CPR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. SKIN: FLUSH WITH WATER. GET MEDICAL ATTENTION IF FROSTBITE OCCURS. EYE S: 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 CYLINDER 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 & HYDROGEN BROMIDE IN FIRE SITUATIONS. THE PRODUCTS ARE IRRITATING & POTENTIALLY TOXIC IF FIRE EXTINGUISHMENT IS DELAYED. ABOVE 1000 F, HALON 1 301 & GLC-13B1 MAY RELEASE HYDROGEN FLUORIDE

, HYDROGEN BROMIDE, CARBONYL FLUORIDE & CARBONYL BROMIDE.

===== 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 125 F. CYLINDERS SHOULD BE SECURED FOR STORAGE WITH VALVE PROTECTION CAP IN PLACE

Other Precautions:DOT: COMPRESSED GAS. N.O.S. (BROMOTRIFLUOROMETHANE) NON-FLAMMABLE GAS, UN 1956. DOT: BROMOTRIFLUOROMETHANE, NONFLAMMABLE COMPRESSED GAS, 2-GASES, UN1009. IATA: BROMOTRIFLUOROMETHANE, 2, UN1009. EXPORT : BROMOTRIFLUOROMETHANE, NON-FLAMMABLE GAS, UN 1009, IMO CLASS 2.2.

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

Respiratory Protection:WEAR NOISH APPROVED, SELF-CONTAINED BREATHING APPARATUS AT CONCEN

TRATIONS GREATER THAN 10,000 PPM AS RECOMMENDED BY NIOSH. CONSULT ANSI STANDARD & OSHA REGULATIONS CONCERNING THE USE OF RESPIRATORY EQUIPMENT. AVOID PROLONGED EXPOSURE TO EXCESSIVE CONCENTRATIONS.

Ventilation: LOCAL EXHAUST: MATERIAL TRANSFER & HANDLING SHOULD BE CONDUCTED WITH AN EXHAUST SYSTEM. MECHANICAL: ALL INDOOR AREAS SHOULD BE WELL VENTILATED.

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

Eye Protection: CHEMICAL SAFETY GOGGLES IF FROSTBITE IS POSSIBILITY. DO NOT 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
NONE

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

HCC: G3

Boiling Pt: -21.6C, -7.2F

Melt/Freeze Pt: -167.6C, -270.F

Vapor Pres: 6200 AT 0 C

Vapor Density: 5.1

Spec Gravity: 1.57 AT 20 C

Evaporation Rate &

Reference: NOT AVAILABLE

Solubility in Water: 0.03% BY WEIGHT

Appearance and Odor: ODORLESS, COLORLESS GAS.

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

Stability Indicator/Materials to Avoid: YES

ACTIVE METALS, FIRE OF METAL HYDRIDES, MATERIAL CONTAINING OWN OXYGEN. PRODUCT WILL NOT EXTINGUISH FIRES OF THESE MATERIALS. PRODUCT MAY DEGRADE CERTAIN POLYMERIC MATERIALS.

Stability Condition to Avoid: NONE LISTED.

Hazardous Decomposition Products: IN THE PRESENCE OF FLAMES

OR HOT

SURFACES: HYDROGEN FLUORIDE, HYDROGEN BROMIDE, BROMINE, CARBONYL FLUORIDE, & CARBONYL BROMIDE. SMOKING CAN CAUSE FORMATION OF THESE CHEMICALS & MUST BE AVOIDED.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

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

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

===== MSDS Transport Information =====

Transport Information: DO

T: PSN: BROMOTRIFLUOROMETHANE, NONFLAMMABLE GAS, UN1009. IMDG: BROMOTRIFLUOROMETHANE, NONFLAMMABLE COMPRESSED GAS, 2(2.2), UN1009. IATA: BROMOTRIFLUOROMETHANE, 2, UN1009. PACKING INSTRUCTION 200. MAXIMUM NET QUANTITY FOR PASSENGER AIRCRAFT 75 KG; MAXIMUM NET QUANTITY FOR CARGO AIRCRAFT 150 KG. EXPORT: BROMOTRIFLUOROMETHANE, NON-FLAMMABLE GAS, UN1009, IMO CLASS 2.2.

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