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

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 Emergen cy 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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omposition/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** 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 LABORATORI ES 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 CONTA CT 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: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.

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.

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

Handling and Storage Precautions:PROTECT CYLINDERS FROM PHYSICAL DAMAGE. STORAGE TEMPERATURE SHOULD NOT EXCEED 125 F. CYLINDERS SHOULD BE SECURED FOR STORAGE W
ITH 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 CONCENT

RATIONS GREATER THAN 10,000 PPM AS RECOMMENDED BY NIOSH. CONSULT ANSI STANDARD & OSHA REGULATIONS CONCERNING THE USE OF RESPIRATORY EQU IPMENT. 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 POSSIBLITY. 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

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 & amp; R eference:NOT AVAILABLE Solubility in Water:0.03% BY WEIGHT Appearance and Odor:ODORLESS, COLORLESS GAS.

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.

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

Transport Information:DOT

: PSN: BROMOTRIFLUOROMETHANE, NONFLAMMABLE GAS, UN1009. IMDG: BROMOTRIFLUOROMETHANE, NONFLAMMABLE COMPRESSED GAS, 2(2.2), UN1009. IATA: BROMOTRIFLUOROMETHANE,2, UN1009. PACKING INSTRUCTION 200. MA XIMUM 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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