

GREAT LAKES CHEMICAL CORP -- 045, HALON 1301 -- 6830-01-284-5852

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

Product ID:045, HALON 1301

MSDS Date:09/01/1990

FSC:6830

NIIN:01-284-5852

Status Code:A

MSDS Number: CLJXL

=== Responsible Party ===

Company Name:GREAT LAKES CHEMICAL CORP

Address:1801 HWY 52 NW

Box:2200

City:WEST LAFAYETTE

State:IN

ZIP:47996-2200

Country:US

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

Emergency Phone Num:(501) 862-5141

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: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-D-0521

CAGE:1U693

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Composition/Information on Ingredients
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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

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Hazards Identification
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LD50 LC50 Mixture: LC50 RAT >800,000 PPM FOR 4 HRS.

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 AND CARDIAC

EFFECTS IN HUMANS AT CONCENTRATIONS ABOVE 10% BY VOLUME, CONCENTRATIONS BELOW 10% ARE CONSIDERED SAFE FOR 0-5 MINUTE EXPOSURES. HALON 1301 IS CLASSIFIED AS GROUP 6 (LEAST TOXIC) IN THE UNDERWRITERS LABORATORIES CLASSIFICATION OF COMPARATIVE LIFE HAZARDS OF FIRE EXTINGUISHING AGENTS. SMOKING IN AREAS WHERE THIS CHEMICAL IS RELEASED CAN CAUSE FORMATION OF TOXIC & IRRITATING HALOGENS AND HALOGEN ACIDS WHICH COULD BE INHALED WITH THE SMOKE.

Explanation

of Carcinogenicity: PRODUCT IS NON-MUTAGENIC IN THE AMES TEST.

Effects of Overexposure: THE ANESTHETIC EFFECT OF HALON 1301 AT LEVELS BELOW 10% IS SIMILAR TO A FEELING OF MILD INTOXICATION. ANESTHETIC EFFECTS END RAPIDLY AFTER EXPOSURE IS TERMINATED. PROLONGED EXPOSURE TO CONCENTRATIONS ABOVE 10% (15-20%) MAY LEAD TO UNCONSCIOUSNESS AND POSSIBLY DEATH. INHALATION OF PRODUCT & ITS DECOMPOSITION PRODUCTS CAN CAUSE CLOUDING OF CONTACT LENSES.

Medical Conditions Aggravated by Exposure:

CARDIAC CONDITIONS MAY BE AGGRAVATED BY OVEREXPOSURE.

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First Aid Measures
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First Aid: INHALATION: REMOVE PERSON TO FRESH AIR; IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. SKIN: FLUSH WITH WATER. GET MEDICAL ATTENTION IF FROSTBITE 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 MATERIAL 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 PRODU

CTS 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.

===== 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 Preca

utions: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:DO NOT SMOKE OR WEAR CONTACT LENSES WHERE THIS PRODUCT IS BEING USED.

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

Respiratory Protection:WEAR NIOSH APPROVED, SELF-CONTAINED BREATHING APPARATUS AT CONCENTRATIONS GREATER THAN 10,000 PPM AS RECOMMENDED BY NIOSH. CONSULT A

NSI STANDARD AND OSHA REGULATIONS CONCERNING THE

USE OF RESPIRATORY EQUIPMENT. AVOID PROLONGED EXPOSURE TO EXCESSIVE CONCENTRATIONS.

Ventilation:LOCAL EXHAUST-MAERIAL TRANSFER AND HANDLING SHOULD BE CONDUCTED WITH AN EXHAUST SYSTEM. MECHANICAL-ALL INDOOR AREAS SHOULD BE WELL VENTILATED. SPECIAL-NONE

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

Eye Protection:CHEMICAL SAFETY GOGGLES IF FROSTBITE IS A POSSIBILITY. DO NOT WEAR CONTACT LENS

Other

Protective Equipment:NONE

Work Hygienic Practices:DETERMINE THAT PIPING IS EMPTY BEFORE DOING MAINTENANCE WORK. PERIODICALLY CHECK CYLINDER TO ENSURE VALVES ARE NOT LEAKING.

Supplemental Safety and Health

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

HCC:G3

Boiling Pt:=-57.6C, -72.F

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

Vapor Pres:6200 AT 0C

Vapor Density:5.1

Spec Gravity:1.57 AT 20C

Evaporation Rate & Reference:NOT AVAILABLE

Solubility in Water:0.03% BY WEIGHT

App

Appearance and Odor:ODORLESS, COLORLESS GAS

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

Stability Indicator/Materials to Avoid:YES

ACTIVE 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 THE PRESENCE OF FLAMES OR HOT SURFACES: HYDROGEN FLUORIDE, HYDROGEN BROMIDE, BROMINE, CARBONYL

FLUORIDE, AND CARBONYL BROMIDE. SMOKING CAN CAUSE FORMATION OF THESE CHEMICALS AND MUST BE AVOIDED IN

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:APPROXIMATE LETHAL CONCENTRATION OF HALON 1301 TO THE RAT IS GREATER THAN 800,000 PPM FOR 15 MINUTES. THE ACUTE INHALATION LC50 WITH RATS IS GREATER THAN 800,000 PPM FOR 4 HOURS. THE COMPOUND IS REPORTED TO BE NON-MUTAGENIC IN THE AMES

TEST.

HALON 1301 HAS ANESTHETIC AND CARDIAC EFFECTS IN HUMANS AT CONCENTRATIONS ABOVE 10% BY VOLUME, CONCENTRATIONS BELOW 10% ARE CONSIDERED SAFE FOR 0-5 MINUTE EXPOSURES.

===== 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.

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BROMOTRIFLUOROMETHANE) NON-FLAMMABLE GAS, UN 1956. EXPORT:
BROMOTRIFLUOROMETHANE, NON-FLAMMABLE GAS, UN 1009, IMO CLASS 2.2.

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===== Regulatory Information =====
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SARA Title III Information: THIS CHEMICAL IS SUBJECT TO THE REPORTING
REQUIREMENTS OF SECTION 313 OF TITLE III OF SUPERFUND AND 40 CFR
372.

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