HALON 1211 RECYCLED - BROMOCHLORODIFLUOROMETHANE

MATERIAL SAFETY DATA SHEET

01/11/00

MSDS PROVIDED BY: STOODY INDUSTRIAL AND WELDING SUPPLY, INC. 3316 National Ave., San Diego, Ca. 92113 Phone: (619) 234-6750 MILITARY EMERGENCY RESPONSE NUMBER 1-800-851-8061

DEFENSE DISTRIBUTION DEPOT RICHMOND DDRV-M -- HALON 1211 RECYCLED -BROMOCHLORODIFLUOROMETHANE, TECHNICAL MATERIAL SAFETY DATA SHEET NSN: Manufacturer's CAGE: 02LX8 Part No. Indicator: A Part Number/Trade Name: HALON 1211 RECYCLED ______ General Information _____ Item Name: BROMOCHLORODIFLUOROMETHANE, TECHNICAL Company's Name: DEFENSE DISTRIBUTION DEPOT RICHMOND/DDRV-M Company's Street: 8000 JEFFERSON DAVIS HIGHWAY Company's City: RICHMOND Company's State: VA Company's Country: US Company's Zip Code: 23297 Company's Emerg Ph #: 804-279-3125 Company's Info Ph #: 804-279-3125 Record No. For Safety Entry: 001 Tot Safety Entries This Stk#: 002 Status: SD Date MSDS Prepared: 030CT95 Safety Data Review Date: 10JUL97 Supply Item Manager: CX MSDS Preparer's Name: DGSC-VBA/HMIS Preparer's Company: DEFENSE SUPPLY CENTER Preparer's St Or P. O. Box: 8000 JEFFERSON-DAVIS HIGHWAY Preparer's City: RICHMOND Preparer's State: VA Preparer's Zip Code: 23297-5607 MSDS Serial Number: BXWNM Specification Number: MIL-B-38741 Spec Type, Grade, Class: TYPE 1211 Hazard Characteristic Code: G3 Unit Of Issue: CY Unit Of Issue Container Qty: 1500 LBS Type Of Container: CYLINDER Net Unit Weight: 1500 LBS NRC/State License Number: NOT RELEVANT _____ Ingredients/Identity Information Proprietary: NO Ingredient: BROMOCHLORDIFLUOROMETHANE (HALON 1211) (SARA 313) Ingredient Sequence Number: 01 Percent: 100 NIOSH (RTECS) Number: 1007484BC CAS Number: 353-59-3 OSHA PEL: NOT ESTABLISHED ACGIH TLV: NOT ESTABLISHED Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics _____ Appearance And Odor: COLORLESS GAS WITH SLIGHT ETHEREAL ODOR Boiling Point: 24.8F,-4.0C Melting Point: -256F, -160C Vapor Pressure (MM Hq/70 F): 2518 @ 68F Vapor Density (Air=1): 6.0 Specific Gravity: 1.82 Decomposition Temperature: 850F,454C Evaporation Rate And Ref: NOT RELEVANT Solubility In Water: NOT MISCIBLE Percent Volatiles By Volume: 100 Viscosity: NOT RELEVANT Corrosion Rate (IPY): UNKNOWN _____ Fire and Explosion Hazard Data Flash Point: NONE Lower Explosive Limit: NOT RELEVANT Upper Explosive Limit: NOT RELEVANT Extinguishing Media: THIS IS FIRE EXTINGUISHER. COOL FIRE EXPOSED CONTAINERS WITH WATER WELL AFTER FIRE IS OUT TO PREVENT POSSIBLE EXPLOSIONS Special Fire Fighting Proc: WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. HAZARDOUS DECOMPOSITION PRODUCTS MAY BE FORMED. Unusual Fire And Expl Hazrds: IRRITATING AND/OR TOXIC GASES DUE TO DECOMPOSITION OF THE PRODUCT MAY BE GENERATED DURING A FIRE. CONTAINERS MAY EXPLODE DUE TO FIRE. Reactivity Data Stability: YES Cond To Avoid (Stability): EXPOSURE TO FLAMES OR HOT SURFACES ABOVE 850F (454C) Materials To Avoid: ALKALINE EARTH METALS, ALKALI, POWDERED ALUMINUM, ZINC, BERYLLIUM Hazardous Decomp Products: HYDROBROMIC, HYDROCHLORIC AND HYDROFLUORIC ACIDS, POSSIBLY FREE HALIDES AND CARBONYL HALIDES Hazardous Poly Occur: NO Conditions To Avoid (Poly): NOT RELEVANT Health Hazard Data _____ LD50-LC50 Mixture: LD50 (ORAL, RAT) IS NOT RELEVANT. Route Of Entry - Inhalation: YES Route Of Entry - Skin: NO Route Of Entry - Ingestion: NO Health Haz Acute And Chronic: TARGET ORGANS: CNS, EYES, SKIN, LUNGS. ACUTE-EYE: CONTACT WITH LIQUID CAN CAUSE "FREEZER" BURNS. SKIN:LIQUID CAN CAUSE FROSTBITE. ORAL:NOT LIKELY TO OCCUR (GAS AT ROOM TEMPERATURES). INHALE:AT CONCENTRATIONS >20,000 PPM, IRREGULARITIES IN THE CENTRAL NERVOUS SYSTEM AND CARDIAC MUSCLE ARE EXHIBITED. CHRONIC- UNKNOWN. Carcinogenicity - NTP: NO Carcinogenicity - IARC: NO Carcinogenicity - OSHA: NO Explanation Carcinogenicity: NONE Signs/Symptoms Of Overexp: FROSTBITE, EYE BURNS, HEADACHE, DIZZINESS, CONFUSION, INCOORDINATION, UNCONSCIOUSNESS, IRREGULAR PULSE, CONVULSION

SIWS PROVIDES MSDS AS A COURTISY. TO ENSURE ACCURATE AND CURRENT DATA, OBTAIN AND USE ONLY MSDS FROM MANUFACTURER.

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Med Cond Aggravated By Exp: ANEMIA, ASTHMA, DERMAL SENSITIVITY AND LOW BLOOD PRESSURE REMOVE CONTAMINATED CLOTHING AND WASH EXPOSED SKIN WITH LARGE AMOUNT OF WATER. INHALED: REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. ORAL: NOT A POTENTIAL ROUTE OF EXPOSURE (GAS). NOTE TO PHYSICIAN: DO NOT GIVE ADRENALINE OR SIMILAR DRUGS. _____ Precautions for Safe Handling and Use Steps If Matl Released/Spill: WEAR PROTECTIVE EQUIPMENTS. VENTIALTE AREA ESPECIALLY LOW PLACES. REMOVE SPILL WITH ABSORBENT MATERIAL AND PLACE INTO A DRUM APPROVED FOR WASTE DISPOSAL. Neutralizing Agent: NOT RELEVANT Waste Disposal Method: RECOVERED MATERIAL CAN BE INCINERATED IN A FURNACE WHERE PERMITTED. OBSERVE ALL LOCAL, STATE AND FEDERAL REGULATIONS. RECYCLING OR REUSE IS RECOMMENDED. Precautions-Handling/Storing: STORE IN A COOL, WELL-VENTILATED AREA AWAY FROM HEAT, FLAMES, HOT SURFACES AND INCOMPATIBLE MATERIALS. DO NOT SMOKE WHILE WORKING WITH THIS PRODUCT. Other Precautions: AVOID EYE AND SKIN CONTACT. DO NOT INHALE VAPORS. KEEP OUT OF REACH OF CHILDREN. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR DRINKING _____ Control Measures _____ Respiratory Protection: IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONCENTRATIONS TO AN ACCEPTABLE LEVEL, A NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS MUST BE WORN. Ventilation: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE TO A MINIMUM LEVEL. Protective Gloves: NITRILE OR NATURAL RUBBER Eye Protection: SPLASH PROOF GOGGLES WITH SIDE SHIELDS Other Protective Equipment: EYE WASH STATION, EMERGENCY SHOWER, IMPERVIOUS BODY COVERING AND BOOTS WHERE SPILLS OR SPLASHING OCCUR Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. Suppl. Safety & Health Data: THIS MSDS WAS PREPARED BY THE PROFESSIONALS OF DGSC-VBA/HMIS WITHOUT ANY WARRANTY. IT IS THE USER'S RESPONSIBILITY TO GATHER INFORMATION AND USE THE MATERIAL PROPERLY TO PROTECT EMPLOYEES AND ENVIRONMENT. Transportation Data Trans Data Review Date: 95293 DOT PSN Code: DGX DOT Proper Shipping Name: CHLORODIFLUOROBROMOMETHANE OR REFRIGERANT GAS R 12B1. DOT Class: 2.2 DOT ID Number: UN1974 DOT Label: NONFLAMMABLE GAS IMO PSN Code: ECT IMO Proper Shipping Name: CHLORODIFLUOROBROMOMETHANE IMO Regulations Page Number: 2117 IMO UN Number: 1974 IMO UN Class: 2(2.2) IMO Subsidiary Risk Label: -IATA PSN Code: GHG IATA UN ID Number: 1974

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IATA Proper Shipping Name: CHLORODIFLUOROBROMOMETHANE IATA UN Class: 2.2 IATA Label: NON-FLAMMABLE GAS AFI PSN Code: GHG AFI Prop. Shipping Name: CHLORODIFLUOROBROMOMETHANE AFI Class: 2.2 AFI ID Number: UN1974 AFI Basic Pac Ref: A6.3,A6.5 Disposal Data _____ Label Data Label Required: YES Technical Review Date: 200CT95 MFR Label Number: NOT RELEVANT Label Status: F Common Name: 1211 Signal Word: WARNING! Acute Health Hazard-Moderate: X Contact Hazard-Moderate: X Fire Hazard-None: X Reactivity Hazard-None: X Special Hazard Precautions: TARGET ORGANS:CNS, EYES, SKIN, LUNGS. ACUTE-EYE: CONTACT WITH LIQUID CAN CAUSE "FREEZER" BURNS. SKIN:LIQUID CAN CAUSE FROSTBITE. ORAL:NOT LIKELY. INHALE:MAY CAUSE IRREGULARITIES IN CNS & CARDIAC MUSCLE. CHRONIC- UNKNOWN. STORE IN COOL, VENTILATED AREA AWAY FROM FLAMES & INCOMPATIBLES. COLLECT SPILL WITH ABSORBENT MATERIAL & PLACE INTO A DRUM APPROVED FOR WASTE DISPOSAL. FIRST AID- CALL A DOCTOR IF SYMPTOMS PERSIST. EYE: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SKIN: REMOVE CONTAMINATED CLOTHING & WASH EXPOSED SKIN WITH LARGE AMOUNT OF WATER. INHALED: REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. ORAL:NOT LIKELY. Protect Eve: Y Protect Skin: Y Label Name: DDRV STOCK MAINTENANCE DIV/DDRV-M/ Label Street: 8000 JEFFERSON-DAVIS HIGHWAY Label City: RICHMOND Label State: VA Label Zip Code: 23297 Label Country: US Label Emergency Number: 800-851-8061