

LAROCHE CHEMICALS INC -- R-22; HCFC-22; REFRIGERANT 22

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MSDS Safety Information  
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FSC: 6830  
NIIN: 00-935-9896  
MSDS Date: 02/01/1997  
MSDS Num: CKCHQ  
Product ID: R-22; HCFC-22; REFRIGERANT 22  
MFN: 01  
Responsible Party  
Cage: 0YFW2  
Name: LAROCHE CHEMICALS INC  
Address: 1134 JEFFERSON HWY  
Box: 5500  
City:  
GRAMERCY LA 70052  
Info Phone Number: 800-528-4963  
Emergency Phone Number: 800-528-4963  
Resp. Party Other MSDS No.: MSDS # 2403

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Item Description Information  
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Item Manager: S9G  
Item Name: MONOCHLORODIFLUOROMETHANE, TECHNICAL  
Specification Number: BB-F-1421  
Type/Grade/Class: 22 TYPE  
Unit of Issue: CY  
Quantitative Expression: 00000000030LB  
UI Container Qty: 1  
Type of Container: DISPO CYLIND  
R

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Ingredients  
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Cas: 75-45-6  
RTECS #: PA6390000  
Name: CHLORODIFLUOROMETHANE  
> Wt: 99.9  
Other REC Limits: NIOSH 1000 PPM TWA  
ACGIH TLV: 3540 MG/M3; 1000 PPM  
ACGIH STEL: NOT ESTABLISHED  
Ozone Depleting Chemical: 2

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Health Hazards Data  
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LD50 LC50 Mixture: NONE PROVIDED BY MFR.  
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oute Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: EYE: NOT READILY ABSORBED THROUGH MUCOUS MEMBRANE OR TISSUE OF EYE, HOWEVER, MAY CAUSE FROSTBITE IF EXPOSED TO DIRECT SPRAY. SKIN: NOT READILY ABSORBED THROUGH SKIN, HOWEVER, MAY CAUSE FROSTBITE IF EXPOSED TO DIRECT SPRAY. INHALATION: MAY CAUSE NARCOSIS IN CONCENTRATIONS ABOVE 1000 PPM. PERSONS WITH CARDIAC ARRHYTHMIA MAY BE AT INCREASED RISK IN SEVERE

EXPOSURES. MAY CAUSE ASPHYXIATION IN HIGH CONCENTRATIONS. INGESTION: NOT LIKELY DUE TO LOW TOXICITY AND EXISTENCE AS A GAS.

Explanation Of Carcinogenicity: NONE PROVIDED BY MFR.

Signs And Symptoms Of Overexposure: FROSTBITE, NARCOSIS, ARRHYTHMIA, UNCONSCIOUSNESS OR PARALYSIS IF EXPOSED TO HIGH CONCENTRATION.

Medical Cond Aggravated By Exposure: PERSONS WITH CARDIAC ARRHYTHMIA MAY BE AT INCREASED RISK IN SEVERE EXPOSURE.

First Aid: EYE: MAY CAUSE FROSTBITE; FLUSH WITH WATER FOR 15 MINS, GET MEDICAL

ATTENTION IF IRRITATION PERSISTS. SKIN: MAY CAUSE FROSTBITE; FLUSH WITH WATER, GET MEDICAL ATTENTION OF REDDENING OF SKIN DEVELOPS. INHALATION: REMOVE FROM CONTAMINATED AREA; APPLY OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED AND GET MEDICAL ATTENTION. INGESTION: COMPOUND NOT NORMALLY CONSIDERED HAZARDOUS BY INGESTION. GET MEDICAL ATTENTION AS NECESSARY.

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Handling and Disposal  
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Spill Release Procedures: STOP DISCHARGE IF POSSIBLE. KEEP PEOPLE AWAY.

Neutralizing Agent: NONE PROVIDED BY MFR.

Waste Disposal Methods: DO NOT VENT TO AIR. SEND FOR RECLAMATION/RECYCLING OR TO AN EPA APPROVED INCINERATOR.

Handling And Storage Precautions: STORE IN WELL-VENTILATED, DRY AREA (BELOW 125 DEG F). CONTACT WITH FLAMES OR HIGH TEMPERATURES SHOULD BE AVOIDED.

Other Precautions: NONE PROVIDED BY MFR.  
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Fire and Explosion Hazard Information  
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Flash Point Text: NONE

Lower Limits: NONE

Upper Limits: NONE

Extinguishing Media: AS APPROPRIATE FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures: MAY DECOMPOSE TO FORM HALOGEN ACID AND/OR PHOSGENE AT TEMPERATURES ABOVE 600 DEG C. SELF CONTAINED BREATHING APPARATUS (SCBA) IS REQUIRED IF CONTAINERS RUPTURE AND CONTENTS ARE SPILLED UNDER FIRE CONDITIONS.

Unusual Fire

/Explosion Hazard: MAY RELEASE TOXIC DECOMPOSITION PRODUCTS, SUCH AS, HALOGEN ACID AND PHOSGENE.

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Control Measures  
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Respiratory Protection: ATMOSPHERIC LEVELS SHOULD BE MAINTAINED BELOW THE EXPOSURE GUIDELINE. WHERE THE EXPOSURE GUIDELINE MAY BE GREATLY EXCEEDED, USE AN APPROVED POSITIVE PRESSURE SELF CONTAINED BREATHING APPARATUS. IN CONFINED OR POORLY VENTILATED AREAS, USE AN APPROVED POSITIVE SELF CONTAINED BREATHING APPARATUS.

Ventilation: CONTROL AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE GUIDELINES. USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST MAY BE NECESSARY FOR SOME OPERATIONS.

Protective Gloves: BUTYL RUBBER

Eye Protection: USE SAFETY GLASSES WITH SIDESHIELDS OR MONOGOGGLES

Other Protective Equipment: FOR BRIEF CONTACT, NO PRECAUTIONS OTHER THAN CLEAN BODY-COVERING CLOTHING SHOULD BE NEEDED. WHEN PROLONGED OR FREQUENTLY REPEATED CONTACT SHOULD OCCUR, USE PROTECTIVE CLOTHING SUCH AS BUTYL RUBBER.

Work Hygienic Practices: NONE PROVIDED BY MFR.

Supplemental Safety and Health: USE IN A WELL VENTILATED AREA, AWAY FROM OPEN FLAMES AND HOT SURFACES.

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Physical/Chemical Properties  
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HCC: G3

Boiling Point: =-40.6C, -41.4F

M.P/F.P Text: NOT PROVIDED

Decomp Text: NOT PROVIDED

Vapor Pres: 7036 MMHG@70 F (ABSOLUTE)

Vapor Density: 3.0(AIR =1)

Spec Gravity: 1.15 (WATER=1.0)

Viscosity: NOT PROVIDED

Evaporation Rate & Reference: >1

Solubility in Water: 0.30%

Appearance and Odor: COLORLESS LIQUIFIED COMPRESSED GAS, FAINT ETHEREAL ODOR

Percent Volatiles by Volume: 100%

Corrosion Rate: NOT PROVIDED

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Reactivity Data  
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Stability Indicator: YES

Stability Condition To Avoid: MATERIAL IS GENERALLY CONSIDERED STABLE, HOWEVER,  
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VOID OPEN FLAMES AND HIGH TEMPERATURES.

Materials To Avoid: NO KNOWN REACTION WITH COMMON MATERIALS.

Hazardous Decomposition Products: MAY DECOMPOSE TO HALOGEN ACIDS OR PHOSGENE AT TEMPERATURES ABOVE 600 DEG C.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NOT PERTINENT

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Toxicological Information  
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Toxicological Information: NON-IRRITATING TO EYES AND THROAT, LIQUID MAY CAUSE FROSTBITE. LC50 (RAT) 4 HR =220,000 PPM.

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Ecological Information  
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Ecological: SEC 302 RQ= NONE.

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MSDS Transport Information  
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Transport Information: PSN: CHLORODIFLUOROMETHANE, 2,2, UN1018.

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Regulatory Information  
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Sara Title III Information: SEC 302 EXTREMELY HAZARDOUS SUBSTANCE: NONE. SEC 311/312 HAZ CATEGORIES: ACUTE HEALTH PRESSURE HAZARD. SEC 313 TOXIC CHEMICAL: YES, EFFECTIVE JAN 01, 1994. CERCLA SUPERFUND, 40NCFR 117, 302: THIS PRODUCT CONTAINS NO REPORTABLE QUANTITY SUBSTANCE.

Federal Regulatory Information: THE INGREDIENTS OF THIS PRODUCT ARE ON THE TSCA INVENTORY. PER HAZ COM RULE 29 CFR 1910.1200 CHLORODIFLUOROMETHANE IS CONSIDERED A HAZARDOUS MATERIAL.

State Regulatory Information: CALIFORNIA PROP 65: REPRODUCTIVE= NO; CARCINOGEN= NO.

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Other Information  
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Other Information: REASON FOR REVISION OF MSDS: ADDITION OF NIOSH RELS; NEW FORMAT OF MSDS; SUPERSEDES MSDS DATED 08/15/1994.

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Transportation Information  
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Responsible Party Cage: 0YFW2  
Trans ID NO: 151560  
Product ID: R-22; HCFC-22; REFRIGERANT 22  
MSDS Prepared Date: 02/01/1997  
Review Date: 02/17/2000  
MFN: 1  
Net Unit Weight: 30 LB  
Multiple KIT Number: 0  
Unit Of Issue: CY  
Container QTY: 1  
Type Of Container: DISPO CYLINDR  
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Detail DOT Information  
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DOT PSN Code: DHC  
DOT Proper Shipping Name: CHLORODIFLUOROMETHANE, OR REFRIGERANT GAS R22  
Hazard Class: 2.2  
UN ID Num: UN1018  
Label: NONFLAMMABLE GAS  
Special Provision: B51  
Non Bulk Pack: 304  
Bulk Pack: 314,315  
Max Qty Pass: 75 KG  
Max Qty Cargo: 150 KG  
Vessel Stow Req: A  
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Detail IMO Information  
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IMO PSN Code: EDB  
IMO Proper Shipping Name: CHLORODIFLUOROMETHANE  
IMDG Page Number: 2118  
UN Number: 1018  
UN Hazard Class: 2(2.2)  
IMO Packaging Group: -  
Subsidiary R  
Risk Label: -  
EMS Number: 2-09  
MED First Aid Guide NUM: 350  
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Detail IATA Information  
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IATA PSN Code: GHQ  
IATA UN ID Num: 1018  
IATA Proper Shipping Name: CHLORODIFLUOROMETHANE  
IATA PSN Modifier: (R22)  
IATA UN Class: 2.2  
IATA Label: NON-FLAMMABLE GAS  
Packing Note Passenger: 200  
Max Quant Pass: 75KG  
Max Quant Cargo: 150KG  
Packaging Note Cargo: 200  
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Detail AFI Information

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AFI PSN Code: GHQ  
AFI Proper Shipping Name: CHLORODIFLUOROMETHANE  
AFI Hazard Class: 2.2  
AFI UN ID NUM: UN1018  
Special Provisions: P5  
Back Pack Reference: A6.3, A6.5

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HAZCOM Label

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Product ID: R-22; HCFC-22; REFRIGERANT 22  
Cage: 0YFW2  
Company Name: LAROCHE CHEMICALS INC  
Street: 1134 JEFFERSON HWY

PO Box: 5500  
City: GRAMERCY LA  
Zipcode: 70052  
Health Emergency Phone: 800-528-4963  
Label Required IND: Y  
Date Of Label Review: 02/17/2000  
Status Code: A  
Year Procured: 2000  
Origination Code: F  
Eye Protection IND: YES  
Signal Word: CAUTION  
Respiratory Protection IND: YES  
Health Hazard: Slight  
Contact Hazard: Slight  
Fire Hazard: None  
Reactivity Hazard: None

Hazard And Precautions: EYE/SKIN: MAY CAUSE FROSTBITE IF EXPOSED TO DIRECT  
SPRAY. INHALATION: MAY CAUSE NARCOSIS & ASPHYXIATION IN CONC  
ENTRACTIONS

ABOVE 1000 PPM. PERSONS WITH CARDIAC ARRHYTHMIA MAY BE AT INCREASED RISK IN  
SEVERE EXPOSURES. INGESTION:UNLIKELY. FIRST AID:EYE: FLUSH WITH WATER FOR 15  
MINS, GET MEDICAL ATTENTION. SKIN: FLUSH WITH WATER, GET MEDICAL ATTENTION.  
INHALATION: REMOVE FROM CONTAMINATED AREA; GIV E OXYGEN IF BREATHING IS  
DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF BREATHING HASSTOPPED AND GET  
MEDICAL ATTENTION. INGESTION: COMPOUND NOT NORMALLY CONSIDERED HAZARDOUS BY  
INGESTION. GET MEDICAL A

ATTENTION AS NECESSARY.

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