

MSDS Safety Information

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

Item Description Information

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 CYLINDR

Ingredients

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

Health Hazards Data

LD50 LC50 Mixture: NONE PROVIDED BY MFR.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Car

cinogenicity 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 IF 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.

Control Measures

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 Hygiene

Practices: NONE PROVIDED BY MFR.

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

Physical/Chemical Properties

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

Reactivity Data

Stability Indicator: YES

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

Materials To Avoid: NO KN

OWN 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 PROD
UCT 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 Code: 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: NONF
LAMMABLE 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 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 P
hone: 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 CONCENTRATIONS
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 ATTEN TION AS NECESSARY.

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