

LAROCHE CHEMICALS INC -- HFC-134 A,R-134 A

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MSDS Safety Information  
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FSC: 6830  
NIIN: 01-370-6209  
MSDS Date: 08/15/1994  
MSDS Num: CCCJK  
Product ID: HFC-134 A,R-134 A  
MFN: 01  
Responsible Party  
Cage: 0YFW2  
Name: LAROCHE CHEMICALS INC  
Address: 1134 JEFFERSON HWY  
Box: 5500  
City: GRAMERCY LA  
70052  
Info Phone Number: 504-869-2365/800-248-6336  
Emergency Phone Number: 800-528-4963/800-424-9300(CHEMTREC)  
Preparer's Name: UNKNOWN  
Review Ind: Y  
Published: Y

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Contractor Summary  
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Cage: 0YFW2  
Name: LAROCHE CHEMICALS INC  
Address: 1134 JEFFERSON HWY  
Box: 5500  
City: GRAMERCY LA 70052  
Phone: 800-528-4963

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Item Description Informatio  
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Item Name: TETRAFLUOROETHANE, TECHNICAL  
Specification Number: NONE  
Type/Grade/Class: NONE  
Unit of Issue: LB  
UI Container Qty: 0  
Type of Container: UNKNOWN

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Ingredients  
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Cas: 811-97-2  
Name: 1,1,1,2-TETRAFLUOROETHANE (HFC-134A)  
% Wt: 99.9  
Other REC Limits: NONE RECOMMENDED  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED

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Health Hazards Data  
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LD50 LC50 Mixture: LD50 (ORAL, RAT) IS NOT KNOWN.

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: TARGET ORGANS:EYE, SKIN, RESPIRATORY TRACT, HEART. ACUTE-  
OVEREXPOSURE BY INHALATION TO VERY HIGH CONCENTRATIONS MAY CAUSE HEART  
IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. LIQUID CONTACT/ES  
CAPING VAPOR S CAN  
CAUSE EYE AND SKIN FROSTBITE. INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE  
OF EXPOSURE. CHRONIC- UNKNOWN.

Explanation Of Carcinogenicity: NONE

Signs And Symptoms Of Overexposure: FROSTBITE, ASPHYXIATION, IRRITATION, HEART  
IRREGULARITIES, UNCONSCIOUSNESS, DEATH

Medical Cond Aggravated By Exposure: INDIVIDUALS WITH PRE-EXISTING DISEASES OF  
THE CENTRAL NERVOUS SYSTEM OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED  
SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

Fir

st Aid: EYE:FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. GET  
IMMEDIATE MEDICAL ATTENTION. SKIN:FLUSH WITH WATER FOR 15 MINUTES. TREAT FOR  
FROSTBITE BY SLOWLY WARMING UP THE EXPOSED AREA. CALL PHYSICIAN .  
INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NECESSARY. CALL A  
PHYSICIAN. ORAL:INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE.

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Handling and Disposal  
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Spi

ll Release Procedures: WEAR PROTECTIVE EQUIPMENT. VENTILATE AREA ESPECIALLY  
LOW OR ENCLOSED PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES.  
STOP DISCHARGE IF POSSIBLE.

Neutralizing Agent: NOT RELEVANT

Waste Disposal Methods: THIS IS NOT A LISTED HAZARDOUS WASTE. DISPOSAL MUST BE  
IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. RECYCLE IF POSSIBLE.  
IF NOT, SEND TO AN EPA APPROVED INCINERATOR.

Handling And Storage Precautions: STORE IN COOL, VENTILATED, DRY AREA AWAY F

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FLAMES AND INCOMPATIBLE MATERIALS. AVOID TEMPERATURES ABOVE 125 F (52C).

Other Precautions: AVOID BREATHING VAPORS. AVOID EYE OR SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING OR DRINKING. USE WITH ADEQUATE VENTILATION. DO NOT MIX WITH AIR FOR LEAK TESTING ABOVE ATMOSPHERIC PRESSURE. KEEP OUT OF REACH OF CHILDREN.

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Fire and Explosion Hazard Information  
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Flash Point Test:

Flash Point Test: NONE

Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures: WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard: CYLINDERS MAY RUPTURE. DECOMPOSITION MAY OCCUR FORMING TOXIC GASES. COMBUSTIBLE AT PRESSURE AS LOW AS 5.5 PSIG AT 351F (177C) WHEN MIXED WITH AIR >60%.

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Control Measures  
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Respiratory Protection: NOT NORMALLY REQUIRED. WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE OR SUPPLIED-AIR RESPIRATOR IF A LARGE RELEASE OCCURS.

Ventilation: NORMAL VENTILATION. LOCAL EXHAUST NEEDED WHEN LARGE AMOUNTS ARE RELEASED.

Protective Gloves: LINED BUTYL WHEN HANDLING LIQUID

Eye Protection: CHEMICAL SPLASH GOGGLES WHEN HANDLE LIQ.

Other Protective Equipment: EYEBATH, SAFETY SHOWER, PROTECTIVE CLOTHING

Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health: THIS NSN IS A NONSUPPLY NSN. USE 6830-01-370-8756 WITH UNIT OF ISSUE: CY AND NET WEIGHT: 125 POUNDS IN A CYLINDER (PER TIR).

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Physical/Chemical Properties  
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HCC: G3

NRC/State LIC No: NOT RELEVANT

B.P. Text: -16F,-27C

M.P/F.P Text: UNKNOWN

Decomp Text: UNKNOWN

Vapor Pres: 4963 @ 77F

Vapor Density: 3.2

Spec Gravity: 1.21 (LIQUID)

Viscosity: NOT RELEVANT

Evaporation Rate & Reference: NOT RELEVANT

Solubility in Water: 0.15%

Appearance and Odor: COLORLESS LIQUEFIED GAS - FAINT ETHEREAL ODOR

Percent Volatiles by Volume: 100

Corrosion Rate: UNKNOWN

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Reactivity Data

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Stability Indicator: YES

Stability Condition To Avoid: OPEN FLAME, HIGH TEMPERATURES, GLOWING METAL SURFACES

Materials To Avoid: ALKALI OR ALKALINE EARTH METALS, POWDERED ALUMINUM, ZINC, BERYLLIUM (BE)

Hazardous Decomposition Products: MAY FORM HYDROGEN FLUORIDE AND POSSIBLY CARBONYL FLUORIDE.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NOT RELEVANT

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Toxicological Information

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Ecological Information

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MSDS Transport Information

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Regulatory Information

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Other Information  
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Transportation Information  
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Responsible Party Cage: 0YFW2

Trans ID NO: 130073

Product ID: HFC-134 A,R-134 A

MSDS Prepared Date: 08/15/1994

Review Date: 11/06/1996

MFN: 1

Radioactivity: NOT RELEVANT

Net Unit Weight: UNKNOWN

Multiple KIT Number: 0

Review IND: Y

Unit Of Issue: LB

Conta

iner QTY: 0

Type Of Container: UNKNOWN

Additional Data: PER MSDS, DOMESTIC SHIPMENTS OF R-134A, PROPER SHIPPING  
NAME:REFRIGERANT GAS, N.O.S. (1,1,1,2-TETRAFLUOROETHANE), HAZARD CLASS:2.2,  
UN ID NUMBER: UN1078. INTERNATIONAL, PROPER SHIPPING  
NAME:1,1,1,2-TETRAFLUOROETHANE AND UN ID NUMBER: UN3159. THIS IS NONSUPPLY  
NSN

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Detail DOT Information  
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DOT PSN Code: OAB

DOT Proper Shippin

g Name: 1, 1, 1, 2-\$TETRAFLUROETHANE OR REFRIGERANT GAS R  
134A

Hazard Class: 2.2

UN ID Num: UN3159

Label: NON-FLAMMABLE GAS

Packaging Exception: 306

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: OKL

IMO Proper Shipping Name: 1,1,1,2-\$TETRAFLUROETHANE

IMDG Page Number: 2181

UN Number: 3159

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: XRL  
IATA UN ID Num: 3159  
IATA Proper Shipping Name: 1,1,1,2-\$TETRAFLUOROETHANE  
IATA PSN Modifier: (R134A)  
IATA UN Class: 2.2  
IATA Label: NON-FLAMMABLE GAS  
Packing Note Passenger: 200  
Max Quant Pass: 75 KG  
Max Quant Cargo: 150 KG  
Pack  
aging Note Cargo: 200

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Detail AFI Information  
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AFI PSN Code: XRL  
AFI Proper Shipping Name: 1,1,1,2-\$TETRAFLUOROETHANE  
AFI PSN Modifier: (R134A)  
AFI Hazard Class: 2.2  
AFI UN ID NUM: UN3159  
Special Provisions: P5  
Back Pack Reference: A6.3, A6.5

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HAZCOM Label  
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Product ID: HFC-134  
A,R-134 A  
Cage: 0YFW2  
Company Name: LAROCHE CHEMICALS INC  
Street: 1134 JEFFERSON HWY  
PO Box: 5500  
City: GRAMERCY LA  
Zipcode: 70052  
Health Emergency Phone: 800-528-4963/800-424-9300(CHEMTREC)  
Label Required IND: Y  
Date Of Label Review: 11/06/1996  
Status Code: C  
MFG Label NO: UNKNOWN  
Label Date: 11/06/1996  
Origination Code: F  
Eye Protection IND: YES  
Skin Protection IND: YES  
Signal Word: WARNING  
Health Hazard: Moderate  
Contact Hazard: Moderate  
Fire Hazard: None  
Reactivity Hazard: None  
Hazard And Pr

Precautions: TARGET ORGANS:EYE, SKIN, RESPIRATORY TRACT, HEART.

ACUTE- OVEREXPOSURE BY INHALATION TO VERY HIGH CONCENTRATIONS MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS/DEATH. LIQUID CONTACT/ESCAPING VAPORS CAN CAUSE EYE & SKIN FROSTBITE. INGESTION IS NOT CONSIDERED A POTENTIAL ROUTE OF EXPOSURE. CHRONIC- UNKNOWN. STORE IN VENTILATED AREA. IF LEAKING, VENTILATE AREA ESPECIALLY LOW/ENCLOSED PLACES. FIRST AID- EYE:FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. CALL PHYSICIAN.

SKIN:FLUSH WITH

WATER. TREAT FOR FROSTBITE BY SLOWLY WARMING UP EXPOSED AREA. CALL PHYSICIAN. INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NECESSARY. ORAL:UNLIKELY.

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