

MSDS Safety Information

FSC: 6830
NIIN: 01-370-6207
MSDS Date: 08/15/1994
MSDS Num: CCCJH
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 Phon
e Number: 800-528-4963/800-424-9300(CHEMTREC)
Preparer's Name: UNKNOWN
Review Ind: Y
Published: Y

Contractor Summary

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

Item Description Information

Item M
anager: S9G
Item Name: TETRAFLUOROETHANE,TECHNICAL
Specification Number: NONE
Type/Grade/Class: TYPE R-134
Unit of Issue: CY
Quantitative Expression: 00000000043LB
UI Container Qty: 0
Type of Container: CYLINDER

Ingredients

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/ESC

APING 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.

Firs

t 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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I 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 FR

OM

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. K EEP OUT OF REACH OF CHILDREN.

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Fire and Explosion Hazard Information

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Flash Point Tex

t: 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: CH

EMICAL SPLASH GOGGLES WHEN HANDLE LIQ.

Other Protective Equipment: EYEBATH, SAFETY SHOWER, PROTECTIVE CLOTHING

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

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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 Gr

avity: 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

Reactivity Data

Stability Indicator: YES
Stability Condition To Avoid: OPEN FLAME, HIGH TEMPERATURES, GLOWING METAL SURFACES
Materials To Avoi
d: 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

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

Transportation Information

Responsible Party Cage: 0YFW2
Trans ID NO: 130061
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: 43 LBS
Multiple KIT Number: 0
Review IND: Y
Unit Of Issue: CY
Container QTY: 0
Type Of Container: CYLINDER
Additional Data: PER MSDS, DOMESTIC SHIPMENTS OF R-134A, PROPER SHIPING NAME: REFRIGERANT GAS, N. O. S. (1,1,1,2-TETR AFL

UOROETHANE), HAZARD CLASS: 2.2,
IDENTIFICATION NUMBER: UN1078. INTERNATIONAL, PROPER SHIPPING NAME:
1,1,1,2-TETRAFLUOROETHANE AND UN ID NUMBER: UN3159.

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Detail DOT Information

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DOT PSN Code: OAB
DOT Proper Shipping Name: 1, 1, 1, 2-\$TETRAFLUOROETHANE OR REFRIGERANT GAS R
134A
Hazard Class: 2.2
UN ID Num: UN3159
Label: NON-FLAMMABLE GAS
Packaging Exception: 306
Non Bulk Pack: 304
B
ulk 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-\$TETRAFLUOROETHANE
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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etail 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
Packaging 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 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:U

NLIKELY.

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