

LELAND LIMITED INC -- CARBON DIOXIDE

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MSDS Safety Information
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FSC: 4220
NIIN: 00-543-6693
MSDS Date: 02/28/1991
MSDS Num: BJRNZ
Product ID: CARBON DIOXIDE
MFN: 01
Responsible Party
Cage: 2W134
Name: LELAND LIMITED INC
Address: 382 SOMERVILLE RD
City: BEDMINSTER NJ 07921-9779
Info
Phone Number: 908-668-1310
Emergency Phone Number: 908-668-1008/908-781-7800
Preparer's Name: LELAND STANFORD, VP
Review Ind: Y
Published: Y

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Contractor Summary
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Cage: 2W134
Name: LELAND LTD INC
Address: 2614 S CLINTON AVE
City: SOUTH PLAINFIELD NJ 07080
Phone: 908-561-2000; 908-568-1310

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Item Description Information
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Item Manager: S9I
Item Name: CARTRIDGE,COMPRESSED GAS
Specification Number: MIL-C-25369
Type/Grade/Class: 2 TYPE
Unit of Issue: EA
UI Container Qty: 1
Type of Container: STEEL CYLINDR

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Ingredients
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Cas: 124-38-9
RTECS #: FF6400000
Name: CARBON DIOXIDE
% Wt: 100
Other REC Limits: NONE SPECIFIED
OSHA PEL: 5000 PPM
ACGIH TLV: 5000PPM/30000STEL;93

Cas: 10024-97-2
RTECS #: QX1350000
Name: NITROUS OXIDE
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: 50 PPM; 9192
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Health Hazards Data
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LD50 LC50 Mixture: LD 50 ORAL RAT IS UNKNOWN

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: CARBON DIOXIDE IS AN ASPHYXIANT. HIGH CONCENTRATIONS CAUSE

PRODUCE PARALYSIS OF THE RESPIRATORY CONTROL CENTER OF THE NERVOUS SYSTEM. 2-3% WILL INCREASE RESPIRATION. >4% PRODUCES LABORED BREATHING AND IS DANGEROUS FOR EVEN A FEW MINUTES. >12% CAUSES RAPID UNCONSCIOUSNESS AND DEATH.

Explanation Of Carcinogenicity: NONE OF THE INGREDIENTS IN THIS PRODUCT IS LISTED BY NTP, IARC OR OSHA AS A CARCINOGEN.

Signs And Symptoms Of Overexposure: FAINT "ACIDIC" TASTE, HEADACHE, DIZZINESS, SHORTNESS OF BREATH, MUSCULAR WEAKNESS, DROWSINESS, AND RINGING OF THE EARS.

AS GAS ESCAPES, CYLINDER FREEZES, MAY CAUSE SKIN BURNS OR REDNESS.

Medical Cond Aggravated By Exposure: PERSONNEL WITH PRE-EXISTING CHRONIC RESPIRATORY DISEASES OR HEART DISORDER SHOULD REFRAIN FROM BREATHING EXCESSIVE CARBON DIOXIDE. RECOVERY IS USUALLY RAPID FROM SHORT TERM OVEREXPOSURE.

First Aid: FIRST AID: INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. RESCUE PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK.

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Handling and Disposal
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Spill Release Procedures: REMOVE PERSONNEL. VENTILATE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS. MOVE LEAKING CONTAINER OUTDOORS IF WITHOUT RISK. SLOWLY RELEASE INTO ATMOSPHERE. RETURN DEFECTIVE CYLINDER TO SUPPLIER. TEST AREA FOR OXYGEN BEFORE ALLOWING RE-ENTRY.

Waste Disposal Methods: CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER. MANUFACTURER RECOMMENDS VENTIN

G SLOWLY TO ATMOSPHERE WITH ADEQUATE VENTILATIONS. DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
Handling And Storage Precautions: STORE CARBON DIOXIDE CYLINDERS UPRIGHT IN A COOL (BELOW 140F), DRY LOCATION, AWAY FROM CHEMICALS WITH SAFETY CAP INSTALLED.

Other Precautions: NEVER WORK ON A PRESSURIZED SYSTEM. IF THERE IS A LEAK, CLOSE THE CYLINDER VALVE, BLOW DOWN SYSTEM BY VENTING TO A SAFE PLACE, THEN REPAIR LEAK. CYLINDER TEMPERATURE WILL DECREASE AS RELEASE OCCURS, CAUSING FREEZE BURNS IF CYLINDER IS TOUCH

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Fire and Explosion Hazard Information
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Extinguishing Media: NON-FLAMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures: STAY CLEAR OF HEATED CYLINDERS. COOL CYLINDER WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: CYLINDERS MAY RUPTURE IF OVERHEATED, 240F APPROXIMATELY.

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Control Measures
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Respiratory Protection: WEAR SELF-CONTAINED BREATHING APPARATUS WHEN CONCENTRATIONS ARE ABOVE PEL.

Ventilation: MECHANICAL (GENERAL) AND/OR LOCAL EXHAUST VENTILATION TO KEEP EXPOSURE LEVELS BELOW PEL.

Protective Gloves: LEATHER GLOVES.

Eye Protection: SAFETY GLASSES OF FULL FACE SHIELD.

Other Protective Equipment: SELF-CONTAINED BREATHING APPARATUS. SAFETY SHOES. DO NOT WEAR CONTACT LENSES.

Work Hygienic Practices: KEEP SAFETY VALVES IN GOOD WORKING CONDITIONS. KEEP DEBRIS AND UNNECESSARY EQUIPMENT AWAY FROM CO2 EQUIPMENT.

Supplemental Safety and Health: CLOSE VALVE WHEN NOT IN USE AND WHEN EMPTY. CARBON DIOXIDE, BEING HEAVIER THAN AIR, TENDS TO ACCUMULATE NEAR THE FLOOR OF AN ENCLOSED SPACE DISPLACING THE AIR AND CREATING AN OXYGEN DEFICIENT ATMOSPHERE. VENTILATE BEFORE ENTRY. VERIFY SUFFICIENT OXYGEN CONCENTRATION.

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Physical/Chemical Properties
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HCC: G3

B.P. Text: 129F,54C

Decomp Text: UNKNOWN

Vapor Pres: 745 PSIG

Vapor Density: 1.5

Spec Gravity: 1.98

Solubility in Water: SLIGHT

Appearance and Odor: COLORLESS GAS. SLIGHT PUNGENT ODOR.

Corrosion Rate: UNKNOWN

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Reactivity Data
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Stability Indicator: YES

Stability Condition To Avoid:

HIGH HEAT, OPEN FLAMES.

Materials To Avoid: NONE

Hazardous Decomposition Products: IN THE PRESENCE OF AN ELECTRICAL DISCHARGE,
CARBON DIOXIDE IS DECOMPOSED TO FORM CARBON MONOXIDE AND OXYGEN.

Hazardous Polymerization Indicator: NO

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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: 2W134

Trans ID NO: 76077

Product ID: CARBON DIOXIDE

MSDS Prepared Date: 02/28/1991

Review Date: 04/19/1991

MFN: 1

Net Unit Weight: UNKNOWN

Multiple KIT Number: 0

Review IND: Y

Unit Of Issue: EA

Container QTY: 1

Type Of Container: STEEL CYLINDR
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Detail DOT Information
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DOT PSN Code: CUX

DOT Proper Shipping Nam

e: CARBON DIOXIDE
Hazard Class: 2.2
UN ID Num: UN1013
Label: NONFLAMMABLE GAS
Packaging Exception: 306
Non Bulk Pack: 302,304
Bulk Pack: 302,314,315
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: DOH
IMO Proper Shipping Name: CARBON DIOXIDE
IMDG Page Number: 2111
UN Number: 1013
UN Hazard Class: 2(2.2)
IMO Packaging Group: -
Subsidiar
y Risk Label: -
EMS Number: 2-09
MED First Aid Guide NUM: 615

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Detail IATA Information
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IATA PSN Code: FHH
IATA UN ID Num: 1013
IATA Proper Shipping Name: CARBON DIOXIDE +
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 Inf
ormation
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AFI PSN Code: FHH
AFI Proper Shipping Name: CARBON DIOXIDE
AFI Hazard Class: 2.2
AFI UN ID NUM: UN1013
Special Provisions: P5
Back Pack Reference: A6.3,A6.5,A6.6

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HAZCOM Label
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Product ID: CARBON DIOXIDE
Cage: 2W134
Company Name: LELAND LTD INC
Street: 2614 S CLINTON AVE
City: SOUTH PLAINFIELD NJ
Zipcode: 07080
Health Eme

rgency Phone: 201-234-1750; 908-668-1008

Label Required IND: Y

Date Of Label Review: 06/02/1993

Status Code: C

Label Date: 06/02/1993

Origination Code: G

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: CAUTION

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: ACUTE: SIMPLE ASPHYXIANT. BREATHING HIGH CONCENTRATIONS OF VAPORS CAN CAUSE INCREASED RESPIRATION, LABORED BREATHING, FAINT "ACIDIC" TASTE, HEADACHE, DIZZINESS, SHORTNESS OF BREATH, MUSCULAR WEAKNESS, DROWSINESS, RINGING OF THE EARS, UNCONSCIOUSNESS AND SUFFOCATION. CONTACT WITH LIQUID CAN CAUSE FROSTBITE.

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