

LELAND LIMITED INC -- CARBON DIOXIDE, GAS

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MSDS Safety Information
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FSC: 4220
NIIN: 00-805-8383
MSDS Date: 05/02/2000
MSDS Num: CKWRR
Product ID: CARBON DIOXIDE, GAS
MFN: 01
Responsible Party
Cage: 2W134
Name: LELAND LIMITED INC
Address: 382 SOMERVILLE RD
Box: 382
City: BEDMINSTER NJ 0
7921
Info Phone Number: 908-668-1008
Emergency Phone Number: (800)424-9300
Resp. Party Other MSDS No.: C02.MSD/VAS
Chemtrec IND/Phone: (800)424-9300
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,CARBON DIOXIDE
Specification Number: MIL-C-601
Type/Grade/Class: 2 TYPE
Unit of Issue: EA
UI Container Qty: 1
Type of Container: CARTRIDGE

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Ingredients
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Cas: 124-38-9
RTECS #: FF6400000
Name: CARBON DIOXIDE
Percent by Wt: 100.
OSHA PEL: 9000 MG/M3;5000 PPM
ACGIH TLV: 9000

MG/M3;5000 PPM
ACGIH STEL: 54000 MG/M3

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Health Hazards Data
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LD50 LC50 Mixture: NO DATA PROVIDED BY MANUFACTURER

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: INHALATION:INITIALLY, EXPOSURE TO INCREASED CARBON DIOXIDE CONCENTRATIONS RESULTS IN A COMPEN-SATORY INCREASE IN BOTH RATE & DEPTH OF VE

NTILATION. BEYOND A CERTAIN POINT, HOWEVER, THIS MAY REVERSE TO HYPOVENTILATION RESULTING RESPIRATORY ACIDOISIS. DEATH FROM ASPHYXIA MAY OCCUR IF THE CONCENTRATION & DURATION OF EXPOSURE ARE SUFFICIENT. SKIN: NO ADVERSE EFFECTS HAVE BEEN REPORTED FROM THE GAS. DU E TO RAPID EVAPORATION, THE LIQUID MAY CAUSE FROSTBITE. EYE: AT HIGH CONCENTRATIONS IN AIR, MAY CAUSE STINGING SENSATION; MAY CAUSE IRRITATION. INGESTION: UNLIKELY. IF LIQUID IS SWALLOWED, FROSTBITE D AMAGE TO LIPS, MO

UTH & MUCOUS MEMBRANES

Explanation Of Carcinogenicity: NONE.

Signs And Symptions Of Overexposure: INHALATION: INCREASE IN BOTH RATE AND DEPTH OF VENTILATION THEN HYPOVENTILATION RESULTING RESPIRATORY ACIDOISIS. DEATH FROM ASPHYXIA MAY OCCUR. SKIN: DUE TO RAPID EVAPORATION, THE LIQUID MAY CAUSE FR OSTBITE WITH RENESS, TINGLING, PAIN, OR NUMBNESS. IN SEVERE CASES, THE SKIN MAY BECOME HARD, WHITE, AND DEVELOP BLISTERS. EYE: AT HIGH CONCENTRATIONS IN AIR, MAY CAUSE STINGING SENSATIO

N. INGESTION: F ROSTBITE TO LIPS, MOUTH, MUCOUS MEMBRANES.

Medical Cond Aggravated By Exposure: NO DATA PROVIDED BY MANUFACTURER.

First Aid: INHALATION: IMMEDIATELY REMOVE FROM EXPOSURE AREA TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. MAINTAIN AIRWAY AND BLOOD PRESSURE. KEEP AFFECTED PERSON WARM, GET MEDICAL ATTENTION IMMEDIATELY. SKIN: IN CASE OF FROSTBITE, WARM AFFECTED SKIN WITH WARM WATER (107F). IF WARM WATER IS UNAVAILABE, GENTLY WRAP AFFECTD AREA IN BLAN

KETS. ALLOW CIRCULATION

TO RETURN NATURALLY. GET MED ICAL ATTENTION IMMEDIATELY. EYE: IF CONTACT WITH LIQUIFIED OR COMPRESSED GAS OCCURS, WASH WITH LARGE AMOUNTS OF WARM WATER (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

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Handling and Disposal
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Spill Release Procedures: NO DATA PROVIDED BY MANUFACTURER

Neutralizing Agent: NO DATA PROVIDED BY MANUFACTURER

Waste

Disposal Methods: NO DATA PROVIDED BY MANUFACTURER.

Handling And Storage Precautions: DO NOT PERMIT PHYSICAL DAMAGE OR OVERHEATING OF CYLINDERS. CONTENTS ARE UNDER PRESSURE; CYLINDERS MAY RUPTURE AND TRAVEL A CONSIDERABLE DISTANCE. CONTACT OF LIQUEFIED GASES WITH WATER MAY CAUSE EXPLOSIONS DUE TO RAPID TEMPERATURE FLUCTUATIONS. STORE IN ACCORDANCE WITH 29 CFR 1910.101.

Other Precautions: HANDLING CONT: FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE EPA.

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Fire and Explosion Hazard Information

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Extinguishing Media: DRY CHEMICAL, CARBON DIOXIDE, OR HALON. FOR LARGER FIRES, USE WATER SPRAY, FOG OR STANDARD FOAM.

Fire Fighting Procedures: COOL FIRE-EXPOSED CYLINDERS WITH WATER FROM THE SIDE UNTIL WELL AFTER THE FIRE IS OUT. USE AGENTS SUITABLE FOR TYPE OF FIRE. COOL CYLINDERS WITH FLOODING AMOUNTS OF WATER. APPLIED FROM AS FAR A DISTANCE AS POSSIBLE.

Unusual

Fire/Explosion Hazard: GAS--NEGLIGIBLE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. CYLINDER--MAY RUPTURE IN HEAT OF FIRE.

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Control Measures

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Respiratory Protection: SCBA ONLY REQUIRED IN CONFINED SPACES.

Ventilation: PROVIDE GENERAL DILUTION VENTILATION.

Protective Gloves: PROTECTIVE CLOTHING IS NOT REQUIRED

Eye Protection: NOT REQUIRED, BUT ADVISABLE.

Other Protective Equipment:

PROTECTIVE CLOTHING IS NOT REQUIRED

Work Hygienic Practices: NO DATA PROVIDED BY MANUFACTURER

Supplemental Safety and Health: NO DATA PROVIDED BY MANUFACTURER

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Physical/Chemical Properties

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HCC: G3

Boiling Point: =-78.3C, -109.F

B.P. Text: SUBLIMES

Melt/Freeze Pt: =-57.C, -70.6F

Vapor Pres: 43700 MMHG@21C

Vapor Density: 1.977G/l

Spec Gravity: 1.52@21C

Solubility in Water: SOLUBLE

Appearance

ance and Odor: ODORLESS, COLORLESS GAS, WITH SLIGHT ACIDIC TASTE.

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Reactivity Data
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Stability Indicator: YES ION OR

Stability Condition To Avoid: STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

Materials To Avoid: ACRYLADEHYDE: EXOTHERMIC POLYMERIZATION; BARIUM PEROXIDE:
INCANDESCENT REACTION; CESIUM OXIDE: IGNITION; DIETHYL MAGNESIUM: IGNITION;
ETHYLENEIMINE: EXPLOSIVE POLYMERIZATION;
ION; HYDRAZINE: DECOMPOSITION; METAL
ACETYLIDES: IGNITION

Hazardous Decomposition Products: TEMPERATURES ABOVE 1700 C MAY CAUSE
DECOMPOSITION AND THE RELEASE OF OXYGEN AND HIGHLY TOXIC CARBON MONOXIDE.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: HAZARDOUS POLYMERIZATION HAS NOT BEEN
REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

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Toxicological Information
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Toxicological Information: NO DATA PROVIDED BY MANUFACTURER.
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Ecological Information
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Ecological: NO DATA PROVIDED BY MANUFACTURER
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MSDS Transport Information
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Transport Information: NO DATA PROVIDED BY MANUFACTURER
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Regulatory Information
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Sara Title III Information: NO DATA PROVIDED BY MANUFACTURER

Federal Regulatory Information: NO DATA PROVIDED BY MANUFACTURER

State Regulatory Information: NO DATA PROVIDED BY MANUFACTURER
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Other Information
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Other Information: NFPA RATINGS: HEALTH=U, FIRE=0, REACTIVITY=0. CERCLA
RATINGS: HEALTH=3, F

ORE=0, REACTIVITY=0, PERSISTENCE=0.

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Transportation Information
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Responsible Party Cage: 2W134
Trans ID NO: 155593
Product ID: CARBON DIOXIDE, GAS
MSDS Prepared Date: 05/02/2000
Review Date: 12/14/2000
MFN: 1
Net Unit Weight: UNKNOWN
Multiple KIT Number: 0
Unit Of Issue: EA
Container QTY: 1
Type Of Container: CARTRIDGE

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Detail DOT I
nformation
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DOT PSN Code: CUX
DOT Proper Shipping Name: 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: C
ARBON DIOXIDE
IMDG Page Number: 2111
UN Number: 1013
UN Hazard Class: 2(2.2)
IMO Packaging Group: -
Subsidiary 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 Information
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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, GAS
Cage:
2W134
Company Name: LELAND LTD INC
Street: 2614 S CLINTON AVE
City: SOUTH PLAINFIELD NJ
Zipcode: 07080
Health Emergency Phone: (800)424-9300
Label Required IND: Y
Date Of Label Review: 12/14/2000
Status Code: A
Origination Code: F
Eye Protection IND: YES
Skin Protection IND: YES
Signal Word: WARNING
Respiratory Protection IND: YES
Health Hazard: Moderate
Contact Hazard: Moderate
Fire Hazard: None
Reactivity Hazard: None
Hazard And Precautions: INHALATION:INITIALLY, EXPOSURE TO INCREASED CARBON
DIOXIDE CONCENTRATIONS RESULTS IN A COMPEN-SATORY INCREASE IN BOTH RATE &
DEPTH OF VENTILATION. BEYOUND A CERTAIN POINT, HOWEVER, THIS MAY REVERSE TO
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DUE TO RAPID EVAPORATION, THE LIQUID MAY CAUSE FROSTBI TE. EYE: AT HIGH
CONCENTRATIONS IN AIR, MAY CAUSE STINGING SENSATION; MAY CAUSEIRRITATION.
INGESTION: UNLIKELY. IF LIQUID IS SW

ALLOWED, FROSTBITE DAMAGE TO LIPS, MOUTH
& MUCOUS MEMBRANES. TARGET ORGAN S: N/P.

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