

LELAND LIMITED INC -- CARBON DIOXIDE,GAS

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MSDS Safety Information
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FSC: 4220
NIIN: 01-077-8773
MSDS Date: 10/19/1996
MSDS Num: BPBPG
Product ID: CARBON DIOXIDE,GAS
MFN: 01
Responsible Party
Cage: 2W134
Name: LELAND LIMITED INC
Address: 382 SOMERVILLE RD
Box: 382
City: BEDMINSTER NJ 07
921
Info Phone Number: 908-668-1008
Emergency Phone Number: 908-668-1008/800-424-9300(CHEMTREC)
Preparer's Name: UNKNOWN
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: CYLINDER,CARBON DIOXIDE
Specification Number: MIL-C-25369
Type/Grade/Class: TYPE 3
Unit of Issue: EA
UI Container Qty: 1
Type of Container: CYLINDER

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Ingredients
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Cas: 124-38-9
RTECS #: FF6400000
Name: CARBON DIOXIDE
% Wt: 100.0
Other REC Limits: NONE RECOMMENDED
OSHA PEL: 5000 PPM
ACGIH TLV: 5000PPM/30000STEL

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Health Hazards Data
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LD50 LC50 Mixture: TLV IS 5000 PPM.

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: TARGET ORGANS:LUNGS, HEART, CNS, EYES, SKIN. ACUTE-
CONTACT WITH LIQUID CAN CAUSE SKIN FROSTBITE. GAS MAY CAUSE EYE IRRITATION.
ASPHYXIANT. INHALATION MAY CAUSE RESPIRATORY ACIDOSIS. HIGH CONC

ENTRATIO NS

MAY CAUSE RAPID CIRCULATORY INSUFFICIENCY LEADING TO DEATH. INGESTION OF
LIQUID MAY DAMAGE MOUTH, LIPS. CHRONIC- UNK.

Explanation Of Carcinogenicity: NONE

Signs And Symptions Of Overexposure: EYE OR SKIN FROSTBITE AND FREEZE BURNS,
HEADACHE, DROWSINESS, DIZZINESS, STINGING OF THE EYES, NOSE AND THROAT,
EXCITATION, RAPID BREATHING AND HEART RATE, EXCESS SALIVATION, SHORTNESS OF
BREATH, MUSC ULAR WEAKNESS, RINGING IN THE EAR, UNCONSCIOUSNESS, COMA,
NAUSEA, VOMITING, WATERY

EYES (FORMATION OF WEAK CABONIC ACID)

Medical Cond Aggravated By Exposure: PERSONNEL WITH PRE-EXISTING CHRONIC
RESPIRATORY DISEASES OR HEART DISORDERS SHOULD REFRAIN FROM BREATHING
EXCESSIVE CARBON DIOXIDE.

First Aid: INHALATION:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED.

EYES:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEE AN
OPHTHALMOLOGIST, URGENTLY. SKIN:FLUSH WITH WARM WATER (NOT TO EXCEED 107 F).
PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE

TO CO2.

RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF CONTAINED BREATHING APPARATUS.
ORAL:TREAT SYMPTOMATICALLY. CALL PHYSICIAN.

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Handling and Disposal
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Spill Release Procedures: LIQUID CARBON DIOXIDE WILL FORM SOLID CO2 (DRY ICE)
WHEN RELEASED TO ATMOSPHERIC PRESSURE. THE AREA SHOULD BE VENTILATED. CLEAN
UP PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FA CE

MASK AND HEAVY PROTECTIVE CLOTHING.

Neutralizing Agent: NOT RELEVANT

Waste Disposal Methods: SLOWLY RELEASE INTO ATMOSPHERE OUTDOORS. DISPOSAL SHOULD BE IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. DEFECTIVE CYLINDERS SHOULD BE TAGGED TO INDICATE A DEFECT.

Handling And Storage Precautions: STORE IN A COOL, WELL-VENTILATED DARK PLACE. NEVER WORK ON A PRESSURIZED SYSTEM. IF THERE IS A LEAK, CLOSE THE CYLINDER VALVE AND BLOW DOWN THE SYSTEM

Other Precautions: KEEP AWAY FR

OM SOURCES OF HEAT. CAUTION! CAN CAUSE RAPID

SUFFOCATION DUE TO OXYGEN DEFICIENCY. USE WITH ADEQUATE VENTILATION. CO2 IS HEAVIER THAN AIR AND TENDS TO ACCUMULATE NEAR THE FLOOR IN CLOSED S PACES. READ ALL LABELS AND INSTRUCTIONS.

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Fire and Explosion Hazard Information
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Flash Point Text: NONE

Extinguishing Media: CARBON DIOXIDE CANNOT CATCH FIRE. USE WATER FOG, CARBON DIOXIDE, FO

AM, OR DRY CHEMICAL FOR SURROUNDING FIRE.

Fire Fighting Procedures: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A NIOSH-APPROVED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. EVACUATE AREA.

Unusual Fire/Explosion Hazard: CYLINDERS MAY EXPLODE DUE TO HEAT OF FIRE.

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Control Measures
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Respiratory Protection: NONE REQUIRED UNDER NORMAL USE. HOWEVER, AIR-SUPPLIED

RESPIRATORS ARE REQUIRED WHILE WORKING IN CONFINED SPACES WITH THIS PRODUCT. THE RESPIRATORY PROTECTION USE MUST CONFORM WITH OSHA RULES AS SPECIF IED IN 29 CFR 1910.134.

Ventilation: SUFFICIENT TO PREVENT ACCUMULATION ABOVE TLV. LOCAL EXHAUST LOCATED NEAR THE FLOOR.

Protective Gloves: INSULATED AND COLD RESISTANT NEOPRENE

Eye Protection: SAFETY GOGGLES RECOMMENDED

Other Protective Equipment: EYE WASH STATION, SAFETY SHOWER, INDUSTRIAL-TYPE WORK CLOTHING, SAFETY SHOES AND APRON AS REQUIRED.

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: -109F SUBLI

M.P/F.P Text: -71F@4000MM

Decomp Text: 3092F,1700C

Vapor Pres: 43700 @70F

Vapor Density: 1.5

Spec Gravity: 1.52

PH: ACIDIC

Viscosity: NOT RELEVANT

Evaporation Rate & Reference: N

OT RELEVANT

Solubility in Water: SOLUBLE

Appearance and Odor: COLORLESS, ODORLESS GAS

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: OVERHEATING CYLINDERS

Materials To Avoid: ACRYLALDEHYDE, SODIUM/BARIUM PEROXIDE, CESIUM OXIDE,
DIETHYL MAGNESIUM, ETHYLENEIMINE, HYDRAZINE, METAL HYDRIDES

Hazardous Decomp

osition Products: CAN DECOMPOSE TO CARBON MONOXIDE AND OXYGEN
ABOVE 3092F (1700C).

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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Respo

nsible Party Cage: 2W134

Trans ID NO: 105568

Product ID: CARBON DIOXIDE,GAS

MSDS Prepared Date: 10/19/1996

Review Date: 04/11/1995

MFN: 1

Net Unit Weight: 34 - 36G

AF MMAC Code: NR

Multiple KIT Number: 0

Review IND: Y

Unit Of Issue: EA

Container QTY: 1

Type Of Container: CYLINDER

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Detail DOT Information
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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: CARBON 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

=====
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: 908-668-1008/800-424-930

0(CHEMTREC)

Label Required IND: Y

Date Of Label Review: 04/11/1995

Status Code: C

MFG Label NO: NOT RELEVANT

Label Date: 04/11/1995

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:LUNGS, HEART, CNS, EYES, SKIN. ACUTE- CONTACT WITH LIQUID CAN CAUSE SKIN FROSTBITE. GAS MAY CAUSE EYE IRRITATION. INHALATION MAY CAUSE RESPIRATOR

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