

LELAND LIMITED INC -- CARBON DIOXIDE, GAS

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MSDS Safety Information

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FSC: 4220

NIIN: 01-391-9844

MSDS Date: 10/19/1996

MSDS Num: CJKBT

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: 1-800-424-9300

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Item Description Information

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Item Manager: S9I

Item Name: LIFE RAFT,INFLATABLE

Unit of Issue: EA

UI Container Qty: 1

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Ingredients

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Cas: 124-38-9

RTECS #: FF6400000

Name: CARBON DIOXIDE GAS

Percent by W

t: 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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Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: TARGET ORGANS: HEART, RESPIRATORY AND NERVOUS SYSTEM.

INHALATION: INITIALLY RESULTS IN A COMPENSATORY INCREASE IN BOTH RATE &
DEPTH O

F VENTILATION. BEYOND A CERTAIN POINT MAY REVERSE TO HYPOVENTILATION RESULTING IN RESPIRATORY ACIDOSIS. DEATH FROM ASPHYXIA MAY OCCUR IF CONC. & DURATION OF EXPOSURE ARE SUFFICIENT. SKIN: NO EFFECTS FROM GAS. LIQUID MAY CAUSE FROSTBITE. EYES: AT HIGH CONC. IN AIR, MAY CAUSE STINGING SENSATION; MAY CAUSE IRRITATION. INGESTION: UNLIKELY. IF LIQUID IS SWALLOWED, MAY CAUSE FROSTBITE DAMAGE TO LIPS, MOUTH AND MUCOUS MEMBRANES.

Signs And Symptoms Of Overexposure: INHALATION: INCREASE IN BOTH RATE &

DEPTH OF VENTILATION. SKIN: REDNESS, TINGLING, PAIN, OR NUMBNESS IF LIQUID CONTACT IS MADE. IN SEVERE CASES, THE SKIN MAY BECOME HARD, WHITE, AND DEVELOP BLISTERS. EYES: STINGING SENSATION.

First Aid: INHALATION: IMMEDIATELY REMOVE FROM EXPOSURE AREA TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. MAINTAIN AIRWAY & BLOOD PRESSURE. KEEP AFFECTED PERSON WARM. GET MEDICAL ATTENTION IMMEDIATELY. SKIN :FOR FROSTBITE, WARM AFFECTED AREA IN WA

TER (107F). IF WARM WATER IS UNAVAILABLE, GENTLY WRAP AFFECTED AREA IN BLANKETS. ALLOW CIRCULATION TO RETURN NATURALLY. GET MEDICAL ATTENTION IMMEDIATELY. EYES: WASH WITH LARGE AMOUNTS OF WARM WATER FOR 15-20 MIN. GET MEDICAL ATTENTION IMMEDIATELY. INGESTION: TREAT SYMPTOMATICALLY & GET MEDICAL ATTENTION.

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Handling and Disposal

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Waste Disposal Methods: FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE EPA.

Handling And Storage Precautions: STORE IN ACCORDANCE WITH 29 CFR 1910.101.
Other Precautions: NONE

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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 WEL

L 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-NEGLECTIBLE 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: PROVID

E GENERAL DILUTION VENTILATION.
Eye Protection: NOT REQUIRED, BUT ADVISABLE.
Other Protective Equipment: NOT REQUIRED UNLESS MULTIPLE CYLINDERS RELEASE IN
 CONFINED SPACES.

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Physical/Chemical Properties

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HCC: G3
Boiling Point: =-79.C, -110.2F
B.P. Text: (SUBLIMES)
Melt/Freeze Pt: =-57.C, -70.5F
M.P/F.P Text: @4000 MMHG
Vapor Pres: 43700 MMHG@21C
Vapor Density: 1.5
Spec Gravity: 1.52@21
C
PH: ACIDIC IN SOL'N
Solubility in Water: SOLUBLE
Appearance and Odor: ODORLESS. COLORLESS GAS, WITH A SLIGHT ACIDIC TASTE.

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Reactivity Data

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Stability Indicator: YES
Stability Condition To Avoid: STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.
Materials To Avoid: ACRYLALDEHYDE, BA PEROXIDE, CE OXIDE, DIETHYL MG,
 ETHYLENEIMINE, HYDRAZINE, METAL ACETYLIDES, METAL HYDRIDES, METALS,
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OTASSIUM, POTASSIUM-SODIUM ALLOYS, SODIUM, SODIUM PEROXIDE.
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: HARDOUS POLYMERIAZATION HAS NOT BEEN
 REPORTEDTO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURE.

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Toxicological Information

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Ecological Information

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MSDS Transport Information

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Transport Information: PER MANUFACTURER OF THE LIFE RAFT: UN2990, LIFE-SAVING
 APPLIANCES, SELF-INFLATING.

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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: 147011

Product ID: CARBON DIOXIDE, GAS

MSDS Prepared Date: 10/19/1996

Review Date: 04/12/2000

MFN: 1

Net Unit Weight: 4.46 LB GAS

Multiple KIT Number:

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Unit Of Issue: EA

Container QTY: 1

Additional Data: EACH DEVICE HAS A CYLINDER CONTAINING 205 CU FT OF CARBON DIOXIDE GAS. WEIGHT OF EMPTY CYLINDER = 10 .16 LBS, WEIGHT OF GAS PLUS CYLINDER IS 14.62 LBS. PSN PER MARKINGS ON THE STOCK.

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Detail DOT Information

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DOT PSN Code: IHN

DOT Proper Shipping Name: LIFE-SAVING APPLIANCES, SELF INFLATING

Hazard Class: 9

UN ID Num: UN2990

Label

: NONE

Non Bulk Pack: 219

Bulk Pack: NONE

Max Qty Pass: NO LIMIT

Max Qty Cargo: NO LIMIT

Vessel Stow Req: A

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Detail IMO Information

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IMO PSN Code: IYJ

IMO Proper Shipping Name: LIFE-SAVING APPLIANCES, SELF-INFLATING

IMDG Page Number: 9032

UN Number: 2990

UN Hazard Class: 9

IMO Packaging Group: -

Subsidiary Risk Label: -

EMS Number:

MED First Aid Guide NUM: ss

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Detail IATA Information

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IATA PSN Code: PAY

IATA UN ID Num: 2990

IATA Proper Shipping Name: LIFE-SAVING APPLIANCES, SELF-INFLATING

IATA PSN Modifier: ,(APPLIES TO LIFE-SAVING APPLIANCES THAT PRESENT A HAZARD IF
THE SELF-INFLATING DEVICE IS ACTIVATED ACCIDENTALLY).

IATA UN Class: 9

IATA Label: MISCELLANEOUS

Packing Note Passenger: SEE 905

Max Quant Pass: SEE 905

Max Quant Cargo: SEE 905

Packaging Note Cargo:

SEE 905

Exceptions: A48, A87

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Detail AFI Information

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AFI PSN Code: PAY

AFI Proper Shipping Name: LIFE-SAVING APPLIANCES, SELF INFLATING

AFI Hazard Class: 9

AFI UN ID NUM: UN2990

Special Provisions: P5

Back Pack Reference: A13.11

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HAZCOM Label

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Product ID: CARBON DIOXIDE, GAS

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age: 2W134

Company Name: LELAND LTD INC

Street: 2614 S CLINTON AVE

City: SOUTH PLAINFIELD NJ

Zipcode: 07080

Health Emergency Phone: 1-800-424-9300

Label Required IND: Y

Date Of Label Review: 08/04/1999

Status Code: A

Origination Code: F

Eye Protection IND: YES

Signal Word: WARNING

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: TARGET ORGANS: HEART, RESPIRATORY AND NERVOUS SYSTEM.

INHALATION: INIT

ALLY RESULTS IN A COMPENSATORY INCREASE IN BOTH RATE & DEPTH OF VENTILATION. BEYOND A CERTAIN POINT MAY REVERSE TO HYPOVENTILATION RESULTING IN RESPIRATORY ACIDOSIS. DEATH FROM ASPHYXIA MAY OCCUR IF CONC. & DURATION OF EXPOSURE ARE SUFFICIENT. SKIN: NO EFFECTS FROM GAS. LIQUID MAY CAUSE FROSTBITE. EYES: AT HIGH CONC. IN AIR, MAY CAUSE STINGING SENSATION; MAY CAUSE IRRITATION. INGESTION: UNLIKELY. IF LIQUID IS SWALLOWED, MAY CAUSE FROSTBITE DAMAGE TO LIPS, MOUTH AND MUCOUS MEMBRANES.

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