

LELAND LIMITED INC -- CARBON DIOXIDE, GAS

MSDS Safety Information

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

Item Description Information

Item Manager: S9I

Item Name: LIFE RAFT,INFLATABLE

Unit of Issue: EA

UI Container Qty: 1

Ingredients

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

Health Hazards Data

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 WELL

COOL 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

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:
0
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.

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MAY CAUSE FROSTBITE DAMAGE TO LIPS, MOUTH AND MUCOUS
MEMBRANES.

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