

Material Safety Data Sheet

LCO₂

Identity: Carbon Dioxide – Liquid

General Information

Date MSDS Prepared: September 1, 2004

Safety Data Review Date: September 1, 2008

Company Identification:

Continental Carbonic Products, Inc.

3985 East Harrison Avenue

Decatur, IL 62526

Haz Mat Identification System

H 1

F 0

R 1

PPE B

Ingredients/Identity Information

CAS#	Chemical Name	Percent	EINECS/ELINCS
124-38-9	Carbon Dioxide	100	

Proprietary: No

NIOSH (RTECS) Number: FF6400000

Exposure Limits:

OSHA PEL: 5000 PPM

ACGIH TLV: 9000 MG/CUM

Other Recommended Limit: 10000 PPM

Physical/Chemical Characteristics

Appearance and Odor: colorless, odorless

Boiling Point: -109 F

Melting Point: -69 F

Vapor Pressure (MM hg/70F): 831 PSIA

Vapor Density (Air=1): 0.115

Specific Gravity: 1.56

Solubility In Water: APPRECIABLE

Fire and Explosion Hazard Data

Reactivity Data

Stability: Yes

Conditions To Avoid (Stability): Moisture

Materials to Avoid: Carbonic acid/salt/corrosive chemicals

Hazardous Polymerization Occurrence: No

Health Hazard Data

Route of Entry-Inhalation: Yes

Route of Entry-Skin: No

Route of entry-Ingestion: No

Health Hazard Acute and Chronic: Concentration in excess of 1.5% carbon dioxide may cause death. At higher concentrations, displaces oxygen in air below levels necessary to support life.

Carcinogenicity-NTP: No

Carcinogenicity-IARC: No

Carcinogenicity-OSHA: No

Explanation Carcinogenicity: None

Signs/Symptoms of Overexposure: At concentrations >1.5%: Hyperventilation/headaches/dyspnea/perspiration. At 6-10%: Headaches/dyspnea/perspiration, tremors, visual disturbances. >10%: Unconsciousness without warning. Cryogenic burns.

Emergency/first Aid Procedures: Inhalation: Remove to fresh air. Assisted respirant and supplemental oxygen should be given if not breathing. Frozen tissues should be flooded/soaked with tepid water. Don't use hot water. Obtain medical attention in all cases.

Precautions for Safe Handling and Use

Steps if Material Released/Spill: Ventilate indoor areas well to avoid hazardous CO₂ concentrations. Ventilate area well and avoid contact with cold vapors/dry ice. CO₂ is heavy gas and will remain in low spots without assisted ventilation.

Waste Disposal Method: Don't attempt to dispose of residual CO₂ in compressed gas cylinders. Return cylinders to air products with residual pressure, cylinder valve tightly closed and the valve cap in place. Dispose of iaw/local/stat/federal regulations, nonflammable gas. UN1013.

Precautions-Handling/Storing: Compress gas cylinders contain gaseous/liquid CO₂ at extremely high pressure and should be handled with care. Keep cylinders away from heat.

Other Precautions: Prevent contact of CO₂ on skin. Use pressure-reducing regulator when connecting to lower pressure piping systems. Secure cylinders when in use. Keep from combustibles. Avoid exposure to areas where salt or other corrosive materials are present.

Control Measures

Respiratory Protection: SCBA in oxygen deficient atmospheres where CO₂ >1.5%. Do not use air purifying respirators.

Ventilation: Local Exhaust: At point sources of CO₂ vapors. Mechanical (general): Low lying area are not naturally ventilated.

Eye Protection: Safety glasses

Supplemental Safety & Health Data: CO₂ is stored in containers under its own vapor pressure. If the pressure is suddenly relieved, the liquid rapidly cools as it evaporates and sublimates, forming dry at -109 F.

Transportation Data

Disposal Data

Disposal Data Review: 89018

Record # For This Disp Entry: 01

Total Disp Entries Per NSN: 001

Landfill Ban Item: Yes

Disposal Supplemental Data: Item not regulated as a RCRA Hazardous Waste by the Federal EPA, but may be regulated in certain states.

1st EPA Hazardous Waste Name New: Not regulated

1st EPA Hazardous Waste Char New: Not regulated by RCRA

1st EPA Acute Hazard New: No

Label Data

Label Required: Yes

Technical Review Date: September 1, 2004

Label Date: September 1, 2004

Common Name: Liquid Carbon Dioxide/LCO₂

Chronic Hazard: Yes

Signal Word: Danger!

Acute Health Hazard- None: X

Contact Hazard-Slight: X

Fire Hazard-Severe: X

Reactivity Hazard-None: X

Special Hazard Precautions: Concentration in excess of 1.5% carbon dioxide may, cause death. At higher concentrations, displaces oxygen in air below levels necessary to support life.

Target organs: Respiratory system, skin

Protect Eye: Y

Protect Skin: Y

Protect Respiratory: Y