Material Safety Data Sheet
LCO_2

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 CO_2 concentrations. Ventilate area well and avoid contact with cold vapors/dry ice. CO_2 is heavy gas and will remain in low spots without assisted ventilation.
Waste Disposal Method: Don't attempt to dispose of residual CO_2 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 CO_2 at extremely high pressure and should be handled with care. Keep cylinders away from heat.
Other Precautions: Prevent contact of CO_2 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 CO_2 >1.5%. Do not use air purifying respirators.
Ventilation: Local Exhaust: At point sources of CO_2 vapors. Mechanical (general): Low lying area are not naturally ventilated.
Eye Protection: Safety glasses
Supplemental Safety & Health Data: CO_2 is stored in containers under its own vapor pressure. If the pressure is suddenly relieved, the liquid rapidly cools as it evaporates and sublimes, 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/LCO_2
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