

MATERIAL SAFETY DATA SHEET For the Proper handling of Carbon Dioxide- CO2

NSN: 6830011002215

Manufacturer's CAGE: 63140

Part No. Indicator: A

Part Number/Trade Name: CARBON DIOXIDE - CO2

General Information

Company's Name: CARBONIC INDUSTRIES CORP

Company's Street: 3340 ROSEBUD RD

Company's City: LOGANVILLE

Company's State: GA

Company's Country: US

Company's Zip Code: 30249

Company's Emerg Ph #: 404-979-0250,CHEMTREC 800-424-9300

Company's Info Ph #: 404-979-0250

Record No. For Safety Entry: 006

Tot Safety Entries This Stk#: 006

Status: SE

Date MSDS Prepared: 18JUN90

Safety Data Review Date: 13OCT92

MSDS Serial Number: BPHRR

Hazard Characteristic Code: NK

Unit Of Issue: EA

Ingredients/Identity Information

Proprietary: NO

Ingredient: CARBON DIOXIDE

Ingredient Sequence Number: 01

Percent: >99.5

NIOSH (RTECS) Number: FF6400000

CAS Number: 124-38-9

OSHA PEL: 5000 PPM

ACGIH TLV: 5000PPM/30000STEL;93

Other Recommended Limit: NOT KNOWN

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS AND ODORLESS GAS OR LIQUID.

Boiling Point: -109F,-78C

Melting Point: N/A

Vapor Pressure (MM Hg/70 F): 838 PSIG

Vapor Density (Air=1): SEE SUP

Specific Gravity: 1.5240(SEE SUP)

Decomposition Temperature: UNKNOWN

Evaporation Rate And Ref: N/A

Solubility In Water: V/V @ 60F & 0 PSIG

Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: N/A

Lower Explosive Limit: N/A

Upper Explosive Limit: N/A

Extinguishing Media: INERT AND NONFLAMMABLE.

Special Fire Fighting Proc: N/A

Unusual Fire And Expl Hazrds: CONFINEMENT OF CARBON DIOXIDE IN VESSELS OR CONTAINERS OF IMPROPER DESIGN CAN RESULT IN EXPLOSION OR RUPTURE FROM OVERPRESSURIZATION.

Reactivity Data

Stability: YES

Cond To Avoid (Stability): NOT APPLICABLE

Materials To Avoid: CAUSES VIOLENT POLYMERIZATION OF ACRYLALDEHYDE OR ETHYLENEIMINE.

Hazardous Decomp Products: HEATING ABOVE 1700C CAUSES DECOMPOSITION TO CARBON MONOXIDE AND OXYGEN.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT APPLICABLE

Health Hazard Data

LD50-LC50 Mixture: NOT KNOWN

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: INHALATION:SIMPLE ASPHYXIANT.HIGH CONCENTRATIONS IN AIR CAN REDUCE OXYGEN NECESSARY TO SUPPORT LIFE.EYES/ SKIN:CONTACT WITH SOLID OR LIQUID CAUSES FROSTBITE.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NONE

Signs/Symptoms Of Overexp: INHALATION:SHORTNESS OF BREATH,HEADACHE, DIZZINESS,RINGING IN EAR.ASPHYXIANT IN HIGH CONCENTRATION.EYES/SKIN:CONTACT WITH SOLID OR LIQUID PRODUCES BURNING SENSATION AND FROSTBITE OCCURS WITHIN SEVERAL SECONDS.

Med Cond Aggravated By Exp: ANY CONDITION THAT WOULD BE AGGRAVATED BY A REDUCED QUANTITY OF NORMAL QUALITY BREATHING AIR.

Emergency/First Aid Proc: EYES:FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MIN (FP A).INHALATION:DO NOT ATTEMPT TO REMOVE INDIVIDUAL FROM SCENE OF OVEREXPOSURE WITHOUT UTILIZING PROPER RESCUE EQUIPMENT.PROVIDE VICTIM WITH PLENTY OF FRESH AIR WHILE KEEPING THE PERSON WARM,DRY,AND QUIET.IF BREATHING HAS STOPPED,GIVE ARTIFICIAL RESPIRATION.GET MEDICAL ATTENTION.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: EVACUATE AREA OF SPILL OR RELEASE,EMPLOY EMERGENCY FIRST AID PROCEDURES,PROVIDE PLENTY OF FRESH AIR.REMOVE DRY ICE RESIDUAL AND ALLOW TO SUBLIME IN SECURED,WELL-VENTILATED AREA AND CONTACT THE MANUFACTURER'S SAFETY DEPARTMENT.

Waste Disposal Method: ALLOW CARBON DIOXIDE TO RELEASE,SUBLIME OR DISSIPATE IN THE OPEN AIR.AVOID RELEASING IN COURTYARDS OR INDOORS OR ANY AREAS WHERE HEAVY CARBON DIOXIDE VAPORS CAN ACCUMULATE.

Precautions-Handling/Storing: LIQUID/VAPOR STORAGE CONTAINERS ARE UNDER HIGH PRESSURE.DO NOT MISHANDLE OR ABUSE THEM.USE ONLY CONTAINERS AND EQUIPMENT DESIGNED FOR CARBON DIOXIDE.

Other Precautions: AVOID DIRECT SKIN CONTACT WITH DRY ICE OR VENTING CO*2 LIQUID OR VAPOR.USE PROTECTIVE EQUIPMENT AND CLOTHING AND GET PROPER TRAINING BEFORE HANDLING CARBON DIOXIDE.

Control Measures

Respiratory Protection: SELF-CONTAINED BREATHING APPARATUS,USE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

Ventilation: PASSIVE SYSTEM:FLOOR LEVEL,OPENINGS TO OUTDOORS.ELECTRICAL FANS:REMOVE CO*2 FROM FLOOR/LOW AREAS,EXHAUST OUTDOORS.

Protective Gloves: HEAVY TERRY CLOTH TYPE.

Eye Protection: CHEMICAL SAFETY GOGGLES (FP A)

Other Protective Equipment: HARD HATS & EAR PROTECTION SHOULD BE WORN WHEN WORKING WITH PRESSURIZED CARBON DIOXIDE.

Work Hygienic Practices: PERSONS HANDLING CARBON DIOXIDE SHOULD BE FULLY TRAINED IN ADVANCE.

Suppl. Safety & Health Data: VAPOR DENSITY:0.1234 LB/FT3 @ 32F & 1 ATM.

SPECIFIC GRAVITY:@ 32F & 1 ATM IN GAS PHASE.

Transportation Data

Trans Data Review Date: 93053
DOT PSN Code: CVK
DOT Proper Shipping Name: CARBON DIOXIDE, REFRIGERATED LIQUID
DOT Class: 2.2
DOT ID Number: UN2187
DOT Label: NONFLAMMABLE GAS
IMO PSN Code: DOJ
IMO Proper Shipping Name: CARBON DIOXIDE, REFRIGERATED LIQUID
IMO Regulations Page Number: 2111
IMO UN Number: 2187
IMO UN Class: 2(2.2)
IMO Subsidiary Risk Label: -
IATA PSN Code: FHM
IATA UN ID Number: 2187
IATA Proper Shipping Name: CARBON DIOXIDE, REFRIGERATED LIQUID
IATA UN Class: 2.2
IATA Label: NON-FLAMMABLE GAS
AFI PSN Code: FHM
AFI Prop. Shipping Name: CARBON DIOXIDE, REFRIGERATED LIQUID
AFI Class: 2.2
AFI ID Number: UN2187
AFI Basic Pac Ref: 6-6,6-15
Additional Trans Data: USE ONLY CONTAINERS AND EQUIPMENT SPECIFICALLY DESIGNATED FOR CARBON DIOXIDE. LIQUID AND VAPOR STORAGE CONTAINERS ARE UNDER HIGH PRESSURE. DO NOT MIS-HANDLE OR ABUSE CONTAINERS.

Disposal Data

Label Data

Label Required: YES
Technical Review Date: 15OCT92
Label Date: 15OCT92
Label Status: G
Common Name: CARBON DIOXIDE - CO2
Chronic Hazard: NO
Signal Word: CAUTION!
Acute Health Hazard-Slight: X
Contact Hazard-Slight: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE:EYES AND SKIN:CONTACT WITH SOLID OR LIQUID MAY CAUSE FROSTBITE.INHALATION:HIGH CONCENTRATION OF CARBON DIOXIDE CAN REDUCE THE OXYGEN CONTENT NECESSARY TO SUPPORT LIFE.INHALATION MAY CAUSE HEADACHE,DIZZINESS,AND SHORTNESS OF BREATH.CHRONIC:DELAYED HAZARD NOT DETERMINED. FIRST AID:EYES:FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MIN (FP A). INHALATION:REMOVE PATIENT TO FRESH AIR.IF BREATHING HAS STOPPED,GIVE ARTIFICIAL RESPIRATION,GET MEDICAL ATTENTION.LIQUID AND GAS STORAGE CONTAINERS ARE UNDER HIGH PRESSURE.USE ONLY CONTAINERS AND EQUIPMENT SPECIFICALLY DESIGNED FOR CARBON DIOXIDE.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: CARBONIC INDUSTRIES CORP
Label Street: 3340 ROSEBUD RD
Label City: LOGANVILLE
Label State: GA
Label Zip Code: 30249
Label Country: US
Label Emergency Number: 404-979-0250
Source of information: <http://www.weldingsupply.net/carbon1.htm>