BOC GROUP INC THE -- CARBON DIOXIDE,GAS -- 8120-00-551-5234

Product ID: CARBON DIOXIDE, GAS
MSDS Date: 04/01/1995
FSC: 8120
NIIN: 00-551-5234
MSDS Number: BQXTB

== Responsible Party ==
Company Name: BOC GROUP INC THE
Address: 575 MOUNTAIN AVE
City: MURRAY HILL
State: NJ
ZIP: 07974
Country: US
Info Phone Num: 908-464-8100/ FOR MSDS: 1800-734-5463
Emergency Phone Num: 908-464-8100/ 800-424-9300 (CHEMTREC)
CAGE: 80382

== Contractor Identification ==
Company Name: AIRCO SALES INC
Box: City: RICHMOND
State: VA
Country: US
CAGE: 8D291

Company Name: BOC GASES, A DIVISION OF THE BOC GROUP, INC
Address: 575 MOUNTAIN AVENUE
Box: City: MURRAY HILL
State: NJ
ZIP: 07974
Country: US
Phone: 908-464-8100
CAGE: 80382

Company Name: DIV OF THE BOC GROUP INC AIRCO INC
Address: 575 MOUNTAIN AVENUE
Box: City: MURRAY HILL
State: NJ
ZIP: 07974
Country: US
Phone: 908-665-2400
CAGE: 6S493

Company Name: MARISON CO THE DIV OF THERMADyne INDUSTRIES INC
Address: 521 GREEN COVE RD
Box: City: HUNTSVILLE
State: AL
ZIP: 35803
Country: US
Phone: 205-650-9103/ 800-821-2975
CAGE: 88096

== Composition/Information on Ingredients ==

Ingredient: CARBON DIOXIDE, 99.8-99.999%.
CAS: 124-38-9
RTECS #: FF6400000
Fraction by Wt: SEE ING
Other REC Limits: NONE RECOMMENDED
OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL:96

------------------------------------------ Hazards Identification ------------------------------------------

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic:OXYGEN LEVELS <19.5% MAY CAUSE ASPHYXIA.CARBON DIOXIDE EXPO CAN CAUSE NAU,RESP PROBLEMS.HIGH CONCEN MAY CAUSE VASODILATION LEADING TO CIRCULATORY COLLAPSE.SKIN:LIQ PROD MAY CAUSE FROSTBITE,CRYOGENIC BURNS UPON EVAPO.MAY BECOME INFLAMED,PAINFUL.INEST:UNLIKELY.EVAPO LIQ MAY CAUSE FROSTBITE,CRYOGENIC BURNS.(SUPPLEMENT)
Explanation of Carcinogenicity:PER
MSDS:CARCINOGENICITY:NTP/IARC/OSHA: NO.
Effects of Overexposure: EFFECTS OF OXY DEFICIENCY RESULTING FROM SIMPEL ASPHYXIANTS:RAPID BREATH, DIMINISHED MENTAL ALERTNESS, IMPAIRED MUSCULAR COORD, FAULTY JUDGEMENT, DEPRESS OF ALL SENSATIONS, EMOTIONAL INSTABILITY, FGT.AS ASP HYXATION PROGRESSES, NAU, VOMIT, PROSTRATION, LOSS OF CONSC MAY RESULT EVENTUALLY LEADING TO CONVULS, COMA, DEATH.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

------------------------------------------ First Aid Measures ------------------------------------------

First Aid: EYE: NEVER INTRO OIL/OINTMENT INTO EYE W/O MED ADVICE.FREEZ/CYRGENIC BURN; DON'T WASH W/ HOT/TEPID WATER.REMOVE FROM EXPO.OPEM EYLIDS DRY.PAIN REFER TO OPHTHALMOLOGIST.PROTECT FROM LIGHT/W/BANDAGE.SKIN:R EMOW CONTAM CLOTH.FLUSH W/COLD WATER-NOT HOT/SOAP.BLISTER OF CYROGENIC BURN/DEEP TISSUE FREEZE/FROSTBITE SEE DR.TREAT BURN AS THERM BURN. INGEST: BLISTER FROM CYROGENIC BURN SEE DR.INHAL: (SUPPLEMENT)

------------------------------------------ Fire Fighting Measures ------------------------------------------

Flash Point: NONE
Autoignition Temp: Autoignition Temp Text: NONE
Lower Limits: NONE
Upper Limits: NONE
Extinguishing Media: NONE SPECIFIED BY MANUFACTURER. HMIS: USE APPROPRIATE FIRE EXTINGUISHING MEDIA FOR SURROUNDING FIRE/MATLS.
Fire Fighting Procedures: NONE SPECIFIED BY MANUFACTURER. HMIS: USE APPROPRIATE PPE AS CONDICTIONS WARRANT.
Unusual Fire/Explosion Hazard: NO, NON-FLAMMABLE.

------------------------------------------ Accidental Release Measures ------------------------------------------

Spill Release Procedures: EVACUATE ALL PERSON. USE APPROPRIATE PPE. LEAK IN USER EQMT BE CERTAIN PURGE PIPE W/INERT GAS PRIOT TO REPAIRS.LEAK IN CNTNR/CNTNR VAL COTNACT APPROP EMERS PHONE/CALL CLOSEST BOC LOCATION.

------------------------------------------ Handling and Storage ------------------------------------------

Handling and Storage Precautions: MOIST CO2 CORR(FORM CARBONIC ACID). USE ONLY IN WELL VENTI AREA. VAP HEAVIER THAN AIR, ACCUMULATE IN LOW
AREAS. VALV PROT CAPS REMIAN IN PLACE UNLESS USIN
Other Precautions: DON'T DRAG/SLIDE/ROLL CYL; USE HAND TRUCK. USE PRESSURE
RED REG WHEN CONNECT TO LOWER PRESSURE. DONT HEAT CYL TO INCR
DISCHARGE RATE. USE CHECK VAL/TRAP IN DISCHARGE LINE-PREVENT
BACKFLOW. PROT CYL FROM DM G.TEMP NOT >125F. STORE UPRIGHT/FIRMLY

__________________ Exposure Controls/Personal Protection __________________

Respiratory Protection: POSITIVE PRESSURE AIR LINE W/FULL-FACE MASK &
ESCAPE BOTTLE OR SELF-CONTAINED BREATHING APPARATUS SHOULD BE
AVAILABLE FOR EMERGENCY USE.
Ventilation: USE LOC EXHAU TO PREVENT ACCUMULATION OF HI CONC SO AS TO
REDUCE OXY LEVEL IN AIR TO <19.5%, CO2 CONC BEL EXPO LIMIT.
Protective Gloves: PROT GLOVES OF ANY MATL APPROP OR FOR JOB.
Eye Protection: SAF GOGG, GLASSES AS APPROPRIATE FOR JOB.
Other Protective Equipment: INSULATED GLOVES/FACESHIELD RECOMMENDED FOR
HDNLG CRYOGENIC LIQ. SAFETY SHOES.
Work Hygienic Practices: ADN STORAGE RECOMMENDATIONS: COMPRESSED GAS
ASSOC PMAPLET P-1.
Supplemental Safety and Health
HEALTH: INHAL: MOST POWERFUL CEREBRAL VASODILATOR KNOWN. INHAL LG CONC
CAUSES RAPID CIRCULATORY INSUFF LEADS TO COMA, DEATH. ASPHYXIATION
LIKELY BEF OVEREXPOS EFFECTS. LOW CONC INCR RESPIRATION, HEAD. 1ST
AID: IMMED MED ATTN IN ALL EXPO CASES. RESCUE PERSON WEAR PPE. MOVE TO
FRESH AIR. UNCONSC GIVE CPR/SUPL OXY. TREAT SYMP/SUPP

__________________ Physical/Chemical Properties __________________

HCC: G3
Boiling Pt: B.P. Text: -109F, -79C
Melt/Freeze Pt: M.P/F.P Text: -70F, -57C
Decomp Temp: Decomp Text: NP
Vapor Press: 856PSI@70F
Vapor Density: 1.53 @70F
Spec Gravity: N/AVAI
pH: N/AVAI
Viscosity: NP
Evaporation Rate & Reference: N/AVAI
Solubility in Water: VERY SOLUBLE.
Appearance and Odor: GAS, COLORLESS, ODORLESS GAS.
Percent Volatiles by Volume: NP
Corrosion Rate: NP

__________________ Stability and Reactivity Data __________________

Stability Indicator/Materials to Avoid: YES
CERTAIN REACTIVE METALS, HYDRIDES, MOIST CEO, OR LITHIUM ACETYLENE
CARBIDE DIAMMINO MAY IGN. CO2 OVER MIX NA2O2/AL, MG EXPLO
Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products: CARBON MONOXIDE & OXY WHEN HEATED
>3092F. CARBONIC ACID IS FORMED IN PRESENCE OF MOISTURE.

__________________ Disposal Considerations __________________

Waste Disposal Methods: DONT ATTEMPT TO DISPO OF RESIDUAL WASTE OR
UNUSED QUANT. RETURN IN SHIPPING CNTRN PROPERLY LABEL W/ANY VALV
OUTLET PLUG/CAPS SECURED & VALVE PROTECTION CAP IN PLACE TO BOC
GASES OR AUTHORIZED DISTRIBUTION FOR PROPER DISPOSAL. DON'T REFILL.

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