

AIRCO INC, AIRCO INDUSTRIAL GASES DIV. -- CARBON DIOXIDE,GAS -- 4220-00-458-9240  
===== Product Identification =====

Product ID:CARBON DIOXIDE,GAS

MSDS Date:08/04/1989

FSC:4220

NIIN:00-458-9240

MSDS Number: BXWLM

=== Responsible Party ===

Company Name:AIRCO INC, AIRCO INDUSTRIAL GASES DIV.

Address:575 MOUNTAIN AVE

City:MURRAY HILL

State:NJ

ZIP:07974

Country:US

Info Phone Num:908-464-8100

Emergency

Phone Num:908-464-8100/800-424-9300(CHEMTREC)

CAGE:00741

=== Contractor Identification ===

Company Name:AIRCO INC, AIRCO INDUSTRIAL GASES DIV.

Address:575 MOUNTAIN AVE

Box:City:MURRAY HILL

State:NJ

ZIP:07974-2006

Country:US

Phone:800-424-9300(CHEMTREC)

CAGE:00741

Company Name:GENIUM PUBLISHING CORPORATION

Address:1145 CATALYN ST

Box:City:SCHENECTADY

State:NY

ZIP:12303-1836

Country:US

Phone:518-377-8854

CAGE:5Z768

Company Name:JEFFERSON METALS STAMPING CO.

Address:4400 GUSTINE AVE

Box:City:ST LO

UIS  
State:MO  
ZIP:53116-1712  
Country:US  
CAGE:0ZGE6  
Company Name:SPARKLET DEVICES INC  
Address:4400 GUSTINE AVE  
Box:City:ST LOUIS  
State:MO  
ZIP:63116-1712  
Country:US  
Phone:314-353-0400  
CAGE:87286

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Composition/Information on Ingredients  
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Ingred Name:CARBON DIOXIDE  
CAS:124-38-9  
RTECS #:FF6400000  
Fraction by Wt: 100%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:5000 PPM  
ACGIH TLV:5000PPM/30000STEL;95

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Hazards Identification  
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LD50  
LC50 Mixture:TLV IS 5000 PPM.  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:TARGET ORGANS:LUNGS, HEART, CNS, EYES,  
SKIN. ACUTE- CONTACT WITH LIQUID CAN CAUSE SKIN FROSTBITE. GAS MAY  
CAUSE EYE IRRITATION. ASPHYXIANT. INHALATION MAY CAUSE RESPIRATORY  
ACIDOSIS. HIGH CONCENTRATIONS MAY CAUSE RAPID CIRCULATORY  
INSUFFICIENCY LEADING TO DEATH. INGESTION OF LIQUID MAY DAMAGE  
MOUTH, LIPS.  
CHRONIC- UNK.  
Explanation of Carcinogenicity:NONE  
Effects of Overexposure:EYE OR SKIN FROSTBITE AND FREEZE BURNS,  
HEADACHE, DROWSINESS, DIZZINESS, STINGING OF THE EYES, NOSE AND  
THROAT, EXCITATION, RAPID BREATHING AND HEART RATE, EXCESS  
SALIVATION, SHORTNESS OF BREATH, MUSCULAR WEAKNESS, RINGING IN THE  
EAR, UNCONSCIOUSNESS, COMA, NAUSEA, VOMITING, WATERY EYES  
(FORMATION OF WEAK CARBONIC ACID)  
Medical Cond Aggravated by Exposure:PERSONNEL WITH PRE-EXISTING CHRONIC  
RESPIRAT

ORY DISEASES OR HEART DISORDERS SHOULD REFRAIN FROM BREATHING EXCESSIVE CARBON DIOXIDE.

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First Aid Measures  
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First Aid:INHALATION:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED.  
EYES:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEE AN OPTHALMOLOGIST, URGENTLY. SKIN:FLUSH WITH WARM WATER (NOT TO EXCEED 107 F). PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO CO2. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF CONTAINED BREATHING APPARATUS. ORAL:TREAT SYMPTOMATICALLY. CALL PHYSICIAN.

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Fire Fighting Measures  
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Flash Point:NONE  
Extinguishing Media:CARBON DIOXIDE CANNOT CATCH FIRE. USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL FOR SURROUNDING FIRE.  
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A NIOSH-APPROVED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. EVACUATE AREA.  
Unusual Fire/Explosion Hazard:CONTAINER MAY RUPTURE DUE TO HEAT OF FIRE.

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Accidental Release Measures  
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Spill Release Procedures:LIQUID CARBON DIOXIDE WILL FORM SOLID CO2 (DRY ICE) WHEN RELEASED TO ATMOSPHERIC PRESSURE. THE AREA SHOULD BE VENTILATED. CLEAN UP PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK AND HEAVY PROTECTIVE CLOTHING.  
Neutralizing Agent:NOT RELEVANT

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Handling  
and Storage  
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Handling and Storage Precautions:STORE IN A COOL, WELL-VENTILATED AREA. PROTECT FROM PHYSICAL DAMAGE. KEEP OUT OF REACH OF CHILDREN. REMOVE CAP ONLY IF CONTAINER IS FIRMLY SECURED.  
Other Precautions:KEEP AWAY FROM SOURCES OF HEAT. CAUTION! CAN CAUSE RAPID SUFFOCATION DUE TO OXYGEN DEFICIENCY. USE WITH ADEQUATE VENTILATION. CO2 IS HEAVIER THAN AIR AND TENDS TO ACCUMULATE NEAR THE FLOOR IN CLOSED SPACES. READ ALL LABEL INSTRUCTIONS.

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Exposure Controls/Personal Protection  
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Respiratory Protection:NONE REQUIRED UNDER NORMAL USE. HOWEVER,  
NIOSH-APPROVED AIR-SUPPLIED RESPIRATORS ARE REQUIRED WHILE WORKING  
IN CONFINED SPACES WITH THIS PRODUCT. FOR EMERGENCIES, WEAR SELF  
CONTAINED BREATHING APPARAT US, OPERATED IN POSITIVE PRESSURE MODE.

Ventilation:SUFFICIENT TO PREVENT ACCUMULATION ABOVE TLV. LOCAL EXHAUST  
LOCATED NEAR THE FLOOR.

Protective Gloves:INSULATED AND COLD RESISTANT NEOPRENE

Eye P

rotection:SAFETY GOGGLES

Other Protective Equipment:EYE WASH STATION, SAFETY SHOWER,  
INDUSTRIAL-TYPE WORK CLOTHING, SAFETY SHOES AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND  
RECOMMENDED PROCEDURES.

Supplemental Safety and Health

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Physical/Chemical Properties  
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HCC:G3

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:-109F SUBLI

Decomp Temp:Decomp Text:3092F,1700C

Vapor Pres:44255

Vapor Density:1.65

Spe

c Gravity:1.52

pH:ACIDIC

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT

Solubility in Water:VERY SOLUBLE

Appearance and Odor:COLORLESS, ODORLESS GAS (SHIPPED AS A LIQUEFIED  
GAS)

Percent Volatiles by Volume:100

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Stability and Reactivity Data  
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Stability Indicator/Materials to Avoid:YES

REACTIVE METALS (MAGNESIUM, ALUMINUM), MOIST CESIUM OXIDE, SODIUM  
PEROXIDE + REACTIVE METALS

Stability Condition to Avoid:EXCESSIVE HEAT

Hazardous

Decomposition Products:CAN DECOMPOSE TO CARBON MONOXIDE AND OXYGEN ABOVE 3092F (1700C).

===== Disposal Considerations =====

Waste Disposal Methods:SLOWLY RELEASE INTO ATMOSPHERE OUTDOORS IF PERMITTED. DISPOSAL SHOULD BE IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. RETURN RESIDUAL OR UNUSED PRODUCTS IN SHIPPING CONTAINERS PROPERLY LABELED WITH CAPS AND VALVES SECURED TO AIRCO.

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