

AIRCO INC, AIRCO INDUSTRIAL GASES DIV. -- CARBON DIOXIDE, GAS -- 4220-00-543-6693  
===== Product Identification =====

Product ID:CARBON DIOXIDE, GAS

MSDS Date:08/04/1989

FSC:4220

NIIN:00-543-6693

MSDS Number: BWSSF

=== Responsible Party ===

Company Name:AIRCO INC, AIRCO INDUSTRIAL GASES DIV.

Address:575 MOUNTAIN AVE

City:MURRAY HILL

State:NJ

ZIP:07974-2006

Country:US

Info Phone Num:908-464-8100

Em

ergency Phone Num: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:JEFFERSON METALS STAMPING CO.

Address:4400 GUSTINE AVE

Box:City:ST LOUIS

State:MO

ZIP:53116-1712

Country:US

CAGE:0ZGE6

===== Composition/Information on Ingredients =====

Ingred Name:CARBON DIOXIDE

CAS:124-38

RTECS #:FF6400000

Fraction by Wt: 100%

Other REC Limits:5000PPM(TWA)

OSHA PEL:5000 PPM

ACGIH TLV:5000PPM/30000STEL;95

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:LOW CONCENTRATIONS (3M TO 5M) CAUSE INCREASED RESPIRATION & HEADACHE. 8M TO 15M CONCENTRATIONS CAUSE HEADACHE, NAUSEA & VOMITING, LEADING TO UNCONSCIOUSNESS IF NOT

MOVED TO OPEN AIR OR GIVEN OXYGEN. H IGH ER CONCENTRATIONS CAUSE RAPID CIRCULATORY INSUFFICIENCY LEADING TO COMA & DEATH. MAINTAIN OXYGEN LEVELS ABOVE 19.5%.

Explanation of Carcinogenicity:MFR GAVE THE ABOVE LISTINGS ON THE MSDS BUT NO OTHER COMMENTS WERE RECORDED.

Effects of Overexposure:INCREASED RESPIRATION, HEADACHE, NAUSEA, VOMITING, UNCONSCIOUSNESS. HIGHER CONCENTRATIONS:RAPID CIRCULATORY INSUFFICIENCY LEADING TO COMA & DEATH.

Medical Cond Aggravated by Exposure :MFR GAVE NO INFORMATION ON MSDS.

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===== First Aid Measures =====

First Aid:PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE OF CARBON DIOXIDE. QUICK REMOVAL FROM THE CONTAMINATED AREA IS MOST IMPORTANT. CONSCIOUS PERSONS SHOULD BE ESCORTED FROM THE CONTAMINATED AREA & INHALE FRESH AIR. UNCONSCIOUS PERSONS SHOULD BE MOVED TO AN UNCONTAMINATED AREA, GIVEN MOUTH TO MOUTH & SUPPLEMENTAL OXYGEN. TREAT AREAS EXPOSED TO LIQ UID AS FROSTBITE.

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===== Fire Fighting Measures =====

Lower Limits:NONE

Upper Limits:NONE

Extinguishing Media:USE EXTINGUISHING MEDIA SUITABLE FOR THE COMBUSTIBLE MATERIALS INVOLVED IN THE FIRE.

Fire Fighting Procedures:MFR GAVE NO INFORMATION ON MSDS.

Unusual Fire/Explosion Hazard:MFR GAVE NO INFORMATION ON MSDS.

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===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE

APPROPRIATE PROTECTIVE EQUIPMENT. IF LEAK IS IN USERS EQUIPMENT,  
PURGE BEFORE REPAIR. IF LEAK IS IN CONTAINER OR VALVE, CALL  
CHEMTREC OR YOUR CLOSEST AIR CO LOCATION FOR EMERGENCY ASSISTANCE.  
Neutralizing Agent:MFR GAVE NO INFORMATION ON MSDS.

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===== Handling and Storage =====

Handling and Storage Precautions:USE ONLY IN WELL-VENTILATED AREAS.  
KEEP VALVE PROTECTION CAPS IN PLACE UNLESS PROPERLY SECURED &  
CONNECTED TO PIPING. DO NOT ROLL,SLIDE,  
DRAG CYLINDERS  
Other Precautions:USE A SUITABLE HANDTRUCK WHEN MOVING CYLINDERS. USE  
PRESSURE REDUCING REGULATOR OR PIPING RATED >3000 PSI. DO NOT HEAT  
CYLINDER. USE CHECK VALVE OR TRAP IN DISCHARGE LINE TO PREVENT BACK  
FLOW. PROTECT CYLINDERS FROM DAMAGE. SEE SUPP DATA.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:POSITIVE PRESSURE AIR LINE WITH MASK OR  
SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR  
EMERGENCY USE.  
Ventilation:LOCAL EXHAUST TO PREVENT ACCUMULATION ABOVE TWA. ENSURE  
ADEQUATE VENTILATION.  
Protective Gloves:PROTECTIVE GLOVES OF ANY MATERIAL  
Eye Protection:SAFETY GOGGLES OR GLASSES  
Other Protective Equipment:SAFETY SHOES  
Work Hygienic Practices:MFR: ? HMIS:FOLLOW ALL GUIDELINES RECOMMENDED  
BY THE COMPRESSED GAS ASSOCIATION. USE GOOD INDUSTRIAL HYGIENE  
PROCEDURES  
Supplemental Safety and Health  
STORE IN A COOL WELL-VENTILATED AREA AWAY FROM HEAVILY TRAFFICKED AREAS  
& EMERGENCY EX  
ITS. DO NOT ALLOW TEMPERATURES TO EXCEED 130F. STORE  
UPRIGHT & SECURED FROM FALLING. SEGREGATE FULL & EMPTY CYLIND ERS.  
DRY CARBON DIOXIDE CAN BE HANDLED IN MOST MATERIALS. MOIST CARBON  
DIOXIDE IS CORROSIVE. USE APPROPRIATE ALLOYS.

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===== Physical/Chemical Properties =====

HCC:G3  
NRC/State Lic Num:NONE  
Boiling Pt:B.P. Text:-109F,-79C  
Vapor Pres:856 PSIA  
Vapor Density:1.65  
Solubility in Water:VERY SOLUBLE  
Appearance and Odor:COLORLESS,ODORLESS GAS. WATER W

HITE LIQUID.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

REACTIVE METALS (MG, AL), HYDRIDES. MOIST CESIUM OXIDE OR LITHIUM ACETYL MAY IGNITE. SODIUM PEROXIDE MAY EXPLODE.

Stability Condition to Avoid: NONE

Hazardous Decomposition Products: SHOCK SENSITIVE MIXTURES MAY FORM WHEN DRY ICE IS MIXED W/POTASSIUM OR SODIUM-POTASSIUM ALLOY.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

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

Waste Disposal Methods: DO NOT ATTEMPT TO DISPOSE OF RESIDUAL OR UNUSED QUANTITIES. RETURN IN ORIGINAL CONTAINER, PROPERLY LABELED, W/VALVE OUTLET PLUGS & PROTECTIVE CAPS IN PLACE, TO AIRCO FOR PROPER DISPOSAL.

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