

AIR PRODUCTS AND CHEMICALS INC. -- CARBON DIOXIDE (GAS) / DRY ICE (SOLID) --
6830-00-292-0142

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===== Product Identification =====

Product ID:CARBON DIOXIDE (GAS) / DRY ICE (SOLID)

MSDS Date:06/01/1990

FSC:6830

NIIN:00-292-0142

MSDS Number: BWCWX

=== Responsible Party ===

Company Name:AIR PRODUCTS AND CHEMICALS INC.

Box:538

City:ALLENTOWN

State:PA

ZIP:18105

Country:US

Info Phone Num:215-481-4911

Em

ergency Phone Num:215-481-4911

CAGE:00742

=== Contractor Identification ===

Company Name:AIR PRODUCTS AND CHEMICALS INC

Address:7201 HAMILTON BLVD

Box:City:ALLENTOWN

State:PA

ZIP:18195-1501

Country:US

Phone:800-345-3148/ 800-752-1597

CAGE:00742

Company Name:SPECIALTY GAS TECHNOLOGY

Address:10207-D CHAPEL HILL RD

Box:City:MORRISVILLE

Phone:800-876-9581

CAGE:0Y5M5

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

Ingred Name:CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF6400000

Fracti

on by Wt: 100%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL;94

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===== Hazards Identification =====
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:CARBON DIOXIDE IS AN ASPHIXIANT. AS A LIQUID OR SOLID, ITS HIGH RATE OF EVAPORATION CREATES AN INTENSE COOLING OF THE BODY TISSUE CONTACTED WHICH RESULTS IN FROSTBITE.
Explanation
of Carcinogenicity:PRODUCT IS NOT LISTED AS A CARCINOGEN BY IARC, NTP, OR OSHA.
Effects of Overexposure:CONTACT: FROSTBITE AND FREEZE BURNS. INHALED: HEADACHE, DIZZINESS SHORTNESS OF BREATH AND OTHER SYMPTOMS OF OXYGEN STARVATION. HIGH CONCENTRATIONS PRODUCE A SLIGHT ACID TASTE ANDMAY PARALYSE THE BRE ATHING CONTROL CENTER.
Medical Cond Aggravated by Exposure:OVEREXPOSURE MAY AGGRAVATE SOME PULMONARY CONDITIONS.

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===== First Aid Measures =====
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First Aid:CONTACT: FROZEN TISSUE SHOULD BE FLOODED WITH TEPID WATER. GET MEDICAL ASSISTANCE IF ANY SYMPTOMS OF FROSTBITE OR FREEZING APPEAR. INHALED: REMOVE FROM EXPOSURE. RESTORE BREATHING. BE CAUTIOUS ENTE RING CLOSED AREAS IN A RESCUE EFFORT IFWITHOUT A SUPPLIED-AIR BREATHING APPARATUS.

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===== Fire Fighting Measures =====
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Extinguishing Media:CARBON DIOXIDE IS AN EXTINGUISHING AGENT FOR CLASS B AND C FIRES.
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

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===== Accidental Release Measures =====
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Spill Release Procedures:PLACE LEAKING CYLINDERS OUTSIDE OR WHERE LEAK IS EXHAUSTED BY LOCAL EXHAUST.
Neutralizing Agent:NONE

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===== Handling and Storage =====
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Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED ARE

A. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions:USE A SAFETY LINE, A STAND-BY WORKER AND A SUPPLIED AIR RESPIRATOR WHEN ENTERING AREAS OF SUSPECTED OR KNOWN HIGH CONCENTRATION.

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

Respiratory Protection:RESPIRATOR WILL NOT NORMALLY BE NECESSARY. USE NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IF EXPOSURE IS ABOVE THE TLV/PEL. SEE 29 CFR 1910.134 FOR REGULATIONS PERTAINING TO RESPIRATOR USE.

R REGULATIONS PERTAINING TO RESPIRATOR USE.

Ventilation:GENERAL ROOM VENTILATION IS NORMALLY ADEQUATE. USE LOCAL EXHAUST IF NECESSARY TO CONTROL EXPOSURE BELOW PEL/TLV.

Protective Gloves:THERMAL PROTECTION IF CONTACT POSSIBLE

Eye Protection:SAFETY GLASSES OR GOGGLES (NO CONTACTS!)

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER.

INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED.

Work Hygienic Practices:USE GOOD CHEMICAL HYGIENE PRACTICE. AVOID CONTACT WHENEVER POSSIBLE.

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Supplemental Safety and Health

NONE

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

HCC:G3

Melt/Freeze Pt:M.P/F.P Text:-110F,-79C

Vapor Pres:831 PSIG

Vapor Density:0.115

Spec Gravity:1.53, LIQUID

Solubility in Water:87.8%

Appearance and Odor:COLORLESS AND ODORLESS GAS OR LIQUID.

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

Stability Indicator/Materials to Avoid:YES

IF MOISTURE IS PRESENT, MATERIALS MUST RESIST CARBONIC ACID.

Stability Condit

ion to Avoid:NONE

Hazardous Decomposition Products:NONE

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

Waste Disposal Methods:ALLOW TO DISSIPATE IN A MANNER THAT THE CARBON DIOXIDE WILL NOT BE SUFFICIENTLY CONCENTRATED TO ENDANGER PERSONNEL OR LIVESTOCK. RETURN CYLINDERS TO AIR PRODUCTS. CLOSE THE CYLINDER VALVE TIGHTLY.

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