

PRAXAIR INC -- CARBON DIOXIDE -- 4220-00-920-3651

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Product Identification
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Product ID:CARBON DIOXIDE

MSDS Date:10/01/1993

FSC:4220

NIIN:00-920-3651

MSDS Number: CFMRF

=== Responsible Party ===

Company Name:PRAXAIR INC

Address:39 OLD RIDGEBURY RD

City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Info Phone Num:203-794-5782

Emergency Phone Num:203-794-5782/800-424-9300(CHEMTREC)

CAGE:0LV01

=== Contractor Identification ===

Company Name:INFLATION SYSTEMS

Box:City:MAMARONICK

State:NY

ZIP:10543

Country:US

Phone:914-381-8070

CAGE:62882

Company Name:PRAXAIR, INC.

Address:39 OLD RIDGEBURY RD

Box:City:DANBURY

State:CT

ZIP:06810-5113

Country:US

Phone:800-772-9247; 800-PRAXAIR

CAGE:0LV01

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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

ACG

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

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, CNS, EYES, SKIN.

ACUTE- EYE/SKIN:COLD VAPOR OR SOLID CARBON DIOXIDE MAY CAUSE FROSTBITE. INHALE:ASPHYXIANT. INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, UNCONSCIOUSNESS. I NGESTION IS

NOT LIKLEY (GAS).

CHRONIC- NONE.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:EYES AND/OR SKIN FROSTBITE, HEADACHE, DROWSINESS, DIZZINESS, STINGING OF THE EYES, NOSE AND THROAT, EXCITATION, RAPID BREATHING AND HEART RATE, EXCESS SALIVATION, SHORTNESS OF BREATH, MUSCULAR WEAKNES S, RINGING IN THE EAR, UNCONSCIOUSNESS,COMA, NAUSEA, VOMITING, WATERY EYES (FORMATION OF WEAK CABONIC ACID)

Medical Cond Aggravated by Exposure:PERSONNEL WITH PRE-EXISTING CHRONIC

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

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

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES:IMMEDIATELY FLUSH WITH WARM WATER FOR 15 MINUTES. CALL PHYSICIAN. INHALED:MOVE TO FRESH AIR. PROVIDE OXYGEN/CPR IF NEEDED. SKIN:TREAT FOR POSSIBLE FROST BITE USING WARM WATER (105F), THEN FLUSH SKIN WITH PLENTY OF WATER. ORAL:UNLIKELY TO OCCUR.

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

Flash Point:NONE

Lower Limits:NOT RELEVANT

Upper Limits:NOT RELEVANT

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:CYLINDERS MAY

RUPTURE.

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

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

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

Handling and Storage Precautions:STORE IN

A COOL, WELL-VENTILATED PLACE

AWAY FROM INCOMPATIBLES. DO NOT STORE ABOVE 120F. KEEP OUT OF REACH OF CHILDREN.

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.

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

Respiratory Protection:NONE REQUIRED UNDER

NORMAL USE. HOWEVER,

AIR-SUPPLIED RESPIRATORS ARE REQUIRED WHILE WORKING IN CONFINED SPACES WITH THIS PRODUCT. THE RESPIRATORY PROTECTION USE MUST CONFORM WITH OSHA RULES AS SPECIFIED IN 29 CFR 1910.134.

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

Protective Gloves:RUBBER

Eye Protection: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

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

HCC:G3

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:-109F,-78C

Vapor Pres:43671 @70F

Vapor Density:1.52

Spec Gravity:NOT RELEVANT

pH:ACIDIC

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT (GAS)

Solubility in Water:SLIGHT

Appearance and Odor:COLORLESS, ODORLESS COMPRESSED

GAS
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid: YES
ALKALI METALS, ALKALINE EARTH METALS, METAL ACETYLIDES, CHROMIUM,
TITANIUM ABOVE 550C/1022F, URANIUM ABOVE 750C/1382F
Stability Condition to Avoid: OVERHEATING
Hazardous Decomposition Products: CARBON MONOXIDE

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

Waste Disposal Methods: SLOWLY RELEASE INTO ATMOSPHERE OUTDOORS.

DISPOSAL SHOULD BE IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL
REGULATIONS. DEFECTIVE CYLINDERS SHOULD BE TAGGED TO INDICATE A
DEFECT.

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