

FLAG FIRE INC -- FIRE EXTINGUISHER CARBON DIOXIDE -- 4210-00-202-7858

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Product Identification
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Product ID:FIRE EXTINGUISHER CARBON DIOXIDE

MSDS Date:03/06/1995

FSC:4210

NIIN:00-202-7858

MSDS Number: BLJGK

=== Responsible Party ===

Company Name:FLAG FIRE INC

Address:5655 OPPORTUNITY DRIVE

City:TOLEDO

State:OH

ZIP:43612

Country:US

Info Phone Num:419-269-1800

Emergency Phone Num:519-727-67

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CAGE:0KS85

=== Contractor Identification ===

Company Name:FLAG FIRE INC

Address:5655 OPPORTUNITY DR

Box:City:TOLEDO

State:OH

ZIP:43612

Country:US

Phone:419-269-1800

CAGE:0KS85

Company Name:FRC INTL CORPORATION

Address:478 ABINGTON AVE

Box:City:GLENSIDE

State:PA

ZIP:19038

Country:US

Phone:215-233-3373

CAGE:8V250

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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: 100.0%

Other REC Limits:NONE RECOMMENDE

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OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL;95

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:(CONC.= 2 - 3%) SIMPLE ASPHYXIA.
(CONC.= 3 - 5%) INCREASED IRRITATION AND HEADACHE. (CONC.UP TO 15%)
HEADACHE, NAUSEA, VOMITING AND UNCONSCIOUSNESS. HIGHER
CONCENTRATIONS CAUSE CIRCULATORY INSUFFICIEN CY LEADING TO COMA AND
DEATH. CO2 IS THE MOST POWERFUL CEREBRAL VASODILATOR KNOWN. SOLID
CO2 CAN CAUSE FROSTBITE.

Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS
LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Effects of Overexposure:RAPID BREATHING, IRRITATED NOSE AND THROAT, AND
WATERY EYES CAUSED BY THE FORMATION OF CARBONIC ACID, A VERY WEAK
ACID.

Medical Cond Aggravated by Exposure:PERSONNEL WITH PRE-EXISTING CHRONIC
RESPIRATORY DISEASES OF HEART DISORDER SHOULD REFRA
IN FROM
BREATHING EXCESSIVE CARBON DIOXIDE.

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

First Aid:CONSCIOUS PERSONS OVER-EXPOSED TO CARBON DIOXIDE SHOULD BE
ASSISTED TO AN AREA OF FRESH AIR. UNCONSCIOUS PERSONS SHOULD BE
MOVED TO AN AREA OF FRESH AIR. GIVE APPROPRAITE BREATHING
ASSISTANCE SUCH A S OXYGEN OR ARTIFICIAL RESPIRATION. SEEK MEDICAL
ASSISTANTCE. FROSTBITE SHOULD BE TREATED AS A BURN WITH PROMPT
MEDICAL TREATMENT SOUGHT.

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

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 =====

Spill Release Procedures:CLEAN UP PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL PROTECTIVE CLOTHING AND FULL FACE MASK.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED AREA AWAY FROM SOURCES OF IGNITION. KEEP CONTAINER CLOSED WHEN NOT IN USE. PROTECT FROM PHYSICAL DAMAGE.

Other Precautions:BULK DELIVERY TRAILERS AND TANK CARS SHALL COMPLY WITH APPLICABLE DOT AND CGA REGULATIONS AS TO CONSTRUCTION, OPERATION, AND LABELLING. STORE CYLINDERS UPRIGHT IN A COOL, DRY LOCATION AWAY FROM CORROSIVE CHEMICALS WITH SAFETY CAP INSTALLED

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

Respiratory Protection:IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR SELECTION.

Ventilation:MECHANICAL (GENERAL) VENTILATION IS USUALLY ADEQUATE.

Protective Gloves:RUBBER GLOVES

Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Other Protective Equipment:SAFETY SHOWER AND EYE BATH. INDUSTRIAL TYPE WORK CLOTHING AND APRON AS REQUIRED TO AVOID PROLONGED OR REPEATED CONTACT.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR DRINKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

CARBON DIOXIDE PORTABLE ANALYZER MAY BE NEEDED. KEEP ALL EQUIPMENT IN GOOD WORKING ORDER.

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

HCC:G3

NRC/State Lic Num:NOT RELEVANT

Melt/Freeze Pt:M.P/F.P Text:-109F SUBLI

Vapor Pres:43680 @70F

Vapor Density:1.53

Spec Gravity:0.713

pH:ACIDIC

Viscosity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT

Solubility in Water:NOT RELEVANT

Appearance and Odor:COLORLESS, ODORLESS C

COMPRESSED GAS IN FIRE
EXTINGUISHER
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

REACTIVE METALS

Stability Condition to Avoid:EXCESSIVE HEAT, MOISTURE

Hazardous Decomposition Products:CARBON MONOXIDE AND OXYGEN AT
TEMPERATURES ABOVE 3000F.

Conditions to Avoid Polymerization:CARBON DIOXIDE CAN CAUSE VIOLENT
POLYMERIZATION OF ACRYLALDEHYDE OR ETHYLENEIMINE.

===== Disposal

Considerations =====

Waste Disposal Methods:VENT SLOWLY TO ATMOSPHERE WITH ADEQUATE
VENTILATION. (MANUFACTURERS INSTRUCTIONS.)

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