

CARBON DIOXIDE

MSDS Number

BKBXG

National Stock Number

4220-00-372-0585

Product Name

CARBON DIOXIDE

Manufacturer

SPARKLET DEVICES INC

Product Identification

Product ID: CARBON DIOXIDE

MSDS Date: 07/01/1989

FSC: 4220

NIIN: 00-372-0585

MSDS Number: BKBXG

Responsible Party

SPARKLET DEVICES INC

4400 GUSTINE AVE

ST LOUIS , MO 63116-1712

US

Cage: 87286

Contractor

SPARKLET DEVICES INC

ST LOUIS, MO 63116-1712

US

314-353-0400

Cage: 87286

Ingredients

CARBON DIOXIDE

CAS: 124-38-9

RTECS: FF6400000

Fraction By Weight: 100%

OSHA PEL5000 PPM

ACGIH TLV: 5000PPM/30000STEL;93

Hazards

Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES

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

Health Hazards Acute and Chronic: SIMPLE ASPHYXIAN. HIGH CONCENTRATIONS OF CARBON DIOXIDE IN THE AMBIENT AIR CAN REDUCE THE OXYGEN CONTENT NECESSARY TO SUPPORT LIFE. IN THE SOLID PHASE (DRY ICE) CONTACT W/BODY TISSUE WILL PRODUCE COLD BURNS OR FROSTBITE W/IN SEVERAL SECONDS.

Explanation of Carcinogenicity: THIS MATERIAL IS NOT LISTED AS A CARCINOGEN BY NTP, IARC, OSHA.

Effects of Overexposure: SHORTNESS OF BREATH, HEADACHE, DIZZINESS, WEAKNESS, DROWSINESS & RINGING IN EARS. DRY ICE IN CONTACT W/BODY TISSUE PRODUCES BURNING SENSATION; & FROSTBITE OCCURS W/IN SEVERAL

SECONDS.

Medical Cond Aggravated by Exposure:CONDITIONS WHICH CAUSE BREATHING DIFFICULTY.

First Aid

First Aid:DO NOT ATTEMPT TO REMOVE AN INDIVIDUAL FROM THE SCENE W/OUT UTILIZING PROPER RESCUE EQUIPMENT OR YOU MAY BECOME A CASUALTY. MOVE VICTIM TO FRESH AIR WHILE KEEPING THEM WARM, DRY & QUIET. IF BREATHING HAS STOPPED PERFORM ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

Fire Fighting

Extinguishing Media:MATERIAL IS AN EXTINGUISHING AGENT ITSELF.

Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER.

Unusual Fire/Explosion Hazard:CONFINEMENT OF CARBON DIOXIDE IN VESSELS CONTAINERS OF IMPROPER DESIGN CAN RESULT IN EXPLOSION OR RUPTURE FROM OVER- PRESSURIZATION.

Accidental Release

Spill Release Procedures:EVACUATE THE AREA OF THE SPILL OR RELEASE, EMPLOY EMERGENCY FIRST AID PROCEDURES,PROVIDE PLENTY OF FRESH AIR.REMOV DRY ICE RESIDUAL & ALLOW TO SUBLIME IN A SECURED, WELL-VENTILATED AREA & CONTACT THE MANUFACTURER'S SAFETY DEPARTMENT.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling

Handling and Storage Precautions:LIQUID & VAPOR STORAGE CONTAINERS ARE UNDER HIGH PRESSURE.DO NOT MIS-HANDLE OR ABUSE,CNTS.USE ONLY EQUIPMENT DESIGNED FOR CARBON DIOXIDE.

Other Precautions:AVOID DIRECT SKIN CONTACT WITH DRY ICE OR VENTING CARBON DIOXIDE LIQ OR VAPOR.USE PROTECTIVE EQUIP & CLOTHING AND GET PROPER TRAINING BEFORE HANDLING CARBON DIOXIDE IN CYLINDERS.

Exposure Controls

Respiratory Protection:SELF-CONTAINED BREATHING APPARATUS- USE IN STRICT ACCORDANCE W/THE MANUFACTURER'S RECOMMENDATIONS.

Ventilation:FRESH AIR LOCAL EXHAUST/MECHANICAL

Protective Gloves:HEAVY TERRY-CLOTH TYPE

Eye Protection:SAFETY GLASSES W/SIDE SHIELDS

Other Protective Equipment:SAFETY SHOES, HARD HATS & EAR PROTECTION SHOULD BE WORN WHEN WORKING W/PRESSURIZED CARBON DIOXIDE.

Work Hygienic Practices:PERSONS HANDLING CARBON DIOXIDE SHOULD BE FULLY TRAINED IN ADVANCE.

Supplemental Safety and Health

USE A PROPER PRESSURE REDUCING REGULATOR WHEN CONNECTING CYLINDER TO LOWER PRESSURE < 1500 PSIG. NEVER HEAT CYLINDER TO INCREASE DISCHARGE RATE. KEEP CYLINDERS UPRIGHT AND PROPERLY SECURED IN SECURED AREAS AWAY FROM HIGH TRAFFIC. HAVE ONLYQUALIFIED PERSONNEL REFILL CYLINDERS.

Chemical Properties

HCC:G3

Boiling Pt:B.P. Text:-109F,-79C

Vapor Pres:1 ATM

Vapor Density:1.5 AIR=1

Solubility in Water:90ML/100ML H2O

Appearance and Odor:IN SOLID TRANSLUCENT WHITE & ODORLESS.IN GAS & LIQ COLORLESS & ODORLESS.

Percent Volatiles by Volume:100

Stability

Stability Indicator/Materials to Avoid:YES

ACTIVE ALKALI METALS(SUCH AS SODIUM, POTASSIUM, MAGNESIUM, ALUMINUM, TITANIUM, ZIRCONIUM), ORGANOMETALLICS, HYDRIDES.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:HEATING ABOVE 1700C CAUSES

DECOMPOSITION OF CARBON MONOXIDE & OXYGEN.
Conditions to Avoid Polymerization:IT CAUSES VIOLENT POLYMERIZATION OF
ACRYLALDEHYDE OR ETHLENEIMINE.

Disposal

Waste Disposal Methods:ALLOW CARBON DIOXIDE TO RELEASE, SUBLIME OR
DISSIPATE IN THE OPEN AIR.AVOID RELEASING IN COURTYARDS OR INDOORS
OR ANY AREAS WHERE HEAVY CARBON DIOXIDE VAPORS CAN ACCUMULATE.

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