

CARBON DIOXIDE

MSDS Number

BJZDJ

National Stock Number

4220-00-805-8383

Product Name

CARBON DIOXIDE

Manufacturer

SPARKLET DEVICES INC

Product Identification

Product ID: CARBON DIOXIDE

MSDS Date: 04/01/1986

FSC: 4220

NIIN: 00-805-8383

MSDS Number: BJZDJ

Responsible Party

SPARKLET DEVICES INC

4400 GUSTINE AVE

ST LOUIS , MO 63116-1712

US

Emergency Phone: 314-353-0400

Info Phone: 314-353-0400

Cage: 87286

Contractor

SPARKLET DEVICES INC

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Cage: 87286

Ingredients

CARBON DIOXIDE

CAS: 124-38-9

RTECS: FF6400000

Fraction By Weight: >99.5%

OSHA PEL5000 PPM

ACGIH TLV: 5000PPM/30000STEL;93

Hazards

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

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

Health Hazards Acute and Chronic: CARBON DIOXIDE IS AN ASPHYXIAN. HIGH CONCENTRATIONS CAN PRODUCE PARALYSIS OF THE RESPIRATORY CONTROL CENTER OF THE NERVOUS SYSTEM. 2-3% WILL INCREASE RESPIRATION. >4% PRODUCES LABORED BREATHING AND IS DANGEROUS FOR EVEN A FEW MINUTES. >12% CAUSES RAPID UNCONSCIOUSNESS AND DEATH.

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

Effects of Overexposure:FAINT "ACIDIC" TASTE, HEADACHE, DIZZINESS, SHORTNESS OF BREATH, MUSCULAR WEAKNESS, DROWSINESS, AND RINGING OF THE EARS.

Medical Cond Aggravated by Exposure:PERSONNEL WITH PRE-EXISTING CHRONIC RESPIRATORY DISEASES OR HEART DISORDER SHOULD REFRAIN FROM BREATHING EXCESSIVE CARBON DIOXIDE. RECOVERY IS USUALLY RAPID FROM SHORT TERM OVEREXPOSURE.

First Aid

First Aid:FIRST AID: INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. RESCUE PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WIHT FULL FACE MASK.

Fire Fighting

Extinguishing Media:NON-FLAMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:CARBON DIOXIDE IS NOT EFFECTIVE IN FIRES INVOLVING CHEMICALS THAT HAVE THEIR OWN OXYGEN SUPPLY OR ON FIRES INVOLVING REACTIVE CHEMICALS OR THEIR HYDRIDES.

Unusual Fire/Explosion Hazard:CONTAINERS MAY EXPLODE VIOLENTLY ON HEAT OF FIRE. FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING AND EQUIPMENT.

Accidental Release

Spill Release Procedures:REMOVE PERSONNEL. VENTILATE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS. MOVE LEAKING CONTAINER OUTDOORS IF WITHOUT RISK. SLOWLY RELEASE INTO ATMOSPHERE. RETURN DEFECTIVE CYLINDER TO SUPPLIER. TEST AREA FOR OXYGEN BEFORE ALLOWING RE-ENTRY.

Handling

Handling and Storage Precautions:STORE IN A COOL, DARK, WELL VENTILATED AREA AWAY FROM SOURCES OF HEAT.

Other Precautions:DO NOT STORE CYLINDERS IN ENCLOSED OR SUBSURFACE AREA. NEVER WORK ON A PRESSURIZED SYSTEM. IF THERE IS A LEAK, CLOSE THE CYLINDER VALVE, BLOW DOWN SYSTEM BY VENTING TO A SAFE PLACE, THEN REPAIR LEAK.

Exposure Controls

Respiratory Protection:WEAR SELF-CONTAINED BREATHING APPARATUS WHEN CONCENTRATIONS ARE ABOVE PEL.

Ventilation:MECHANICAL (GENERAL) AND LOCAL EXHAUST VENTILATION TO KEEP EXPOSURE LEVELS BELOW PEL.

Protective Gloves:LEATHER GLOVES.

Eye Protection:SAFETY GLASSES OR FULL FACE SHIELD.

Other Protective Equipment:SELF-CONTAINED BREATHING APPARATUS. SAFETY SHOES. DO NOT WEAR CONTACT LENSES.

Work Hygienic Practices:KEEP SAFETY VALVES IN GOOD WORKING CONDITIONS. KEEP DEBRIS AND UNNECESSARY EQUIPMENT AWAY FROM CO2 EQUIPMENT.

Supplemental Safety and Health

CLOSE VALVE WHEN NOT IN USE AND WHEN EMPTY. CARBON DIOXIDE, BEING HEAVIER THAN AIR, TENDS TO ACCUMULATE NEAR THE FLOOR OF AN ENCLOSED SPACE DISPLACING THE AIR AND CREATING AN OXYGEN DEFICIENT ATMOSPHERE. VENTILATE BEFORE ENTRY. VERIFY SUFFICIENT OXYGEN CONCENTRATION.

Chemical Properties

HCC:G3

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

Vapor Density:1.5

Solubility in Water:90 ML/100 ML @ 68F

Appearance and Odor:COLORLESS GAS, ODORLESS.

Stability

Stability Indicator/Materials to Avoid:YES

AVOID SODIUM HYDROXIDE MIXED WITH AL OR MG, REACTIVE CHEMICALS AND THEIR HYDRIDES.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES.

Hazardous Decomposition Products:IN THE PRESENCE OF AN ELECTRICAL DISCHARGE, CARBON DIOXIDE IS DECOMPOSED TO FORM CARBON MONOXIDE AND OXYGEN.

Disposal

Waste Disposal Methods:CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER. MANUFACTURER RECOMMENDS VENTING SLOWLY TO ATMOSPHERE WITH ADEQUATE VENTILATIONS. DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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