

SPARKLET DEVICES INC -- CARBON DIOXIDE -- 4220-00-965-0595

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

Product ID:CARBON DIOXIDE

MSDS Date:04/01/1986

FSC:4220

NIIN:00-965-0595

MSDS Number: BJYKL

=== Responsible Party ===

Company Name:SPARKLET DEVICES INC

Address:4400 GUSTINE AVE

City:ST LOUIS

State:MO

ZIP:63116-1712

Country:US

Info Phone Num:314-353-0400

Emergency Phone Num:314-353-0400

CAGE:87286

=== Cont

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

Ingred Name:CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF6400000

Fraction by Wt: >99.5%

Other REC Limits:NONE SPECIFIED

OSHA PEL:5000 PPM

ACGIH TLV:5000PPM/30000STEL;93

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

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 ASPHYXIANT. 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 N

TP, 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 Measures =====

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d: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 Measures =====

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

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:HEAT OF FIRE MAY RUPTURE CONTAINERS VIOLENTLY. CO2 IS NOT EFFECTIVE WITH CHEMICALS THAT HAVE THEIR OWN OXYGEN SUPPLY OR WITH REACTIVE METALS AND THEIR HYDRIDES.

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

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 and Storage =====

Handling and Storage Precautions:STORE CARBON DIOXIDE CYLINDERS UPRIGHT IN A COOL, DRY LOCATION, AWAY FROM CHEMICALS WITH SAFETY CAP INSTALLED.

Other Precautions:NONE.

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

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

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

Protective Gloves:LEATHER GLOVES.

Eye Protection:SAFETY GLASSES OF 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.

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

HCC:G3  
Boiling Pt:B.P. Text:-109F,-78C  
Vapor Pres:760  
Vapor Density:1.5  
Solubility in Water:SLIGHT  
Appearance and Odor:COLORLESS GAS. ODORLESS.

===== Stability and React

ivity Data =====

Stability Indicator/Materials to Avoid: YES

SODIUM PEROXIDE MIXED WITH AL AND MG. REACTIVE CHEMICALS, THEIR  
HYDRIDES. DRY ICE CAN FORM SHOCK SENSITIVE MIX WITH NA, K

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 Considerations =====

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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