



Kidde

Residential & Commercial Division

1394 S. Third Street

Mebane, NC 27302

(919) 563-5911

MATERIAL SAFETY DATA SHEET CARBON DIOXIDE FIRE EXTINGUISHER

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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|-----------------------------------|--|
| Trade Name / Label Name: | Carbon Dioxide Fire Extinguisher |
| CAS Number: | 124-38-9 |
| Chemical Name / Family | Gaseous Carbon Dioxide / Carbonate |
| Manufacturer's Name: | Kidde – Residential & Commercial |
| Address: | 1394 S. Third Street Mebane, NC 27302 |
| Business phone / Fax: | (919) 563-5911 / (800) 547-2111 |
| Date of preparation: | December 31, 2001 |
| 24 Hour Emergency Contact: | Chemtrec 1-800-424-9300 |

SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS

| CHEMICAL NAME | CAS N° | % w/w | OSHA PEL mg/m ³ | ACGIH TLV mg/m ³ | TOXICITY DATA |
|----------------|----------|-------|-------------------------------|--------------------------------|------------------|
| Carbon Dioxide | 124-38-9 | N/A | N/A | N/A | N/A |

These cylinders contain Carbon Dioxide (CAS No. 124-38-9) which functions as a fire suppression agent. When the cylinders discharge, the agent will be released and may present hazards to exposed persons. See MSDS on Carbon Dioxide for information and warnings. In addition, the cylinders are pressurized. Although unlikely to occur, a cylinder could be propelled and cause bodily injury and/or property damage if the valve is broken due to improper handling or storage. Also, if a cylinder is over-pressurized, exposed to direct heat, or receives severe physical impact it could discharge or rupture causing bodily injury and/or property damage.

SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS

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|--|---|---|---|--|------|
| Boiling point, °C: | -109.3°F | Specific gravity (Air=1) | 1.522 | Viscosity @ 20°C: | N/A |
| Vapor pressure, mm Hg: (@ 70°F (21.1°C)) | 838 psig | Percent volatile by volume: | N/A | Melting point, °C: | N/A |
| Gas Density (@ 70°F (21.1°C) & 1 atm) | 0.1144 lb/ft ³ (1.832 kg/m ³) | Evaporation rate (Butyl acetate=1) | N/A | Solubility in water: (Vol./Vol. At 68°F (20°C)) | 0.90 |
| Reactivity in water: | N/A | Appearance and odor: | Colorless and odorless. A slightly acid gas. It is felt by some to have a slight pungent odor and biting taste. | | |

SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

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|--|--|---|-----|-----------------------------------|-----|
| Flash point: | N/A | Flammable limits in air, % by volume | N/A | Auto-ignition temperature: | N/A |
| Extinguishing media: | Non-flammable gas, Carbon Dioxide is an extinguishing agent | | | | |
| Unusual fire and explosion hazards: | N/A - See sections 2 & 7 | | | | |
| Special fire fighting procedures: | Avoid direct heat and severe impact to pressurized cylinders | | | | |

SECTION 5 – REACTIVITY DATA

| | | | | | |
|--|---|-----------------------------|---|----------------------------------|----------------|
| Stability: | Stable | Conditions to avoid: | Direct heat and severe impact to pressurized cylinder | Hazardous polymerization: | Will not occur |
| Incompatibility (materials to avoid): | If moisture is present, it may form carbonic acid | | | | |
| Hazardous decomposition products: | None established | | | | |

SECTION 6 – HEALTH HAZARD DATA

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|---|---|--|--|--|--|
| Threshold limit value: | N/A | | | | |
| Routes of entry: | Inhalation: Yes Eye contact: Yes Skin contact: Yes Ingestion: Yes | | | | |
| Signs and symptoms of overexposure: | Acute: Prolonged contact may be irritating to skin eyes, and mucous membranes. Chronic: The effect of chronic over-exposure may consist of multiple areas of superficial irritation. Prolonged contact may result in primary irritant dermatitis and possible destruction of tissue. Similarly, chronic over-exposure to the inhalation of dust, spray of mist may result in varying degrees of irritation to the respiratory tract tissue and an increased susceptibility to respiratory illness. | | | | |
| Medical conditions generally aggravated by exposure: | Prolonged contact may cause chemical burns. | | | | |
| Chemical listed as carcinogen or potential: | NTP program: No IARC monographs: No OSHA: No | | | | |
| Emergency and first aid procedures: | Eye contact: Flush and irrigate eyes with water for 15 minutes while holding eyelids open. Skin contact: Wash thoroughly with soap and water. Inhalation: Seek fresh air Ingestion: Dilute by drinking large quantities of water. If irritation persists, seek medical attention In the event of physical injury, due to exposure of the compressed gas hazard, take appropriate first aid or medical measures. | | | | |

SECTION 7 – SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

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| Precautions to be taken in handling and storage: | Handle, transport and store carefully and securely to avoid accidental knocking over or other severe physical impacts. Do not expose to direct heat sources. Do not over pressurize. |
| Other precautions: | Cylinders should be recharged only by trained and qualified personnel. |
| Steps to be taken in case materials is released or spilled: | Contain any spill. Place in closed container for proper disposal. Wash spill areas liberally with water to remove traces. |

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| Waste disposal method: | Dispose of in accordance with local, state and federal regulations. |
| SECTION 8 – SPECIAL PROTECTION INFORMATION | |
| Respiratory protection: | For acute exposure, no repertory protection is necessary. For chronic exposure to spray or mist, use of a NIOSH/MSHA approved respirator is recommended. |
| Ventilation: | Use adequate ventilation. |
| Protective gloves: | Rubber gloves recommended during spill/leak procedures and during recharging operations. |
| Eye protection: | Chemical goggles recommended during spill/leak procedures and during recharging operations. |
| Other protective equipment: | Safety shoes are recommended when handling cylinders. |
| Work / Hygienic practices: | Use good personal hygiene. |

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| SECTION 9 – REGULATORY INFORMATION | | | |
| HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS | | | |
| HEALTH: | 1 | FLAMMABILITY: | 0 |
| | | REACTIVITY: | 0 |
| HAZARD INDEX: 0 Minimal hazard; 1 Slight hazard; 2 Moderate hazard; 3 Serious hazard; 4 Severe hazard | | | |
| SHIPPING INFORMATION | | | |
| DOT Shipping Name: | Carbon Dioxide | DOT Hazard Class: | 2.2 (Nonflammable Compressed Gas) |
| DOT ID Number: | UN1013 | DOT/IMO Label | Nonflammable Gas |
| Packing Group: | N/A | | |

GENERAL KEYS:

N/A: Not applicable.

NDA: No data available.

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