

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 212.00

Revision Date: June 15, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Carbon Dioxide Gas

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Carbon dioxide gas

Synonym: carbonic anhydride

CAS#: 124-38-9

SECTION 3 — HAZARDS IDENTIFICATION

Odorless and colorless gas.

An asphyxiate.

Substance considered nonhazardous. However, not all health aspects of this substance have been thoroughly investigated.

FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-0

Exposure-0

Storage-0

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye: Immediately flush with fresh water for at least 15 minutes.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible gas.

Dusts of various metals are ignitable and explosive when suspended in CO₂.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate the area. Cylinder is so small that asphyxiation is unlikely.

SECTION 7 — HANDLING AND STORAGE

Store with the bottled gases in a secure area.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 5000 ppm STEL 3000 ppm (OSHA, NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless and odorless gas.

Relative density: (Air = 1) 1.53

Solubility: Solubility in water: (At 1 atm, 20 °C) 88 ml CO₂/100 mL water.

Melting Point: -109 °F (sublimes)

Formula: CO₂

Formula Weight: 44.0

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with sodium peroxide, aluminum or magnesium metal in finely divided form, and water reactive substances.
Shelf Life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Nausea, dizziness, and headache.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.

Empty gas cylinder outside or in an operating fume hood. Throw empty cylinder in garbage if nonrefillable.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Carbon Dioxide

Hazard Class: 2.2, Nonflammable gas

UN Number: UN1013

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (204-696-9).

SECTION 16 — OTHER INFORMATION

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**