

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 212.00

Revision Date: July 26, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Carbon Dioxide Gas

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Carbon dioxide gas

Synonym: carbonic anhydride

CAS#: 124-38-9

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### SECTION 3 — HAZARDS IDENTIFICATION

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Odorless and colorless gas.

An asphyxiate. Otherwise, substance is not considered hazardous.

#### FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-0

Exposure-0

Storage-0

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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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.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Nonflammable, noncombustible gas.

Dusts of various metals are ignitable and explosive when suspended in CO<sub>2</sub>.

#### NFPA CODE

None  
established

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

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### SECTION 7 — HANDLING AND STORAGE

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Store with the bottled gases in a secure area.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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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: PEL 5000 ppm STEL 3000 ppm (OSHA, NIOSH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless and odorless gas.

Solubility: Solubility in water: (At 1 atm, 20 °C) 88 ml CO<sub>2</sub>/100 mL water.

Formula: CO<sub>2</sub>

Formula weight: 44.0

Boiling point: -78 °C (sublimes)

Melting point: -56.6 °C

Relative density: 0.720

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**SECTION 10 — STABILITY AND REACTIVITY**

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

Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Nausea, dizziness, and headache.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Empty gas cylinder outside or in one operating fume hood. Throw empty cylinder in garbage if non-refillable.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Carbon Dioxide

Hazard class: 2.2, Nonflammable gas

UN number: UN1013

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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