

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 194.00

Revision Date: March 21, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Calcium Carbide

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Substances and mixtures which, in contact with water, emit flammable gases (Category 2). In contact with water releases flammable gas (H261). Handle under inert gas. Protect from moisture (P231+P232).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium carbide	75-20-7	CaC <sub>2</sub>	64.10	
Synonym: Calcium acetylide				

### SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

**If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### SECTION 5 — FIRE FIGHTING MEASURES

Flammable solid. Exposure to water or moisture evolves flammable acetylene. 500 g of calcium carbide will yield approximately 150L of flammable acetylene.

**In case of fire:** Use a tri-class dry chemical fire extinguisher (P370+P378).

**NFPA CODE**

H-3

F-3

R-2

No Water

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and water. Do NOT use water, sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #5. Store with sulfides, phosphides, carbides and nitrides. Store in a cool, dry place. Store in a Flinn Chem-Saf™ bag and then inside a Flinn Saf-Stor™ can. Use only in a hood or in a well ventilated area.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or in a well ventilated area.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Rocklike, grayish-black. Odor of acetylene always present.

Garlic like odor.

Specific gravity: 2.22

Soluble: Reacts and decomposes with water.

Forms calcium hydroxide and acetylene with much heat.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Decomposes in water to form acetylene and calcium hydroxide. Store in a metal can or a flammables cabinet. Avoid contact with water, acids, halogens, silver nitrate, copper compounds, and heavy metals.

Shelf life: Good, if stored under dry conditions.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive.

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

Chronic effects: N.A.

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

Target organs: 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.

Flinn Suggested Disposal Method #25 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Calcium Carbide. Hazard class: 4.3, Dangerous when wet. UN number: UN1402.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (200-848-3), RCRA code D001, D003.

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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.

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