# FLINN SCIENTIFIC

#### 11/11/2024: File reviewed, more current MSDS/SDS not available. CAS

### Safety Data Sheet (SDS)

#### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

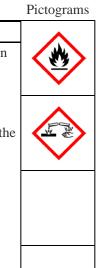
## Calcium Carbide

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261 Chemtrec Emergency Phone Number: (800) 424-9559

#### 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 (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).



Signal Word

DANGER

#### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Calcium carbide	75-20-7	CaC <sub>2</sub>	64.1	
Synonyms: 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	NFPA Code
carbide will yield approximately 150L of flammable acetylene.	H-3
In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).	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.

#### SECTION 7 — HANDLING AND STORAGE

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<sup>TM</sup> bag and then inside a Flinn Saf-Stor<sup>TM</sup> can. Use only in a hood or in a well ventilated area.

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

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.

#### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Rocklike, grayish-black. Odor of acetylene always

present.

Garlic like odor.

Soluble: Reacts and decomposes with water.

Forms calcium hydroxide and acetylene with much

heat.

#### SECTION 10 — STABILITY AND REACTIVITY

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.

#### SECTION 11 — TOXICOLOGICAL INFORMATION

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.

#### SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

#### SECTION 13 — DISPOSAL CONSIDERATIONS

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

Flinn Suggested Disposal Method #25 is one option.

#### SECTION 14 — TRANSPORT INFORMATION

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

#### SECTION 15 — REGULATORY INFORMATION

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

#### SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND

Specific gravity: 2.22

OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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

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

Revision Date: July 8, 2015