

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 190.00

Revision Date: March 15, 2012

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Caffeine

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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Caffeine

CAS#: 58-08-2

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### SECTION 3 — HAZARDS IDENTIFICATION

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White crystal. Odorless.  
Irritant to body tissues. Toxic by ingestion - as little as 65 mg can be life threatening. Not for human consumption.

#### FLINN AT-A-GLANCE

Health-3  
Flammability-1  
Reactivity-0  
Exposure-3  
Storage-3

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.  
Eye or External: Immediately flush with fresh water for at least 15 minutes.  
Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Combustible solid, flammable hazard as a dust.  
When heated to decomposition, emits toxic fumes of NO<sub>x</sub>.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

**NFPA CODE**  
None  
established

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from the area. 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: Organic #2. Store with alcohols, glycols, amines, and amides.  
Store in a cool, dry place. Store in a Flinn Chem-Saf bag inside a poison cabinet.

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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 chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White, odorless crystal.

Solubility: Soluble in chloroform and ether, slightly soluble in water.

Solutions neutral to litmus.

Formula: C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub>

Formula weight: 194.20

Boiling point: 90 °C (sublimes)

Melting point: 238 °C

Specific gravity: 1.23

Used in LD<sub>50</sub> studies, daphnia heart rate and root tip mitosis inhibition (<0.1%) experiments.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Shelf life: Fair to poor. Effloresces in air resulting in decomposition.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Not for human consumption.

Acute effects: Toxic.

Chronic effects: Possible teratogen and possible mutagen.

Target organs: Central nervous system and heart. Mitotic inhibitor.

ORL-RAT LD<sub>50</sub>: 192 mg/kgIHL-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.

Flinn Suggested Disposal Method #5 is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Toxic solids, organic, N.O.S.

Hazard class: 6.1, Keep away from food

UN number: UN2811

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (200-362-1).

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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.**