





SDS #: 585.1

Revision Date: January 16, 2014

## 1 10-Phenanthroline Solution Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### 1 10-Phenanthroline Solution

Signal Word  
**WARNING**

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

Chemtrec Emergency Phone Number: (800) 424-10107

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
1,10-Phenanthroline	5144-89-8	C <sub>12</sub> H <sub>8</sub> N <sub>2</sub> •H <sub>2</sub> O	198.21	0.1%
Water	7732-18-5	H <sub>2</sub> O	18.00	99.9%

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

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

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

**If on skin:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code

None established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Contain spill with sand or absorbent material; deposit in sealed bag or container. 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.

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

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Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Clear, colorless liquid. Odorless. Melting point: 93-94 °C

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizing agents and acids.

Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Harmful if swallowed.

ORL-RAT LD<sub>50</sub>: 132 mg/kg (as 1,10-phenanthroline)

Chronic effects: N.A.

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

Target organs: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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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: Not regulated. Hazard class: N/A. UN number: N/A.

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (200-629-2).

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**SECTION 16 — OTHER INFORMATION**

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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.**

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