

SDS #: 338.5

Revision Date: September 22, 2014

2/17/2025: File reviewed, more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word DANGER

Ferrocene

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

Chemtrec Emergency Phone Number: (800) 424-9772

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable solids (Category 1). Flammable solid (H228). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|--|---------------|------------------------------------|-------------------|---------------|
| Ferrocene | 102-54-5 | C ₁₀ H ₁₀ Fe | 186.031 | |
| Synonyms: bis-Cyclopentadienyliron; Dicyclopentadienyl iron | | | | |

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

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 (P302+P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Flammable solid. NFPA Code

When heated to decomposition, may emit toxic fumes.

None established

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

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Wipe up dust with a damp paper towel to avoid generating dust. Place in a sealed bag or container and dispose. 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: Organic Miscellaneous. Store with other miscellaneous organics. Store in a cool, dry place. Ground or bond container and receiving equipment (P240). Use explosion-proof electrical and ventilating equipment (P241).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Exposure guidelines: (as total dust) TLV 10 mg/m³ (ACGIH); PEL 15 mg/m³ (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Orange to brown crystalline powder. May become Boiling point: 249 °C

lumpy during storage. Camphor-like odor. Melting point: 172-176 °C (sublimes @ 100 °C)

Soluble in alcohol, ether, dilute nitric acid, concentrated Specific gravity: 1.49 sulfuric acid. Insoluble in water. Vapor density: 3.4

SECTION 10 — STABILITY AND REACTIVITY

Avoid heat, sunlight, and ignition sources. Reacts with strong oxidizing agents.

Shelf life: Fair, may decompose upon prolonged storage in air.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: May be harmful if swallowed. May cause ORL-RAT LD₅₀: 1320 mg/kg

liver damage. May cause blood abnormalities. May IHL-RAT LC₅₀: N.A. cause eye, skin, and respiratory tract irritation. SKN-RBT LD₅₀: N.A.

Chronic effects: Kidney and lung damage.

Target organs: Blood, liver.

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 #26c is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ferrocene. Hazard class: 4.1. UN number: UN1325.

SECTION 15 — REGULATORY INFORMATION

TSCA listed.

SECTION 16 — OTHER INFORMATION

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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.

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