



MSDS

P.O. Box 329 - 802 Washington Avenue Chestertown, MD 21620 - USA

MATERIAL SAFETY DATA SHEET

TELEPHONE # FOR INFORMATION 410 778-3100

24 HOUR EMERGENCY NUMBER (CHEM-TEL): USA, Canada, Puerto Rico 800-255-3924;

Outside North American Continent 813-248-0585 (call Collect)

1. Product Identification

Product Code: 6410

Product Description: Ferrioin Indicator

Manufactured By: LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

2. Composition/Information On Ingredients

Hazard	CAS#/Name	%	PEL	TLV
Yes	5144-89-8 1, 10 Phenanthroline monohydrate	0.3	N/E	N/E
Yes	7782-63-0 Ferrous Sulfate heptahydrate	0.1	N/E	1 mg/m ³ (sol. iron as Fe)
No	7732-18-5 Water	to 100%	None Established	None Established

3. Hazards Overview

Primary Route Of Entry: Ingestion

May be harmful if swallowed.

HMIS Hazard

Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least

Health: 1 Flammability: 0 Reactivity: 0

Carcinogenicity: None:

Other Health Related Comments:

See Section 11, Toxicity

Product Code: 6410

Product Description: Ferroin Indicator

4. First Aid Measures

Eye Contact: Flush with water for 15 minutes.

Skin Contact: Flush skin with water. Wash with soap and water.

Ingestion: Drink water, consult physician.

Inhalation: Remove to fresh air.

5. Fire Fighting Measures

Flash Point (Method Used): N/A

LEL: N/A

UEL: N/A

Extinguishing Media: Not a fire hazard

Special Fire Fighting Procedures: N/A

Unusual Fire & Explosion Hazard: N/A

6. Accidental Release Measures

1,10 Phenanthroline is toxic to aquatic organisms. Small spills can be mopped up and flushed to drain. Large spills: Absorb material on inert spill pads and dispose of as hazardous waste--not to sewer.

7. Handling & Storage

Store tightly closed in cool, dry place.

Product Code: 6410

Product Description: Ferroin Indicator

8. Exposure Controls/Personal Protection

Ventilation

Normal

Protection When Handling

Eye Protection Gloves Lab Coat

Work/Hygenic Practices: Avoid contact with eyes or skin. Wash after handling.

9. Physical & Chemical Properties

Appearance: Red-orange Liquid

Solubility In Water: Soluble

Odor: None

pH: 5

Vapor Density: <1 (Air=1)

Vapor Pressure: <17 mm Hg @ 20 deg C

Boiling Point: >100 deg C

Melting Point: N/A

10. Stability & Reactivity

Stable: Yes

Conditions To Avoid: N/A

Incompatibility (Materials To Avoid): Contact with nitric acid or other strong oxidizers

Hazardous Decomposition Products: CO, NOx, HCN

11. Toxicological Information

Oral rat LD50:132 mg/kg--toxic by ingestion (Supplier data for 1,10-Phenanthroline,anhydrous). Monohydrate form investigated as a mutagen.

Target Organs: N/A

Product Code: 6410

Product Description: Ferroin Indicator

12. Ecological Information

Pure, solid 1,10-Phenanthroline Monohydrate expected to be toxic to aquatic organisms & persistent in the environment. #6410 reagent contains <1% of solid in water, but disposal to drain of quantities >1 liter is not recommended

13. Disposal Considerations

Small amount: Flush down drain. Large amount: Dispose according to federal, state and local regulations.

14. Transportation Information

Not Regulated For Transport

15. Regulatory Information

Chemical Inventory Status

Hazard	Ingredient	USA	Europe	--- Canada ---		Australia	Japan
		TSCA	EC	DSL	NDSL		
Yes	66-71-7 1, 10 Phenanthroline anhydrous	Yes	Yes	Yes	No	Yes	Yes
Yes	7720-78-7 Ferrous Sulfate, anhydrous	Yes	Yes	Yes	No	Yes	Yes
No	7732-18-5 Distilled Water	Yes	Yes	Yes	No	Yes	Yes

Federal, State, & International Regulations

Ingredient	--- SARA 302 ---		----- SARA 313 -----		CERCLA	RCRA 261.33	TSCA 8(D)
	RQ	TPQ	Listed	Chemical Category			
66-71-7 1, 10 Phenanthroline anhydrous	No	No	No	No	No	No	No
7720-78-7 Ferrous Sulfate, anhydrous	No	No	No	No	1000	No	No
7732-18-5 Distilled Water	No	No	No	No	No	No	No

Product Code: 6410

Product Description: Ferroin Indicator

--- SARA 311/312 ---

Hazard Categories

----- Australia -----

**Hazchem
Code**

**Poison
Schedule**

**This MSDS Is
WHMIS Compliant**

Ingredient

Acute

Chronic

Fire

Pressure

Reactivity

None Allocated

None Allocated

66-71-7
1, 10 Phenanthroline anhydrous

Yes

Yes

No

No

No

None Allocated

None Allocated

7720-78-7
Ferrous Sulfate, anhydrous

Yes

Yes

No

No

No

None Allocated

None Allocated

7732-18-5
Distilled Water

No

No

No

No

No

**product 6410
as a whole**

Yes

No

No

No

No

None Allocated

None Allocated

Yes

16. Other Information

Keep out of the reach of children.

Prepared By: Regulatory Affairs Department

Revised: 4/20/2010
