



Issuing Date 2/28/2011

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SULFIDE REAGENT B

Product Code(s) V-4459

Recommended Use Laboratory chemicals. Industrial (not for food or food contact use). Test kit reagent.

Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA

Emergency Telephone Number 24 Hour Emergency Number (CHEM-TEL):
USA, Canada, Puerto Rico 1-800-255-3924
Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Corrosive

Can cause severe irritation or burns to every area of contact

Harmful if swallowed

May cause adverse liver effects

Appearance Dark amber

Physical State Liquid

Odor Slight, Acidic

OSHA Regulatory Status Safety information is given for exposure to the reagent as sold and considers exposure to the chemical if user has direct eye and skin contact.

Potential Health Effects

Principle Routes of Exposure Ingestion, Skin contact, Eye contact.

Acute Toxicity

Eyes

Corrosive. Contact with eyes causes severe irritation. Causes irritation, redness, and pain. May cause burns.

Skin

Corrosive. Contact causes severe skin irritation and possible burns. Symptoms can include redness, itching, and pain.

Inhalation

Can be extremely destructive to tissues of the mucous membranes and upper respiratory tract. Can cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

Ingestion

Corrosive. Can burn mouth, throat, stomach, and GI tract. Harmful if swallowed. May cause nausea, vomiting, and diarrhea, and in severe cases death.

Chronic Effects

May cause adverse liver effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Iron (III) chloride hexahydrate	10025-77-1	25
Water	7732-18-5	to 100

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing.
Eye Contact	Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Seek immediate medical attention/advice.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Seek immediate medical attention/advice.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.
Ingestion	DO NOT INDUCE VOMITING. Drink large quantity of water. Clean mouth with water. Get medical attention. Never give anything by mouth to an unconscious person.
Protection of First-aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flash Point	Not applicable			
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO ₂ , water spray or alcohol-resistant foam.			
Explosion Data				
NFPA	Health Hazard 2	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 0	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment. Refer to Section 8. Avoid contact with skin, eyes and inhalation of vapors.
Methods for Cleaning Up	Containerize spill material and hold for later disposal. If local regulations permit, dissolve with large volume of water, neutralize with alkaline material (sodium bicarbonate), then rinse to drain with excess water. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.
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Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Store at room temperature. Keep away from direct sunlight. Keep away from heat and incompatibles. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron (III) chloride hexahydrate 10025-77-1	TWA: 1 mg/m ³	None Known	TWA: 1 mg/m ³
Water 7732-18-5	None Known	None Known	None Known

Personal Protective Equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and Body Protection

Wear protective gloves/clothing. Gloves & Lab Coat.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical State
Flash Point
230

Dark amber
Liquid
Not applicable

Odor
pH
Boiling Point/Range
°C

Slight, Acidic
Acidic

Solubility
Vapor Density

Soluble
No information available

Vapor Pressure

No information available

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions of use and storage.

Incompatible Products

Metals. Bases. Oxidizing agents.

Conditions to Avoid

Excessive heat. Incompatible products.

Hazardous Decomposition Products Hydrogen chloride.

Hazardous Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron (III) chloride hexahydrate	None Known	None Known	None Known
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity

May cause adverse liver effects.

Chemical Name	ACGIH	IARC	NTP	OSHA
Iron (III) chloride hexahydrate	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Iron (III) chloride hexahydrate	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Iron (III) chloride hexahydrate	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Chemical Name	Log Pow
Iron (III) chloride hexahydrate	None Known
Water	None Known

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Iron (III) chloride hexahydrate - 10025-77-1	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION**DOT**

Proper Shipping Name FERRIC CHLORIDE SOLUTION
Hazard Class 8
UN-No 2582
Packing Group III
Reportable Quantity (RQ) 1000

IATA

UN-No 2582
Proper Shipping Name FERRIC CHLORIDE SOLUTION
Hazard Class 8
Packing Group III

IMDG/IMO

Proper Shipping Name	FERRIC CHLORIDE SOLUTION
Hazard Class	8
UN-No	2582
Packing Group	III

15. REGULATORY INFORMATION**International Inventories**

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Iron (III) chloride hexahydrate 10025-77-1 (25)	TSCA	DSL	EINECS/ELINCS	1-213	X	KECL	X	X
Water 7732-18-5 (to 100)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Iron (III) chloride hexahydrate	10025-77-1	25	None Known
Water	7732-18-5	to 100	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Iron (III) chloride hexahydrate 10025-77-1 (25)	None Known	None Known	None Known	None Known
Water 7732-18-5 (to 100)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Iron (III) chloride hexahydrate	10025-77-1	25	None Known	None Known	None Known	None Known
Water	7732-18-5	to 100	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
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Iron (III) chloride hexahydrate	None Known	None Known
Water	None Known	None Known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
Iron (III) chloride hexahydrate	10025-77-1	None Known
Water	7732-18-5	None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Iron (III) chloride hexahydrate	None Known	None Known	X	None Known	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations**Mexico - Grade**




Chemical Name	Carcinogen Status	Exposure Limits
Iron (III) chloride hexahydrate	None Known	Mexico: TWA= 1 mg/m ³
Water	None Known	None Known

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

Component	WHMIS Hazard Class
Iron (III) chloride hexahydrate 10025-77-1 (25)	E
Water 7732-18-5 (to 100)	Uncontrolled product according to WHMIS classification criteria

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table><tr><td>Health Hazard</td><td>2</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>1</td></tr></table>	Health Hazard	2	Fire Hazard	0	Reactivity	1		
Health Hazard	2								
Fire Hazard	0								
Reactivity	1								

Prepared By
Issuing Date
Revision Date
Revision Note
Initial Release

Regulatory Affairs Department
2/28/2011
07-Jun-2012

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS