

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product name** SULFIDE TEST SOLUTION #3

**Other means of identification**

**Product Code(s)** 4635  
**UN-No** 2582

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use).

**Details of the supplier of the safety data sheet**

**Manufacturer Address**  
 LaMotte Company, Inc.  
 802 Washington Avenue  
 P.O. Box 329  
 Chestertown, MD 21620 USA  
 T 410-778-3100  
 F 410-778-9748

**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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### EMERGENCY OVERVIEW

**DANGER**

**Hazard statements**

Harmful if swallowed. Causes severe skin burns and eye damage.



**Appearance** dark amber

**Physical state** liquid

**Odor** Slight

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth, IF SWALLOWED, Do NOT induce vomiting

#### Precautionary Statements - Storage

Store locked up.

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

#### Other Hazards

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Iron (III) chloride hexahydrate	10025-77-1	50

### 4. FIRST AID MEASURES

#### First Aid Measures

##### General advice

Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Do not delay care and transport of a seriously injured person. Show this safety data sheet to the doctor in attendance.

##### Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

##### Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

##### Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

##### Ingestion

Do NOT induce vomiting. Drink plenty of water. Call a physician immediately. Never give anything by mouth to an unconscious person. Rinse mouth.

##### Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing.

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment** Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Neutralize spills with acid such as acetic, hydrochloric or sulfuric, absorb with vermiculite or other inert substance, and package in a suitable container for disposal. Prevent product from entering drains.

**7. HANDLING AND STORAGE****Precautions for safe handling**

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

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, moisture, and incompatibles. Keep away from metals and organic halogens. Do not flush into surface water or sanitary sewer system. Keep out of the reach of children.

**Incompatible Products** Metals. Sodium or potassium.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron (III) chloride hexahydrate 10025-77-1	TWA: 1 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur: Face protection shield.

**Skin and body protection** Gloves & Lab Coat. Impervious clothing. Protective gloves. Nitrile rubber.

**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. Take off contaminated clothing and wash before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

Physical state liquid  
 Appearance dark amber Odor Slight

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening point No information available  
 Molecular weight No information available  
 VOC Content (%) No information available  
 Density No information available  
 Bulk density No information available

**10. STABILITY AND REACTIVITY**

Stability Stable under recommended storage conditions.  
 Hazardous Reactions Reacts violently with water. Contact with metals may evolve flammable hydrogen gas.  
 Hazardous polymerization Hazardous polymerization does not occur.  
 Conditions to avoid Excessive heat. Incompatible products.  
 Incompatible materials Metals. Sodium or potassium.  
 Hazardous decomposition products Potassium Oxides. Iodine gas.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Iron (III) chloride hexahydrate 10025-77-1	= 900 mg/kg ( Rat ) = 316 mg/kg ( Rat ) = 450 mg/kg ( Rat )	Not Established	Not Established

**Information on toxicological effects**

**Carcinogenicity** All forms of mercury can cross the placenta to the fetus. Most of what is known has been learned from experimental animals.

Chemical name	ACGIH	IARC	NTP	OSHA

Iron (III) chloride hexahydrate 10025-77-1	Not Established	Not Established	Not Established	Not Established
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ATEmix (oral)

632 mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Unknown Aquatic Toxicity** 0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Iron (III) chloride hexahydrate 10025-77-1	Not Established	20.95 - 22.56: 96 h Pimephales promelas mg/L LC50 semi-static 20.26: 96 h Lepomis macrochirus mg/L LC50 semi-static 75.6: 96 h Gambusia affinis mg/L LC50 static	27.9: 48 h Daphnia magna mg/L EC50 9.6: 48 h Daphnia magna mg/L EC50 Static

**Persistence and degradability**

Based on components product is expected to be poorly eliminated from water and poorly biodegradable.

**Bioaccumulation/Accumulation**

Some components of this material have some potential to bioaccumulate but not all have been tested. For Mercury: Has an experimentally-determined BCF (bioconcentration factor) of greater than 100. This material is expected to significantly bioaccumulate.

Chemical name	Log Pow
Iron (III) chloride hexahydrate 10025-77-1	-4

## 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

Dispose of waste product or used containers according to local regulations. Should not be released into the environment.

**Contaminated packaging**

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Iron (III) chloride hexahydrate 10025-77-1	Not Established	-	Not Established	Not Established

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	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Iron (III) chloride hexahydrate 10025-77-1	-

## 14. TRANSPORT INFORMATION

**DOT**

**Proper shipping name** FERRIC CHLORIDE SOLUTIONS  
**UN-No** 2582  
**Hazard Class** 8  
**Packing group** III

**IATA**

Proper shipping name FERRIC CHLORIDE SOLUTIONS  
 UN-No 2582  
 Hazard Class 8  
 Packing group III

**IMDG/IMO**

Proper shipping name FERRIC CHLORIDE SOLUTIONS  
 UN-No 2582  
 Hazard Class 8  
 Packing group III

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA Complies  
 DSL/NDL Does not comply  
 EINECS/ELINCS Does not comply  
 ENCS Does not comply  
 IECSC Complies  
 KECL Does not comply  
 PICCS Complies  
 AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US 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	SARA 313 - Threshold Values %
Iron (III) chloride hexahydrate 10025-77-1	Not Established

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
 Chronic Health Hazard No  
 Fire hazard No  
 Sudden release of pressure hazard No  
 Reactive Hazard Yes

**CWA (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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Iron (III) chloride hexahydrate 10025-77-1	Not Established	Not Established	Not Established	Not Established

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Iron (III) chloride hexahydrate 10025-77-1	1000 lb	Not Established	RQ 1000 lb final RQ RQ 454 kg final RQ

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

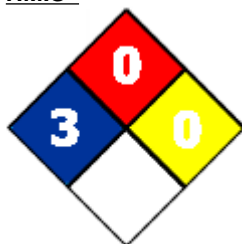
Chemical name	California Proposition 65
Iron (III) chloride hexahydrate 10025-77-1	Not Established

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Iron (III) chloride hexahydrate 10025-77-1	X	X	X

## 16. OTHER INFORMATION

<b>NFPA</b>	Health hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards W
<b>HMIS</b>	Health hazard 3	Flammability 0	Stability 2	



Health Hazard	<b>3</b>
Fire Hazard	<b>0</b>
Reactivity	<b>2</b>

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#### Disclaimer

The information provided on this SDS 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 Material Safety Data Sheet**