

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

### Product identifier

**Product name** Ferrous-Ferric Iron

### Other means of identification

**Product Code(s)** 5265  
**UN-No** 1940

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

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

### 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 3
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

### EMERGENCY OVERVIEW

**DANGER**

#### Hazard statements

Toxic if swallowed. Harmful in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage.



**Appearance** pink

**Physical state** liquid

**Odor** Unpleasant - Skunk

#### Precautionary Statements - Prevention

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

**Precautionary Statements - Response**

Immediately call a POISON CENTER or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

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

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

Call a POISON CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician, Rinse mouth, IF SWALLOWED, Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements - Disposal**

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Thioglycolic acid	68-11-1	70

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing. Consult a physician.
<b>Eye contact</b>	Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Consult a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Consult a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b><u>Self-protection of the first aider</u></b>	Use personal protective equipment. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give 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

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or 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**

<b>Personal precautions</b>	Use personal protective equipment. Wear respiratory protection. Wear protective gloves/clothing and eye/face protection. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

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

<b>Methods for containment</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose according to federal, state, and local regulations.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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

<b>Handling</b>	Avoid contact with skin and eyes. Avoid ingestion and inhalation. Do not eat, drink, or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.
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**Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials. Keep out of the reach of children.
<b>Incompatible Products</b>	Strong oxidizing agents. Strong acids.

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

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Thioglycolic acid 68-11-1	TWA: 1 ppm	-	TWA: 1 ppm TWA: 4 mg/m <sup>3</sup>

**Appropriate engineering controls**

<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves/clothing.
<b>Respiratory protection</b>	Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
<b>Hygiene Measures</b>	Avoid contact with eyes, skin and clothing. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Unpleasant - Skunk
<b>Appearance</b>	pink		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1	
Melting point / freezing point	No information available	
Boiling point / boiling range	120 °C Thioglycolic acid	
Flash point	130 °C / 266 °F	Thioglycolic acid
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	0.4	0.4 mm Hg @ 25 °C (Thioglycolic acid solution) (air=1)
Vapor density	3.18	
Specific gravity	No information available	
Water solubility	Completely miscible	
Solubility in other solvents	No information available	
Partition coefficient	Log Pow:0.059	
Autoignition temperature	350 °C / 662 °F	
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**

<b>Stability</b>	Stable under normal conditions of use and storage.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Excessive heat.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous decomposition products</b>	Liberates toxic hydrogen sulfide gas on decomposition with heat. Carbon oxides (COx). Sulfur oxides (SOx).

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

<b>Chemical name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Thioglycolic acid 68-11-1	= 73 mg/kg ( Rat )	= 848 mg/kg ( Rabbit )	= 56.7 ppm ( Rat ) 4 h

**Information on toxicological effects**

<b>Chemical name</b>	<b>ACGIH</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>
Thioglycolic acid 68-11-1	Not Established	Not Established	Not Established	Not Established

ATEmix (oral)	102
ATEmix (dermal)	1104 mg/kg
ATEmix (inhalation-dust/mist)	0.7 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity****Unknown Aquatic Toxicity** 72 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Thioglycolic acid 68-11-1	Not Established	Not Established	Not Established

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Thioglycolic acid 68-11-1	Not Established

**13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Should not be released into the environment. Dispose of contents/containers in accordance with local regulations.

**Contaminated packaging**

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Thioglycolic acid 68-11-1	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Thioglycolic acid 68-11-1	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Thioglycolic acid 68-11-1	-

**14. TRANSPORT INFORMATION****DOT**

**Proper shipping name** THIOGLYCOLIC ACID  
**UN-No** 1940  
**Hazard Class** 8  
**Packing group** II

**IATA**

**Proper shipping name** THIOGLYCOLIC ACID  
**UN-No** 1940  
**Hazard Class** 8  
**Packing group** II

**IMDG/IMO**

**Proper shipping name** THIOGLYCOLIC ACID  
**UN-No** 1940  
**Hazard Class** 8  
**Packing group** II

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - 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 %
Thioglycolic acid 68-11-1	Not Established

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### **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
Thioglycolic acid 68-11-1	Not Established	Not Established	Not Established	Not Established

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Thioglycolic acid 68-11-1	-	Not Established	-

### US State Regulations

#### **California Proposition 65**

Chemical name	California Proposition 65
Thioglycolic acid 68-11-1	Not Established

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Thioglycolic acid 68-11-1	X	X	X

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**

<b>NFPA</b>	Health hazard 3	Flammability 1	Instability 0	Physical and Chemical Hazards N/A
<b>HMIS</b>	Health hazard 3	Flammability 1	Stability 2	



Health Hazard	<b>3</b>
Fire Hazard	<b>1</b>
Reactivity	<b>2</b>

**Prepared by** Regulatory Affairs Department  
**Issuing Date** Jun-01-2015  
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**Reason for revision** New US GHS format  
**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**