

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **SULFITE REAGENT A**
Product Code(s) 7327
Recommended Use Laboratory chemicals. Industrial (not for food or food contact use).
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
DANGER!
Emergency Overview

Corrosive

Causes severe skin burns and eye damage

Liquid and mist can cause burns to all body tissue

May be harmful if swallowed, inhaled, or absorbed through skin

Appearance Clear, colorless

Physical State Liquid

Odor Pungent

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 Inhalation, skin contact, and ingestion.

Acute Toxicity
Eyes

Corrosive to the eyes and may cause severe damage including blindness.

Skin

Corrosive. Can cause redness, pain, and severe skin burns. May discolor the skin. Harmful if absorbed through skin.

Inhalation

Corrosive to nose, throat and respiratory tract. Depending on exposure, the effects from inhalation of corrosive mists can vary from mild irritation to serious damage to respiratory tract.

Ingestion

Corrosive. Can burn mouth, throat, stomach, and GI tract.

Chronic Effects

Chronic exposure to corrosive mists or vapors may cause erosion of the teeth. Prolonged contact causes serious tissue damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HCl in water

| Chemical Name | CAS-No | Weight % |
|-------------------|-----------|----------|
| Hydrochloric acid | 7647-01-0 | 10 |
| Water | 7732-18-5 | to 100% |

4. FIRST AID MEASURES

| | |
|-----------------------------------|---|
| General Advice | Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. |
| Eye Contact | Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Call a physician immediately. |
| Skin Contact | Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Excess acid on skin can be neutralized with a 2% solution of sodium bicarbonate in water. Call a physician immediately. |
| 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 plenty of water. Clean mouth with water. Call a physician immediately. 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

| | |
|-------------------------------------|--|
| Flammable Properties | Not flammable. |
| Flash Point | Not applicable |
| Suitable Extinguishing Media | Dry chemical, CO ₂ , water spray or alcohol-resistant foam. |
| Explosion Data | |

Specific Hazards Arising from the Chemical

Contact with most metals causes the formation of explosive and flammable hydrogen gas.

| | | | | |
|-------------|------------------------|-----------------------|--------------------|--|
| NFPA | Health Hazard 3 | Flammability 0 | Stability 0 | Physical and Chemical Hazards - |
| HMIS | Health Hazard 3 | Flammability 0 | Stability 1 | |

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 | Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. 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. |
| 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 |
|--------------------------------|------------|-------------------------------------|--|
| Hydrochloric acid 7647-01-0 | None Known | Ceiling 5 ppm (7mg/m ³) | IDLH: 50 ppm Ceiling: 7 mg/m ³ Ceiling: 5 ppm |
| 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. Neoprene gloves. Rubber gloves.

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 | Clear, colorless | Odor | Pungent |
| Physical State | Liquid | pH | <1 |
| Flash Point | Not applicable | Autoignition Temperature | Not applicable |
| Boiling Point/Range | ~101 °C / 214 °F | Flammability Limits in Air | Not applicable |
| Specific Gravity | 1 (water = 1) | Vapor Pressure | No information available |
| Vapor Density | No information available | | |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under normal conditions of use and storage. |
| Incompatible Products | Strong bases. Metals. Amines. Cyanides. Sulfides. Formaldehyde. |
| Conditions to Avoid | Excessive heat. Incompatible products. Direct sunlight. |
| Hazardous Decomposition Products | Chlorine gas. Hydrogen gas. Hydrogen chloride. |
| Hazardous Reactions | Thermal oxidative decomposition produces toxic chlorine gas and flammable hydrogen gas. May react with metals to produce flammable hydrogen gas. |
| Hazardous Polymerization | Hazardous polymerization does not occur. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------|-------------------|-----------------------|----------------------|
| Hydrochloric acid | 700 mg/kg (Rat) | 5010 mg/kg (Rabbit) | 3124 ppm (Rat) 1 h |
| Water | 90 mL/kg (Rat) | None Known | None Known |

Chronic Toxicity**Chronic Toxicity**

Chronic exposure to corrosive mists or vapors may cause erosion of the teeth. Prolonged contact causes serious tissue damage.

Carcinogenicity

Hydrochloric acid is classified by IARC as Group 3 - not classifiable as to its carcinogenicity to humans.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-------------------|------------|------------|------------|------------|
| Hydrochloric acid | 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 |
|-------------------|--|--|---|
| Hydrochloric acid | None Known | None Known | None Known |
| Water | None Known | None Known | None Known |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Concentrated Hydrochloric acid may be toxic to aquatic life.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Microtox | Daphnia Magna (Water Flea) |
|-------------------|-------------------|--------------------------------------|------------|----------------------------|
| Hydrochloric acid | None Known | LC50= 282 mg/L Gambusia affinis 96 h | None Known | None Known |
| Water | None Known | None Known | None Known | None Known |
| Chemical Name | Log Pow | | | |
| Hydrochloric acid | 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 |
|-------------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Hydrochloric acid - 7647-01-0 | 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 | HYDROCHLORIC ACID SOLUTION |
| Hazard Class | 8 |
| UN-No | 1789 |
| Packing Group | II |
| Reportable Quantity (RQ) | 5000 |

IATA

| | |
|----------------------|----------------------------|
| UN-No | 1789 |
| Proper Shipping Name | HYDROCHLORIC ACID SOLUTION |
| Hazard Class | 8 |
| Packing Group | II |

IMDG/IMO

| | |
|----------------------|----------------------------|
| Proper Shipping Name | HYDROCHLORIC ACID SOLUTION |
| Hazard Class | 8 |
| UN-No | 1789 |
| Packing Group | II |

15. REGULATORY INFORMATION

International Inventories

| Component | TSCA | DSL | EINECS/ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------------------------------|---------|-----|---------------|------|-------|---------------|-------|------|
| Hydrochloric acid 7647-01-0 (10) | T | X | X | X | X | KE-20189 X | 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 contains a chemical or 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 % |
|-------------------|-----------|----------|-------------------------------|
| Hydrochloric acid | 7647-01-0 | 10 | 1.0 |
| 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 contains the following substances which are regulated 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 |
|---------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Hydrochloric acid 7647-01-0 (10) | 5000 lb | None Known | None Known | X |
| Water 7732-18-5 (to 100%) | None Known | None Known | None Known | None Known |

| Chemical Name | CAS-No | Weight % | HAPS data | VOC Chemicals | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|-------------------|-----------|----------|------------|---------------|-------------------------|-------------------------|
| Hydrochloric acid | 7647-01-0 | 10 | Present | 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 |
|-------------------|--------------------------|------------------------------------|
| Hydrochloric acid | 5000 lb | 5000 lb |
| 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 |
|-------------------|-----------|---------------------|
| Hydrochloric acid | 7647-01-0 | None Known |
| Water | 7732-18-5 | None Known |

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------|---------------|------------|--------------|------------|--------------|
| Hydrochloric acid | X | X | X | X | X |
| Water | None Known | None Known | None Known | None Known | None Known |

International Regulations

Mexico - Grade No information available.

| Chemical Name | Carcinogen Status | Exposure Limits |
|-------------------|-------------------|-----------------|
| Hydrochloric acid | None Known | None Known |
| 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 |
|---------------------------------------|---|
| Hydrochloric acid 7647-01-0 (10) | 1 % A D1A E D1B E D1A E |
| Water 7732-18-5 (to 100%) | Uncontrolled product according to WHMIS classification criteria |



16. OTHER INFORMATION

| NFPA | HMIS | PPE | Transport Symbol | | | | | | |
|---------------|---|---------------|------------------|-------------|---|------------|---|--|--|
| | <table border="1"> <tr> <td>Health Hazard</td> <td>3</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table> | Health Hazard | 3 | Fire Hazard | 0 | Reactivity | 1 | | |
| Health Hazard | 3 | | | | | | | | |
| Fire Hazard | 0 | | | | | | | | |
| Reactivity | 1 | | | | | | | | |

Prepared By Regulatory Affairs Department
 Issuing Date 2/11/2013
 Revision Date -
 Revision Note Initial Release.
 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