



Issuing Date 5/10/2010

Revision date 6/10/2013

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name HYDROCHLORIC ACID 1.0N
Product Code(s) 6130
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
Can cause severe irritation or burns to every area of contact
HARMFUL IF SWALLOWED
appearance Clear, colorless
Physical state liquid
Odor pungent

OSHA Regulatory Status This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold, but considers exposure to the chemical if user has direct eye and skin contact with the chemical.

Potential health effects
Principle Routes of Exposure Skin Contact, Ingestion.

Acute toxicity
EYES May cause burns. May cause irreversible damage to eyes.
skin Contact causes severe skin irritation and possible burns. Can cause redness, pain, and severe skin burns. HARMFUL IF ABSORBED THROUGH SKIN.
inhalation Irritating to mucous membranes. Inhalation of vapors can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract; in severe cases, pulmonary edema, circulatory failure, and death.
Ingestion HARMFUL IF SWALLOWED. Can burn mouth, throat, stomach, and GI tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Chronic effects Chronic exposure to corrosive mists or vapors may cause erosion of the teeth.

Aggravated Medical Conditions Hypersensitivity may occur in those with preexisting skin disorders. Respiratory disorders. Preexisting eye disorders.

3. Composition/information on Ingredients

Formula HCl in water

| Chemical name | CAS-No | Weight % |
|-------------------|-----------|----------|
| Hydrochloric acid | 7647-01-0 | <4 |
| Water | 7732-18-5 | to 100% |

4. First aid measures

| | |
|-----------------------------------|---|
| General advice | Do not get in eyes, on skin, or on clothing. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician. |
| 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. Consult a physician. 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 | Water spray. Water. |

| | | | | |
|-------------|------------------------|-----------------------|--------------------|--|
| 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 | 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. 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. |
|-----------------|---|

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.

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 | 0.1 |
| flash point | Not Applicable | Boiling Point/Range | 100 °C / 212 °F |

| | | | |
|-------------------------|-------------------------------|-----------------------|-------------------------------|
| Specific gravity | ~1 | vapor pressure | Essentially the same as water |
| vapor density | Essentially the same as water | | |

10. Stability and Reactivity

stability Stable under normal conditions of use and storage.

Incompatible Products Strong bases. Metals. Cyanides. Sulfides. Formaldehyde.

Conditions to avoid Excessive heat. Incompatible products. Direct sunlight.

Hazardous decomposition products Chlorine gas. Hydrogen gas. Hydrogen chloride.

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.

| 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 III
Reportable Quantity (RQ) 5000

IATA

UN-No 1789
Proper shipping name HYDROCHLORIC ACID SOLUTION
Hazard Class 8
Packing group III

IMDG/IMO

Proper shipping name HYDROCHLORIC ACID SOLUTION
Hazard Class 8
UN-No 1789
Packing group III

15. Regulatory information

International Inventories

| Component | TSCA | DSL | EINECS/ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-------------------------------------|---------|-----|---------------|------|-------|---------------|-------|------|
| Hydrochloric acid 7647-01-0 (<4) | 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 | <4 | 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 (<4) | 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 | <4 | 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 (<4) | 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 style="text-align: center;">2</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">1</td> </tr> </table> | Health Hazard | 2 | Fire Hazard | 0 | Reactivity | 1 | | |
| Health Hazard | 2 | | | | | | | | |
| Fire Hazard | 0 | | | | | | | | |
| Reactivity | 1 | | | | | | | | |

| | |
|---|---|
| <p>Prepared by Issuing Date Revision date Revision note</p> | <p>Regulatory Affairs Department 5/10/2010 10-Jun-2013 MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request.</p> |
|---|---|

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