

Issuing Date 11/1/2011

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HYDROCHLORIC ACID, 0.2N
Product Code(s) 2818
Recommended Use Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.
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
CAUTION!
Emergency Overview

Corrosive

 Irritating to eyes, respiratory system and skin
 May cause burns to eyes, skin and mucous membranes

Harmful if swallowed

Appearance Clear, colorless

Physical State Liquid

Odor Odorless

Potential Health Effects
Principle Routes of Exposure Eye contact, Skin contact, and, Ingestion.

Acute Toxicity
Eyes

Liquid may cause severe irritation and possible eye damage.

Skin

Contact causes severe skin irritation and possible burns. Harmful if absorbed through skin.

Inhalation

Irritating to mucous membranes. Inhalation of corrosive mist may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate.

Ingestion

Harmful if swallowed. Can burn mouth, throat, stomach, and GI tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects
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	<0.9
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. Wash skin with soap and water. Consult a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.

Ingestion DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water. Consult a physician.

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 a fire hazard.

Flash Point Not applicable

Suitable Extinguishing Media Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Explosion Data				Physical and Chemical Hazards -
NFPA	Health Hazard 1	Flammability 0	Stability 0	
HMIS	Health Hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to Section 8. Use personal protective equipment. Avoid contact with skin, eyes and inhalation of vapors.

Methods for Containment Absorb/Cover spill with sodium bicarbonate or sodium carbonate to neutralize, then place in a chemical waste container for later disposal. Dispose according to local regulations, if permitted dissolve in water and rinse to drain.

Methods for Cleaning Up 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 away from strong bases or metals. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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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

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment**Eye/Face Protection**

Safety glasses with side-shields. If splashes are likely to occur, wear: Face-shield.

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	Odorless
Physical State	Liquid	pH	1
Flash Point	Not applicable	Boiling Point/Range	100° - 103°C (212° - 217.4°F)

Vapor Pressure	No data available	Vapor Density	No data available
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10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Strong bases. Metals. Strong oxidizing agents.

Conditions to Avoid Excessive heat. Incompatible products.

Hazardous Decomposition Products Hazardous decomposition products formed under fire conditions - . Hydrogen chloride 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

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

Endocrine Disruptor Information

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 (<0.9)	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	<0.9	1.0
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
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 (<0.9)	5000 lb	None Known	None Known	X
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 contains the following HAPs: .

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrochloric acid	7647-01-0	<0.9	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

U.S. State Right-to-Know Regulations

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

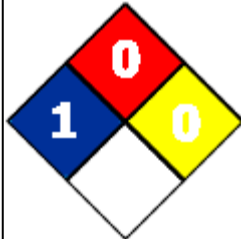


Chemical Name	Carcinogen Status	Exposure Limits
Hydrochloric acid	None Known	None Known
Water	None Known	None Known

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 (<0.9%)	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;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

Prepared By: Regulatory Affairs Department

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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