



LaMotte

7516-DR-02

Caustic Test Kit

Material Safety Data Sheet

Issuing Date 9/13/2011

Revision Date 5/2/2012

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name PHENOLPHTHALEIN INDICATOR 1%, CHLORIDE C, OR ALKALINITY RGT.

Product Code(s) 2246

Synonyms none

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

POISON! DANGER!

Emergency Overview

Flammable liquid and vapor
Harmful by inhalation, in contact with skin and if swallowed
May be fatal or cause blindness if swallowed
Affects central nervous system
May cause skin and eye irritation

Appearance Clear, colorless

Physical State Liquid

Odor Alcohol

Potential Health Effects

Principle Routes of Exposure Skin contact, Ingestion, and, Inhalation.

Acute Toxicity

Eyes

May cause irritation.

Skin

Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

Inhalation

May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Ingestion

May cause drowsiness and dizziness. May be fatal or cause blindness if swallowed. May cause central nervous system depression.

Chronic Effects

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Prolonged skin contact may cause skin irritation and/or dermatitis.

Environmental Hazard

Harmful to aquatic organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Phenolphthalein	77-09-8	<1
Methyl alcohol	67-56-1	3
Ethyl alcohol	64-17-5	58
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing. Consult a physician.
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 plenty of water for at least 15 minutes. 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	Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Call a physician immediately.
Protection of First-aiders	Use personal protective equipment. 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		Flammable.		
Flash Point		16°C (60.8°F) CC for SDA (3A) Ethyl Alcohol		
Suitable Extinguishing Media		Water spray, dry chemical, carbon dioxide (CO ₂), or foam.		
Explosion Data				
NFPA	Health Hazard 1	Flammability 3	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 3	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8. Ensure adequate ventilation. Remove all sources of ignition.
Methods for Containment	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.
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.
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Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from heat and sources of ignition. Separate from acids. Keep away from oxidizing agents. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phenolphthalein 77-09-8	None Known	None Known	None Known
Methyl alcohol 67-56-1	250	TWA: 200 ppm TWA: 260 mg/m ³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
Ethyl alcohol 64-17-5	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
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 Nitrile rubber. Gloves & Lab Coat.
Respiratory Protection Use only with adequate ventilation.

Hygiene Measures Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless	Odor	Alcohol
Physical State	Liquid	pH	Not applicable
Flash Point	16°C (60.8°F) CC for SDA (3A) Ethyl Alcohol	Boiling Point/Range	78.5°C (173.3°F) for SDA (3A) Ethyl Alcohol
Explosion Limits			
Upper	19% Ethanol		
Lower	3.3% Ethanol		
Vapor Pressure	48 mmHg @ 20 °C for SDA (3A) Ethyl Alcohol	Vapor Density	1.6 @ 20°C (Air=1) for SDA (3A) Ethyl Alcohol

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Nitric acid. Strong oxidizing agents.

Conditions to Avoid Heat, flames and sparks.

Hazardous Decomposition Products Carbon oxides (COx).

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phenolphthalein	None Known	None Known	None Known
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h
Ethyl alcohol	1501 mg/kg (Rat)	None Known	124.7 mg/L (Rat) 4 h
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Prolonged skin contact may cause skin irritation and/or dermatitis.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Phenolphthalein	None Known	Group 2B	Reasonably Anticipated	X
Methyl alcohol	None Known	None Known	None Known	None Known
Ethyl alcohol	None Known	None Known	Known	None Known
Water	None Known	None Known	None Known	None Known

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Phenolphthalein	Group III Chemical	None Known	None Known
Methyl alcohol	None Known	None Known	None Known
Ethyl alcohol	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Phenolphthalein	None Known	None Known	None Known	None Known
Methyl alcohol	None Known	LC50 13500 - 17600 mg/L Lepomis macrochirus 96 h LC50 18 - 20 mL/L Oncorhynchus mykiss 96 h LC50 19500 - 20700 mg/L Oncorhynchus mykiss 96 h LC50= 28200 mg/L Pimephales promelas 96 h LC50> 100 mg/L Pimephales promelas 96 h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	None Known
Ethyl alcohol	None Known	LC50= 12900 mg/L Oncorhynchus mykiss 96 h LC50= 14.2 mg/L Pimephales promelas 96 h	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	EC50 = 10800 mg/L 24 h EC50 = 9268 mg/L 48 h
Water	None Known	None Known	None Known	None Known

Persistence and Degradability

Ethanol: When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may evaporate to a moderate extent. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to be readily removed from the atmosphere by dry and wet deposition. When released into the air, this material is expected to have a half-life between 1 and 10 days.

Chemical Name	Log Pow
Phenolphthalein	None Known
Methyl alcohol	= -0.77
Ethyl alcohol	= -0.32
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Phenolphthalein - 77-09-8	None Known	None Known	None Known	None Known
Methyl alcohol - 67-56-1	None Known	None Known	None Known	None Known
Ethyl alcohol - 64-17-5	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

Chemical Name	California Hazardous Waste Status
Ethyl alcohol	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
UN-No 1170
Packing Group II

IATA

UN-No 1170
Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
Packing Group II

IMDG/IMO

Proper Shipping Name ETHANOL SOLUTION (Ethyl Alcohol Solution)
Hazard Class 3
UN-No 1170
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Phenolphthalein 77-09-8 (<1)	Present	X	X	9-1152	X	KE-03234	X	X
Methyl alcohol 67-56-1 (3)	Present	X	X	(2)-201	X	KECL	X	X
Ethyl alcohol 64-17-5 (58)	Present	X	X	2-202	X	KE-13217	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 %
Phenolphthalein	77-09-8	<1	None Known
Methyl alcohol	67-56-1	3	1.0
Ethyl alcohol	64-17-5	58	None Known
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

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).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenolphthalein 77-09-8 (<1)	None Known	None Known	None Known	None Known
Methyl alcohol 67-56-1 (3)	None Known	None Known	None Known	None Known
Ethyl alcohol 64-17-5 (58)	None Known	None Known	None Known	None Known

Water 7732-18-5 (to 100%)	None Known	None Known	None Known	None Known
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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
Phenolphthalein	77-09-8	<1	None Known	Group III	None Known	None Known
Methyl alcohol	67-56-1	3	Present	Group IV	None Known	None Known
Ethyl alcohol	64-17-5	58	None Known	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
Phenolphthalein	None Known	None Known
Methyl alcohol	5000 lb	None Known
Ethyl alcohol	None Known	None Known
Water	None Known	None Known

U.S. State Regulations

California Proposition 65

WARNING! This product contains chemicals know to the State of California to cause cancer and birth defects or other reproductive harm Ethyl alcohol is only considered a Proposition 65 cancer hazard and developmental hazard when it is ingested as an alcoholic beverage

Chemical Name	CAS-No	California Prop. 65
Phenolphthalein	77-09-8	Carcinogen
Methyl alcohol	67-56-1	Developmental
Ethyl alcohol	64-17-5	Carcinogen
Water	7732-18-5	None Known

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Phenolphthalein	None Known	None Known	None Known	None Known	None Known
Methyl alcohol	X	X	X	X	X
Ethyl alcohol	X	X	X	None Known	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Phenolphthalein	None Known	None Known
Methyl alcohol	None Known	Mexico: TWA 200 ppm Mexico: TWA 260 mg/m ³
Ethyl alcohol	None Known	Mexico: TWA= 1000 ppm Mexico: TWA= 1900 mg/m ³
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
Phenolphthalein 77-09-8 (<1)	Not determined
Methyl alcohol 67-56-1 (3)	1 % B2 D1B D2A D2B
Ethyl alcohol 64-17-5 (58)	0.1 % B2 D2B
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria



Chemical Name	NPRI
Methyl alcohol	X

Legend
X - Listed

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table><tr><td>HEALTH</td><td>2</td></tr><tr><td>FLAMMABILITY</td><td>3</td></tr><tr><td>REACTIVITY</td><td>0</td></tr></table>	HEALTH	2	FLAMMABILITY	3	REACTIVITY	0		
HEALTH	2								
FLAMMABILITY	3								
REACTIVITY	0								

Prepared By Regulatory Affairs Department
 Issuing Date 9/13/2011
 Revision Date 02-May-2012
 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



Material Safety Data Sheet

Issuing Date 5/13/2010

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Hydrochloric Acid 2.5N

Product Code(s) 6251

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

May be fatal if inhaled, or swallowed

Appearance Clear, colorless solution

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

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

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, and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

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

Aggravated Medical Conditions

Skin disorders. Respiratory disorders. Preexisting eye disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HCl in water

Chemical Name	CAS-No	Weight %
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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. 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 metals may evolve flammable hydrogen gas.

<u>NFPA</u>	Health Hazard 3	Flammability 0	Stability 0	Physical and Chemical Hazards -
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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	Cover spill with alkaline material (sodium bicarbonate) to neutralize, 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 Established	None Established	IDLH: 50 ppm Ceiling: 7 mg/m ³ Ceiling: 5 ppm
Water 7732-18-5	None Established	None Established	None Established

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 solution	Odor	Pungent
Physical State	Liquid	pH	<1
Flash Point	Not applicable	Autoignition Temperature	Not applicable
Boiling Point/Range	~100 °C / 212 °F	Flammability Limits in Air	Not applicable
Specific Gravity	1 (water = 1)	Vapor Pressure	Essentially the same as water
Vapor Density	Essentially the same as water		

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
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 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 Established	None Established

Chronic Toxicity

Chronic Toxicity Chronic exposure to corrosive vapors may cause erosion of the teeth.

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 Established	None Established	None Established	None Established
Water	None Established	None Established	None Established	None Established

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Hydrochloric acid	None Established	None Established	None Established
Water	None Established	None Established	None Established

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 Established	LC50= 282 mg/L Gambusia affinis 96 h	None Established	None Established
Water	None Established	None Established	None Established	None Established

Chemical Name	Log Pow
Hydrochloric acid	None Established
Water	None Established

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
Hydrochloric acid - 7647-01-0
Water - 7732-18-5

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Hydrochloric acid - 7647-01-0	None Established	None Established	None Established	None Established
Water - 7732-18-5	None Established	None Established	None Established	None Established

Chemical Name	California Hazardous Waste Status
Hydrochloric acid	Toxic; Corrosive; Reactive

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 Established

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 Established	None Established	X
Water 7732-18-5 (to 100%)	None Established	None Established	None Established	None Established

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 Established	None Established	None Established
Water	7732-18-5	to 100%	None Established	None Established	None Established	None Established

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Hydrochloric acid	5000 lb	5000 lb

Water	None Established	None Established
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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 Established
Water	7732-18-5	None Established

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrochloric acid	X	X	X	X	X
Water	None Established	None Established	None Established	None Established	None Established

International Regulations**Mexico - Grade**

No information available.

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

Canada

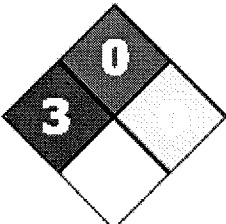

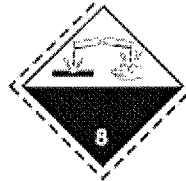
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

E Corrosive material

D1A Very toxic materials

**16. OTHER INFORMATION**

NFPA	HMIS	PPE	Transport Symbol						
	<table><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 5/13/2010

Revision Date

Revision Note Initial Release.

Disclaimer

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