Product Number 710

Issuing Date No data available

Revision Date 08-Nov-2013

Revision Number 1

SAFETY DATA SHEET



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

Product identifier	
Product Name	Muriatic Acid
Other means of identification	
UN-No.	UN1789
Synonyms	None
Recommended use of the chemical	and restrictions on use
Recommended Use	Stains
Uses advised against	No information available
Details of the supplier of the safety	data sheet
Supplier Name Supplier Address	Sunnyside Corporation 225 Carpenter Avenue Wheeling IL 60090 US
Supplier Phone Number	Phone:8003238611 Fax:8475419043
Supplier Email Emergency telephone number	sscontact@sunnysidecorp.com Chem Trec 8004249300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements



Precautionary Statements - Prevention

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

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Eyes

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

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician

Ingestion

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

Precautionary Statements - Storage

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

Precautionary Statements - Disposal Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable



Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

Other information

No information available

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Hydrogen chloride	7647-01-0	15 - 40	*
*The exact percentage (concentration) of composition has been withheld as a trade secret			

4. FIRST AID MEASURES

First aid measures

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Ingestion	Do NOT induce vomiting. Rinse mouth. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. 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.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. **Effects**

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Note: Most foams will react with the material and release corrosive/toxic gases.

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes.

Uniform Fire Code	Corrosive: Acid-Liquid
	Toxic: Liquid

Hazardous Combustion Products Hydrogen chloride.

Explosion Data Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wear protective gloves/protective clothing and eye/face protection. Do not touch damaged packages or spilled material. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
Environmental Precautions	
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods and material for containme	ent and cleaning up
Methods for Containment	Dike far ahead of spill to collect runoff water.
Methods for cleaning up	Dam up. Soak up with inert absorbent material. Use personal protective equipment as required. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Use personal protection equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling.		
Conditions for safe storage, includ	ling any incompatibilities		
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.		
Incompatible Products	Acids. Bases. Oxidizing agent.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH		
Hydrogen chloride 7647-01-0	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³		
	ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health				
Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters				
Appropriate engineering controls	<u>5</u>				
Engineering Measures	Showers Eyewash stations Ventilation systems				
Individual protection measures, such as personal protective equipment					
Eye/Face Protection	Tight sealing safety goggles. F	ace protection shield.			
Skin and Body Protection	Wear protective gloves and protective clothing.				
Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.				
Hygiene Measures	Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.				

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State Liquid



Appearance	Clear to light yellow	Odor	Pungent
Color	No information available	Odor Threshold	No information available
Property	Values	Remarks/ Method	
рН	2	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	5001 C / 9034 F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible in water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/wa	aterNo data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Explosive properties	No data available		
Oxidizing Properties	No data available		
Other Information			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution			

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

Incompatible materials

Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products

Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION



Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases 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.
Eye Contact	Specific test data for the substance or mixture is not available. (based on components). Causes serious eye damage.
Skin Contact	Specific test data for the substance or mixture is not available. Causes severe burns.
Ingestion	Specific test data for the substance or mixture is not available. Toxic if swallowed. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen chloride 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat)1 h

Information on toxicological effects

Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing. Symptoms Difficulty in breathing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen chloride		Group 3		
7647-01-0				

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen.
Target Organ Effects	Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Systemic Toxicity. Teeth.
Aspiration Hazard	No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,842.00 mg/kg ATEmix (inhalation-dust/mist) 1.32 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Hydrogen chloride 7647-01-0		96h LC50: = 282 mg/L (Gambusia affinis)		

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated Packaging	Dispose of contents/containers in accordance with local regulations.
US EPA Waste Number	D002

California Hazardous Waste Codes 791

14. TRANSPORT INFORMATION

DOT_ UN-No.	UN1789
Proper Shipping Name Prozerd Class Packing Group Description Emergency Response Guide Number	HYDROCHLORIC ACID SOLUTION 8 II UN1789, HYDROCHLORIC ACID SOLUTION, 8, II 157
<u>TDG</u> UN-No.	UN1789



Proper Shipping Name Hazard Class Packing Group	HYDROCHLORIC ACID SOLUTION 8 II
Description	UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
MEX UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
ICAO UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
IATA UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
IMDG/IMO UN-No. Proper Shipping Name Hazard Class Packing Group EmS No. Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II F-A, S-B UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
<u>RID</u> UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II C1 UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
ADR UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Description	UN1789 HYDROCHLORIC ACID SOLUTION 8 II C1 UN1789, HYDROCHLORIC ACID SOLUTION, 8, II
ADN UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Special Provisions Description Hazard Labels Limited Quantity	UN1789 HYDROCHLORIC ACID SOLUTION 8 II C1 520 UN1789, HYDROCHLORIC ACID SOLUTION, 8, II 8 1 L

15. REGULATORY INFORMATION

International Inventories

TSCA DSL Complies All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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 %
Hydrogen chloride - 7647-01-0	7647-01-0	15 - 40	1.0
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		

CWA (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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen chloride 7647-01-0	5000 lb			Х

<u>CERCLA</u>

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hydrogen chloride	5000 lb	5000 lb	RQ 5000 lb final RQ
7647-01-0			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Hydrogen chloride 7647-01-0	Х	Х	Х	Х	Х

International Regulations

Mexico National occupational exposure limits



Component	Carcinogen Status	Exposure Limits
Hydrogen chloride		Mexico: Ceiling 5 ppm
7647-01-0(15-40)		Mexico: Ceiling 7 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

E - Corrosive material D1A - Very toxic materials



16. OTHER INFORMATION

NFPA HMIS	Health Hazards 3 Health Hazards 3	Flammability 0 Flammability 0	Instability 1 Physical Hazard 1	Physical and Chemical Hazards Personal Protection X
Prepared By				
Revision Date Revision Note	08-Nov-2013 No information available			

Disclaimer

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End of Safety Data Sheet

