HASA MURIATIC ACID

Safety Data Sheet

Emergency 24 Hour Telephone: **CHEMTREC 800.424.9300**

Corporate Headquarters: Hasa Inc.
P. O. Box 802736
Santa Clarita, CA 91355
Telephone • 661.259.5848
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SECTION 1: IDENTIFICATION			
1.1	**Product Identification:**		
	1.1.1	**Product Name:**	HASA MURIATIC ACID
	1.1.2	**CAS #** (Chemical Abstracts Service):	7647-01-0
	1.1.3	**RTECS** (Registry of Toxic Effects of Chemical Substances):	MW4025000
	1.1.4	**EINECS** (European Inventory of Existing Chemical Substances):	231-595-7
	1.1.5	**Synonym:**	Hydrochloric Acid, Spirits of Salt
	1.1.6	**Chemical Name:**	Hydrochloric Acid
	1.1.7	**Chemical Formula:**	HCl
1.2	**Recommended Uses:**		Household cleaning, swimming pool water pH control and neutralization.
1.3	**Company Identification:**		Hasa Inc. P.O. Box 802736 Santa Clarita, CA 91355
1.4	**Emergency Telephone Number:**		**CHEMTREC:** 1-800-424-9300 (24 hour)
1.5	**Non-Emergency Assistance:**		661-259-5848 (8 AM – 5 PM PST / PDT)

SECTION 2: HAZARD(S) IDENTIFICATION

Health Hazard	Acute Toxicity (Oral):	Category 4
	Skin corrosion / irritation:	Category 1
	Serious eye damage / irritation	Category 1
	Specific Target Organ Toxicity (Single exposure)	Category 3 (respiratory tract irritation)
Physical Hazard	Corrosive to metals.	Category 1
Symbols		
Signal Word	**DANGER**	
Hazard Statement	Causes severe skin burns & eye damage. Harmful if swallowed. May cause respiratory irritation. Maybe corrosive to metals.	
Precautionary Statement	**Prevention**	
	Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Keep only in original container.	
	Response	
	If swallowed: Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.	
	Storage	
	Store locked up. Store in a corrosive resistant container. Store in a well-ventilated place. Keep container tightly closed.	
	Disposal	
	Dispose of container/contents in accordance with local, regional, national, international regulations as specified.	

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

	Ingredient	CAS No.	Weight % (Approx.)
3.1	Hydrochloric Acid	7647-01-0	31.45%
3.2	Water	7789-20-0	68.55%

SECTION 4: FIRST-AID MEASURES

4.1.	**IF IN EYES**	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
4.2.	**IF ON SKIN OR CLOTHING**	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
4.3.	**IF INHALED**	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
4.4.	**IF SWALLOWED**	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE-FIGHTING MEASURES

5.1	**Products of Combustion:**		Hydrogen and chlorine
5.2	**Fire Hazards in Presence of Various Substances:**		Reacts with many metals to liberate hydrogen gas which can form explosive mixtures with air.
5.3	**Explosion Hazards:**		Not sensitive.
5.4	**Fire Fighting Media and Instructions:**		
	5.4.1	**Extinguishing Media:**	Use extinguishing measures appropriate to local circumstances and the surrounding environment.
	5.4.2	**Small Fires:**	Use carbon dioxide, dry chemical, dry sand, alcohol-resistant foam or water spray.
	5.4.3	**Large Fires:**	Water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do it without risk. Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material.
5.5	**Fire Involving Tank Cars / Trailer Loads:**		Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES		
6.1	**Small Spill:**	Gather up with a squeegee and place in pool and spa. If this is not possible, absorb with sand, diatomaceous earth or similar products and securely bag, and place in trash for collection.
6.2	**Large Spill:**	Steps to be taken in case material is released or spilled: Spills or discharges into the environment involving large quantities of Hydrochloric Acid should be controlled and cleaned-up according to a pre-determined, affirmative written Spill Prevention and Control Program. Refer to Section 15 for spill/release reporting information. Spills should be handled immediately by neutralization and dilution of the spilled product by the use of Soda Ash (Sodium Carbonate), Lime (Calcium Hydroxide), or Limestone (Calcium Carbonate) with large amounts of water. For an interior (inside a closed space) spill be aware that the use of Soda Ash, Lime and Limestone will evolve heat and carbon dioxide and that ample ventilation must be provided. If possible without personal risk, stop leak. Try to prevent the materials from entering drains, waterways, or sewers and dispose of in accordance with local regulations. Rinse exposed area with dilute sodium carbonate solution.

SECTION 7: HANDLING AND STORAGE		
7.1	**Handling:**	Keep away from skins and eyes. Do not inhale or swallow. Do not mix with chlorine type bleaches or other household chemicals. Whenever handling muriatic acid, wear protective clothing (goggles, old clothing and rubber gloves). Remove protective clothing and wash before reuse.
7.2	**Storage and Disposal:**	Store muriatic acid in a clean, dry place in the upright position. Keep out of reach of children, pets and other animals. Rinse empty container thoroughly before discarding.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION			
8.1	**Engineering Controls:**		Local exhaust to maintain levels below Permissible Exposure Limit (PEL).
8.2	**Personal Protection:**		When necessary, wear splash goggles or safety glasses and gloves.
8.3	**Personal Protection in case of a Large Spill:**		Wear splash goggles or safety glasses and gloves. If natural ventilation is insufficient, wear a NIOSH approved respirator.
8.4	**Exposure Guidelines:**		
	8.4.1	**ACGIH** (American Conference of Governmental and Industrial Hygienists) **TLV** (Threshold Limit Value)	5 ppm (7 mg/m^3) Ceiling
	8.4.2	**PEL** (OSHA Permissible Exposure Limit)	5 ppm (7 mg/m^3) Ceiling Limit
	8.4.3	**IDLH** (NIOSH Immediate Danger to Life & Health)	50 ppm (75 mg/m^3)
	8.4.4	**AIHA** (American Industrial Hygiene Association)	**ERPG – 1** (T*he maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor.)*: **3 ppm** **ERPG – 2** (*The maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms that could impair an individual's ability to take protective action.):* **20 ppm** **ERPG – 3** (*The maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to one hour without experiencing or developing life-threatening health effects.)*: **150 ppm**

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
9.1	**Appearance:**	Colorless liquid.
9.2	**Odor:**	Irritating and pungent odor.
9.3	**Odor Threshold:**	4.7 ppm @ at 25 ℃
9.4	**pH:**	<1.0
9.5	**Melting Point:**	Not applicable.
9.6	**Freezing point:**	-46.9℃ (-52.5℉)
9.7	**Boiling Point & Boiling Range:**	85℃ (185℉)
9.8	**Flash Point:**	No information available.
9.9	**Evaporation Rate:**	No information available.
9.10	**Flammability (solid, gas):**	Nonflammable and noncombustible.
9.11	**Upper / Lower Flammability or Explosive Limits:**	Not applicable.
9.12	**Vapor Pressure:**	40 mm Hg @ 30°C (86℉)
9.13	**Vapor Density:**	No information available.
9.14	**Relative Density (Specific Gravity):**	1.16 @ 15.5℃ (60℉)
9.15	**Solubility in Water:**	Mixes with water in all concentrations.
9.16	**Partition Coefficient: (n-octanol / water):**	Not applicable.
9.17	**Auto-ignition Temperature:**	Not applicable.
9.18	**Decomposition Temperature:**	85°C. Rate of decomposition increases with heat.
9.19	**Molecular Weight:**	36.46 g/mole
9.20	**Viscosity:**	1.55 centipoises @ 30°C (86℉)

SECTION 10: STABILITY AND REACTIVITY		
10.1	**Stability:**	Stable under normal conditions of storage, handling, and use.
10.2	**Instability Temperature:**	85°C. Rate of decomposition increases with heat.
10.3	**Conditions of Instability:**	High heat, ultraviolet light.
10.4	**Incompatibility with Various Substances:**	Oxidizing agents, acids, nitrogen containing organic, metals, iron, copper, nickel, cobalt, organic materials, and ammonia. Corrosive to most metals with evolution of hydrogen gas, which may form explosive mixtures with air.
10.5	**Special Remarks on Reactivity:**	Rate of decomposition increases with heat.
10.6	**Hazardous Polymerization:**	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION		
11.1	**Routes of Entry:**	Eyes, skin, ingestion.
11.2	**Eye damage & skin corrosion:**	Causes eye burns. Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.
11.3	**Acute Oral Toxicity** (LD_{50})**:**	NIOSH: 900 mg/kg (rabbit)
11.4	**Acute Inhalation Toxicity** (LC_{50})**:**	3124 mg/l, 1 Hour (rat)
11.5	**Toxic Effects on Humans:**	Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.
11.6	**Carcinogenic [Cancer Potential] Information:**	
	NTP (National Toxicological Program 6th Annual Report on Carcinogens):	Not Listed.
	IARC (International Agency for Research on Cancer Monographs, V. 1-100):	Not Listed.
	Proposition 65, California only: (Safe Drinking Water and Toxic Enforcement Act of 1986)**:**	Not Listed.
11.7	**Mutagenic Effects:**	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
11.8	**Signs and Symptoms of Exposure:**	Exposure to hydrochloric acid may cause severe burns at the contact points.
11.9	**Medical Conditions Generally Aggravated by Exposure:**	Exposure to fumes may aggravate dermatitis and breathing disorders.
11.10	**Health Hazards (Acute and Chronic):**	Hydrogen Chloride, both as a gas and in a solution as Hydrochloric Acid, is a corrosive substance and can cause severe and painful burns on contact with any part of the body or if taken internally. The mucous membranes of the eyes and the upper respiratory tract are especially susceptible to the irritating effects of high atmospheric concentrations of Hydrogen Chloride. The gas or vapor is so penetrating and pungent that when high concentrations do occur, those exposed should immediately leave the contaminated area.

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Ecotoxicity General:**	This product is toxic to fish and aquatic organisms. Do not contaminate water containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.
12.2	**Ecotoxicological Information:**	**LC_{50}** Shrimp 100 to 330 ppm/48 hr (salt water) **LC_{50}** Mosquito Fish 282 mg/L (24 to 96 hours) **LC_{50}** Green crabs 100 mg/L (96 hr produced no stress effects) **LC_{50}** Gold fish 180 mg/L (96 hours) Aquatic Hazard Concern Level : moderate
12.3	**Persistence and Degradation:**	When hydrochloric acid is spilled onto soil, it will begin to infiltrate. The presence of water in the soil will influence the rate of chemical movement in the soil. During transport through the soil, hydrochloric acid will dissolve some of the soil material, in particular those of a carbonate base. The acid will be expected to remain for transport down toward the ground water table. Hydrogen chloride in water dissociates almost completely, with the hydrogen ion captured by the water molecules to form the hydronium ion.
12.4	**Products of Biodegradation:**	Not pertinent.

SECTION 13: DISPOSAL CONSIDERATIONS

Do not contaminate food or feed by storage, disposal, or cleaning of equipment. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination system (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Dispose of in accordance with all applicable local, county, State, and Federal regulations.

SECTION 14: TRANSPORT INFORMATION		
14.1	**Shipping Name:**	Hydrochloric Acid
14.2	**Hazard Class / Division:**	8
14.3	**Identification No.:**	UN 1789
14.4	**Packing Group:**	PG II
14.5	**Reportable Quantity (RQ):**	5,000 lb (1643 gallons)
14.6	**DOT Special Permit 6614:**	Hydrochloric acid may be shipped in deposit 1 gallon polyethylene bottles secured 4 per case in a plastic crate in accordance with DOT-SP-6614. In these cases, the special permit number "DOT-SP-6614" is included in the shipping description. The shipping description for return of empty deposit bottles and crates is "RESIDUE: LAST CONTAINED UN1789, HYDROCHLORIC ACID, 8, PGII, DOT-SP 6614".
14.7	**Deposit Pails, Carboys and Drums:**	The shipping description for return of empty deposit pails, carboys, and drum is "RESIDUE: LAST CONTAINED UN1789, HYDROCHLORIC ACID, 8, PGII".
14.8	**Materials of Trade (MOT) Exceptions.** Certain hazardous materials transported in small quantities as part of a business are subject to less regulation, because of the limited hazard they pose. These materials are known as Materials of Trade. The regulations that apply to MOTs are found in 49 CFR § 173.6.	
This information is not intended to convey all specific regulatory or operational requirements / information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.		

SECTION 15: REGULATORY INFORMATION

15.1	**U.S. Regulations:**		
	15.1.1	**OSHA HAZCOM** (Hazard Communication)	This material is considered hazardous under the HAZCOM standard (29 CFR 1910.1200).
	15.1.2	**OSHA PSM** (Process Safety Management)**:**	Not regulated under PSM standard (29 CFR 1910.119).
	15.1.3	**EPA EPCRA** (EPA Emergency Planning and Community Right-to-know Act)**:**	Not listed on Extremely Hazardous Substances and Their Threshold Planning Quantities. (Appendix A to 40 CFR Part 355)
	15.1.4	**EPA TSCA** (Toxic Substance Control Act)**:**	All components are listed or exempted. TSCA 12(b): This product is not subject to export notification.
	15.1.5	**EPA CERCLA** (Comprehensive Environmental Response, Compensation, and Liability Act):	Reportable Quantity (RQ) under CERCLA: 5000 lbs. (1643 gallons).
	15.1.6	**EPA FIFRA** (Federal Insecticide, Fungicide, Fungicide, and Rodenticide Act):	Not regulated under FIFRA standard.
	15.1.7	**EPA RMP** (Risk Management Plan):	Not regulated under RMP. (40 CFR 68.130)
15.2	**State of California Regulations:**		
	15.2.1	**CDPR** (California Department of Pesticide Regulation):	Registration No: 10897-50008-AA (spray adjuvant)
	15.2.2	**CalARP** (California Accidental Release Prevention):	Not regulated.
15.3	**Canada Regulations:**		
	15.3.1	**WHMIS** (Workplace Hazardous Materials Information System):	WHMIS classification: D1A - Poisonous and infectious material - Immediate and serious effects - Very toxic E - Corrosive Materials
	15.3.2	**DSL** (Domestic Substances List):	All components of this product are on the DSL.
15.4	**International Inventory:**		
	15.4.1	**AICS** (Australian Inventory of Chemical Substances):	On inventory or in compliance with inventory.
	15.4.2	**KECI** (Korean Existing Chemicals Inventory):	On inventory or in compliance with inventory.
	15.4.3	**PICCS** (Philippine Inventory of Chemicals and Chemical Substances)**:**	On inventory or in compliance with inventory.
	15.4.4	**IECSC** (Inventory of Existing Chemical Substances in China):	On inventory or in compliance with inventory.
	15.4.5	**NZIoC** (New Zealand Inventory of Chemicals):	On inventory or in compliance with inventory.

SECTION 16: OTHER INFORMATION

16.1	**HMIS III** (Hazardous Materials Identification System):		
	16.1.1	**HEALTH**	**3**
	16.1.2	**FLAMMABILITY**	**0**
	16.1.3	**PHYSICAL HAZARD**	**0**
	16.1.4	**PERSONAL PROTECTION**	**See Section 8**
16.2	**NFPA 704** (National Fire Protection Association):		
	16.2.1	**Health**	**3**
	16.2.2	**Flammability**	**0**
	16.2.3	**Instability**	**0**
	16.2.4	**Special**	None
16.3	**International Fire Code / International Building Code:**		Corrosive Liquid.
16.4	**ANSI** (American National Standards Institute):		
	16.4.1	**Hazardous Industrial Chemicals -** MSDSs-Preparation:	Complies with **ANSI Z400.1 – 2004**.
	16.4.2	**Hazardous Industrial Chemicals -** Precautionary Labeling:	Complies with **ANSI Z129.1 – 2006**.

Note: To convert concentrations in air (at 25°C) from ppm to mg/m^3:

mg/m^3 = (ppm) × (molecular weight of the compound) / (24.45)
For hydrochloric acid: 1 ppm = 1.49 mg/m^3.

Disclaimer of Liability:

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