Hydrochloric Acid, 7.7N

Safety Data Sheet

Section 1 Product Description

Product Name:	Hydrochloric Acid, 7.7N
Manufacturer number	HA6207-B
Distributor:	Best Sanitizers, Inc. PO Box 1360 Penn Valley, CA 95946
Chemical Information Emergency: Aquaphoenix Scientific	1.800.255.3924

Section 2 Hazard Identification

Classification of the substance or mixture:

Specific target organ toxicity following single exposure	Category 3
Acute Toxicity (oral,dermal,inhalation)	Category 3
Serious eye damage	Category 1
Skin corrosion	Category 1A
Corrosive to metals	Category 1

Danger

Appearance—Aqueous solution
Physical state—Liquid
Odor— Pungent Odor

Hazard Statements

May be corrosive to metals. Causes severe skin burns and eye damage.
Causes serious eye damage.
Toxic if swallowed.
May cause drowsiness or dizziness.

Precautionary Statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use. Do not breathe dust/fume/gas/mist/vapours/spray.
Wash skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Keep only in original container.

IF ON SKIN (or hair): Remove/Takeoff immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

Specific treatment (see Section 4).

In case of fire: Use media appropriate for extinction. Store locked up.

Store in a well ventilated place. Store in corrosive resistant stainless steel container with a resistant inner liner. Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulation.

Precautionary Statements—Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None.

Other Information

No ingredients of Unknown Acute Toxicity.

Section 3 Composition/Information on Ingredients

Chemical Name	CAS No.	Weight-%
Hydrochloric Acid, ACS	7647-01-0	75.05
Water	7732-18-5	24.95

Section 4 First Aid Measures

First Aid Measures

Eye Contact — Hold eye(s) open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye(s). Get medical advice/attention.

Skin Contact — Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Get medical attention if irritation persists or if concerned.

Inhalation — Remove to fresh air. Seek immediate medical attention if discomfort or irritation persists.

Ingestion — Rinse mouth thoroughly. Do NOT induce vomiting.
Drink sips of water.
Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed

Symptoms

Inhalation may cause irritation to nose and upper respiratory tract, ulceration, coughing, chest tightness and shortness of breath. Higher concentrations cause tachypnoea, pulmonary oedema and suffocation. Ingestion may cause corrosion of lips, mouth, oesophagus and stomach, dysphagia and vomiting. Pain, eye, ulceration, conjunctival irritation, cataracts and glaucoma may occur following eye exposure. Erythema and skin irritation, as well as chemical burns to skin and mucous membranes may arise following skin eposure. Potential sequelae following ingestion of hydrochloric acid include perforation, scarring of the esophagus or stomach obstruction. In some cases, RADS may develop. Respiratory symptoms may take up to 36 hours to develop.

Indication of any immediate medical attention and special treatment needed

If seeking medical attention, provide SDS document to physican.

Section 5 Fire-Fighting Measures

Suitable Extinguishing Media

If in laboratory setting, follow laboratory fire suppression procdures. Use appropriate suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable Extinguishing Media

None.

Specific hazards arising from the chemical

Combustion products may include carbon oxides or other toxic vapors. Hydrogen chloride gas.

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.
Thermal decomposition can produce poisoning chlorine. Hydrochloric acid reacts also with many organic materials with liberation of heat.

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas. Keep unprotected persons away. Keep away from ignition sources. Protect from heat. Contained spilled material by diking or using inert absorbent.

Environment Precautions

Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (See Section 13).
Methods for cleaning up	Use clean non-sparking tools to collect absorbed material. May be ignited by friction, heat, sparks or flames. Collect spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water. Place in properly labeled containers. If in a laboratory setting, follow Chemical Hygiene Plan procedures.

Section 7 Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling

Prevent formation of aerosols. If opening metal containers, use non-sparking tools because of the possiblilty of hydrogen gas being preent. Wash hands after handling. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. When handling hydrochloric acid avoid contact with metals and organic matters. Never use hot water and never add water to the acid!

Conditions for safe storage, including any incompatibilities

Storage Conditions/ Incompatible materials

Keep Containers tightly closed in a dry, cool and well-ventilated place. Avoid storage near extreme heat, ignition sources or open flame. Keep away from foodstuffs. Store from oxidizing agents. Protect from freezing and physical damage. Containers for hydrochloric acid must be made from corrosion resistant materials: glass, polyethylene, polypropylene, polyvinyl chloride, carbon steel lined with rubber or ebonite.

Section 8 Protection Information

Exposure Guidelines

Control Parameters:	7647-01-0 Hydrochloric Acid, ACGIH: 2 ppm Ceiling 7647-01-0, Hydrochloric Acid, NIOSH: 5 ppm Ceiling; 7 mg/m^3 Ceiling. 7647-01-0 Hydrochloric Acid, OSHA PEL TWA 7 mg/m^3

Appropriate Engineering Controls

Engineering Controls	Emergency eyewash fountains and safety showers should be available in the immediate vicinity of use/ handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits.

Individual Protection Measures, such as personal protective equipment

Eye/Face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear impermeable and resistant to the product/ substance/preparation protective gloves. Selection of glove material on consideration of the penetration times, rates of diffusion and degradation.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not Eat, Drink or Smoke when using this product. Do not inhale gases/fumes/dust/mist/vapors/aerosols. Avoid contact with the eyes and skin.

Section 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Formula:	See Section 3	Physical State:	Liquid
Odor:	Pungent odor	Appearance:	Aqueous solution
Odor Threshold:	0.3 - 14.9 mg/m^3	Color:	Clear

Property	Values
pH	< 1
Meting Point/Freezing Point	Approximately 0°C
Boiling Point/Boiling Range	Approximately 100°C
Flash Point	Not Applicable.
Evaporation rate	> 1.00
Flammability (solid, gas)	Non Combustible
Flammability Limit in Air	
Upper flammability limit:	Non Explosive
Lower flammability limit:	Non Explosive
Vapor pressure:	Not Determined
Vapor density:	Not Determined
Specific Gravity	Not Determined
Water solubility	Soluble in water
Partition coefficient	No information available
Autoignition temperature	Not Determined
Decomposition temperature	Not Determined
Kinematic viscosity	No information available
Dynamic viscosity	No information available

Section 10 Stability and Reactivity Data

Reactivity	Reacts violently with bases and is corrosive.
Chemical Stability	No decompostion if used and stored according to specifications.
Possibility of Hazardous Reactions	Reacts violently with oxidants forming toxic gas (chlorine). Attacks many metals in the presence of water forming flammable/explosive gas (hydrogen).
Conditions to avoid	Excess heat. Incompatible products.
Incompatible materials	Metal oxides, formaldehyde. Strong bases. Most metals. Stong oxidizing agents. Reducing agents. Alkalis, cyanides, sulfides. Sulfites.
Hazardous Decomposition Products	Carbon oxides (CO, CO_2). Fumes of hydrogen chloride and hydrogen in contact with metals. Oxides of carbon.

Section 11 Toxicity Data

Information on toxicological effects

Inhalation	Hydrochloric acid
Sensitization	No Information Available
Germ cell mutagenicity	No Information Available
Carcinogenicity	IARC: Group 3
Reproductive toxicity	No Information Available
STOT single exposure	No Information Available
STOT repeated exposure	No Information Available

Section 12 Ecological Data

Ecotoxicity
None.

Persistence and degradability
Readily Biodegradable.

Bioaccumulation
Not Bioaccumulative.

Mobility
Aqueous solution has high mobility in soil.

Other adverse effects
None.

Section 13 Disposal Information

Waste treatment methods

Disposal of wastes	Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain. Treat the solid residue as normal refuse. All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not dispose together with household garbage.

Section 14 Transport Information

DOT

UN ID Number	UN1789
UN proper shipping name	HYDROCHLORIC ACID
Hazard Class	8
Packing Group	II

Section 15 Regulatory Information

International Inventories

TSCA	**Complies**
DSL/NDSL	**Complies**

Legend:

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 of 1986 (SARA).

7647-01-0 Hydrochloric Acid

SARA 311/312

Acute

CERCLA

7647-01-0 Hydrochloric Acid 5000

US State Regulations

California Proposition 65

None of the ingredients is listed.

Section 16 Additional Information

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Physical and Chemical Properties**
	3	**0**	**1**	**0**
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal protection**
	3	**0**	**1**	**X**

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Disclaimer

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End of Safety Data Sheet