

HAVILAND PRODUCTS COMPANY
SAFETY DATA SHEET



Section 1: Identification

Product Name: Acid, Muriatic 20 Deg Product Code:H002381

Haviland Products Company
421 Ann Street NW
Grand Rapids, MI 49504
(616) 361-6691

Emergency Phone
CHEMTREC (800) 424-9300
CHEMTREC International (703) 527-3887

Product Use: Industrial
Not recommended for: No data available

Section 2: Hazard(s) Identification

GHS Ratings:

Corrosive to metals	1	Corrosive to metals
Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Inhalation Toxicity	Acute Tox. 3	Gases>500+<=2500ppm, Vapors>2+<=10mg/l, Dusts&mists>0.5+<=1mg/l
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Organ toxin single exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan
Organ toxin repeated exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidanc
Aquatic toxicity	A1	Acute toxicity <= 1.00 mg/l

GHS Hazards

H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure

GHS Precautions

P234	Keep only in original container
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash face, hands, and any exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment

P280	Wear protective gloves/protective clothing/eye protection/face protection
P285	In case of inadequate ventilation wear respiratory protection
P310	Immediately call a POISON CENTER or doctor/physician
P311	Call a POISON CENTER or doctor/physician
P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see first aid treatment on SDS)
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
P390	Absorb spillage to prevent material damage
P391	Collect spillage
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician
P342+P311	If experiencing respiratory symptoms call a POISON CENTER or doctor/physician
P405	Store locked up
P406	Store in a corrosive resistant container with a resistant inner liner
P403+P233	Store in a well ventilated place. Keep container tightly closed
P501	Dispose of contents/container in accordance with local/regional/national/international regulations

Danger



Section 3: Composition/Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Hydrogen chloride 7647-01-0 30 to 40%		2 ppm Ceiling	NIOSH: 5 ppm Ceiling; 7 mg/m3 Ceiling

Section 4: First-aid Measures

Inhalation

Move to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Eye Contact

In case of eye contact, rinse with plenty of water and seek medical attention immediately

Skin Contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

Ingestion

Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

Section 5: Fire-fighting Measures

LEL:

UEL:

Extinguishing Media

Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.

Specific Hazards Arising from the Chemical

Emits toxic (hydrogen chloride gas) fumes under fire conditions. (See also Stability and Reactivity section).

Special Protective Equipment and Precautions for Firefighters

Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

Section 6: Accidental Release Measures

Prevent spillage from entering drains. Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

Section 7: Handling and Storage

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

Section 8: Exposure Control/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
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Hydrogen chloride 7647-01-0		2 ppm Ceiling	NIOSH: 5 ppm Ceiling; 7 mg/m3 Ceiling
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Engineering Controls

Maintain airborne contaminate levels below listed guidelines. Use with adequate ventilation. Use a mechanical fan or vent area to scrubber.

Eye Protection

Wear chemical safety glasses or goggles, and face shield.

Respiratory Protection

If exposure levels are excessive, use an approved respirator.

Skin Protection

Wear nitrile or rubber gloves, and full body suit. The type of protective equipment must be selected according to the concentration and amount of the dangerous su

Other Protection

Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Section 9: Physical and Chemical Properties

<p>Appearance: Clear slightly yellow liquid</p> <p>Vapor Pressure: 50 - 60 mm</p> <p>Vapor Density: Unknown</p> <p>Density: 9.671 - 9.748</p> <p>Freezing point: -12°F to -63°F</p> <p>Boiling range: 230°F</p> <p>Evaporation rate: Unknown</p> <p>Explosive Limits: Unknown</p> <p>Autoignition temperature: Unknown</p> <p>Viscosity: Unknown</p>	<p>Odor: Sharp pungent odor</p> <p>Odor threshold: Unknown</p> <p>pH: Unknown</p> <p>Melting point: Unknown</p> <p>Solubility: Miscible</p> <p>Flash point: Unknown</p> <p>Flammability: Unknown</p> <p>Partition coefficient (n-octanol/water): Unknown</p> <p>Decomposition temperature: Unknown</p> <p>Grams VOC less water: Unknown</p>
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Section 10: Stability and Reactivity

Stability

STABLE

Incompatible Materials

Metals, oxidizing agents, organic materials, alkalis, water.

Hazardous Decomposition Products

Hydrogen chloride gas

Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Oral Toxicity LD50: 752mg/kg

Inhalation Toxicity LC50: 5mg/L

Component Toxicity

Routes of Entry

Eye Contact
Skin Contact
Inhalation
Ingestion

Target Organs

Eyes Skin Respiratory System

Effects of Overexposure

Health Effects

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.

Carcinogenicity

Not classified or listed by IARC, NTP or OSHA.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
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Section 12: Ecological Information

Component Ecotoxicity

Section 13: Disposal Considerations

Dispose of in accordance with all local, state and federal regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Since emptied containers retain product residue, follow label warnings even after container is emptied. The information offered here is for the product as shipped. Use and/or alteration to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal.

Section 14: Transportation Informations

Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances

7647-01-0 Hydrogen chloride

DEA List I and II Chemicals

7647-01-0 Hydrogen chloride

OSHA Process Safety Management Highly Hazardous Chemicals

7647-01-0 Hydrogen chloride

U.S. Clean Air Act Toxic and Flammable Substances

7647-01-0 Hydrogen chloride

SARA 313

7647-01-0 Hydrogen chloride

TSCA 8(b) Inventory

7647-01-0 Hydrogen chloride

Country

Regulation

All Components Listed

Section 16: Other Information

Date Prepared: 5/21/2015

Reviewer Revision

Disclaimer

The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.