according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification
· Product identifier
 Trade name: <u>Hydrochloric Acid, 0.01N</u> Product code: HA6005-P
 Recommended use and restriction on use Recommended use: Laboratory chemicals Restrictions on use: No relevant information available.
 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 Phone: (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 (717) 632-1291
 Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International)
2 Hazard(s) identification
Classification of the substance or mixture

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- [•] Label elements
- · GHS label elements None.
- · Hazard pictograms: None.
- · Signal word: None
- · Hazard statements: None.
- · Precautionary statements: None.

· Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

7732-18-5	Water

7647-01-0 hydrochloric acid

Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318
 Acute Tox. 4, H302; STOT SE 3, H335

• Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

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>99%

<0.1%

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For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- [•] Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:
- Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

- After eye contact:
- Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

- Nausea in case of ingestion.
- · Danger: No relevant information available.
- Indication of any immediate medical attention and special treatment needed:
- If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- [•] Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

• Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Use limestone to neutralize and/or absorb spill.

Send for recovery or disposal in suitable receptacles.

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 Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information. 	(Cont'd. of page 2)

7 Handling and storage

[·] Handling

Precautions for safe handling:

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Information about protection against explosions and fires: No special measures required.

[•] Conditions for safe storage, including any incompatibilities

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with alkalis (caustic solutions).

• Further information about storage conditions: Keep containers tightly sealed.

• Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

• Components with limit values that require monitoring at the workplace:

7647-01-0 hydrochloric acid	
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PEL (USA)	Ceiling limit value: 7 mg/m³, 5 ppm
REL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm Ceiling limit value: 7 mg/m ³ , 5 ppm Ceiling limit value: 2.98 mg/m ³ , 2 ppm Ceiling limit value: 2 ppm
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm
EL (Canada)	Ceiling limit value: 2 ppm
EV (Canada)	Ceiling limit value: 2 ppm
LMPE (Mexico)	Ceiling limit value: 2 ppm
	ΔΔ

• Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

- Wash hands before breaks and at the end of work.
- Engineering controls: Provide adequate ventilation.
- Breathing equipment: Not required under normal conditions of use.
- Protection of hands:

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Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
• Material of gloves
Nitrile rubber, NBR
Neoprene gloves
Butyl rubber, BR
Natural rubber, NR
Fluorocarbon rubber (Viton)
Sensibilization by the components in the glove materials is possible.
• Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to
be observed.
• Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties			
[·] Information on basic physical and chemical properties			
· Appearance:			
Form:	Fluid		
Color:	Clear, colorless		
· Odor:	Characteristic		
· Odor threshold:	Not determined.		
· pH-value:	Not determined.		
 Melting point/Melting range: 	0 °C (32 °F)		
 Boiling point/Boiling range: 	100-105 °C (212-221 °F)		
· Flash point:	The product is not flammable.		
· Flammability (solid, gaseous):	Not applicable.		
· Auto-ignition temperature:	Not determined.		
· Decomposition temperature:	Not determined.		
[.] Danger of explosion:	Product does not present an explosion hazard.		
· Explosion limits			
Lower:	Not determined.		
Upper:	Not determined.		
Oxidizing properties:	Not determined.		
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)		
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		(Cont'd. of pa
Density at 20 °C (68 °F):	>1 g/cm³ (>8.35 lbs/gal)	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/	/water): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No relevant information available.	

10 Stability and reactivity

· Reactivity: No relevant information available.

- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with alkali (lyes).

Corrosive action on metals.

Toxic fumes may be released if heated above the decomposition point.

· Conditions to avoid No relevant information available.

[·] Incompatible materials

Alkalis

Metals.

· Hazardous decomposition products

Hydrogen

Under fire conditions only:

Chlorine compounds

11 Toxicological information

[·] Information on toxicological effects

· Acute toxicity:

- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.

• Sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):

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• NTP (National Toxicology Program):

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	of page 5)
None of the ingredients are listed.	
· OSHA-Ca (Occupational Safety & Health Administration):	
None of the ingredients are listed.	
 Probable route(s) of exposure: Ingestion. Inhalation. Eye contact. Skin contact. Acute effects (acute toxicity, irritation and corrosivity): No relevant information available. Repeated dose toxicity: No relevant information available. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met. STOT-single exposure: Based on available data, the classification criteria are not met. STOT-repeated exposure: Based on available data, the classification criteria are not met. Aspiration hazard: Based on available data, the classification criteria are not met. 	

12 Ecological information

[·] Toxicity

- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.

[•] Additional ecological information

· General notes:

Generally not hazardous for water.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.

[•] Results of PBT and vPvB assessment

- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No relevant information available.

13 Disposal considerations

[·] Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

[·] Uncleaned packagings

• **Recommendation:** Disposal must be made according to official regulations.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

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UN-Number		
DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
UN proper shipping name DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
Transport hazard class(es)		
DOT, ADR/RID/ADN, IMDG, IATA		
Class	Not regulated.	
Packing group		
DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
Environmental hazards	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	Il of	
MARPOL73/78 and the IBC Code	Not applicable.	

5 Regulatory information	
Safety, health and environmental regulations/legislation spe	ecific for the substance
mixture	
· United States (USA) · SARA	
· Section 302 (extremely hazardous substances):	
None of the ingredients are listed.	
· Section 355 (extremely hazardous substances):	
7647-01-0 hydrochloric acid	
· Section 313 (Specific toxic chemical listings):	
None of the ingredients are listed.	
· TSCA (Toxic Substances Control Act)	
7647-01-0 hydrochloric acid	
7732-18-5 Water	
· Proposition 65 (California)	
· Chemicals known to cause cancer:	
None of the ingredients are listed.	
· Chemicals known to cause developmental toxicity for females:	
None of the ingredients are listed.	
· Chemicals known to cause developmental toxicity for males:	
None of the ingredients are listed.	
· Chemicals known to cause developmental toxicity:	
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None of the ingredients are listed.

EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):

7647-01-0 hydrochloric acid

Canadian Domestic Substances List (DSL): (Substances not listed.)

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative OSHA: Occupational Safety & Health Administration Met. Corr.1: Corrosive to metals - Category 1 Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Eye Dam. 1: Serious eye damage/eye irritation - Category 1 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 · Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

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