

# SAFETY DATA SHEET

Acidi-pHlow Liquid

## Section 1. Identification

- GHS product identifier** : Acidi-pHlow Liquid
- Other means of identification** : ACIPHL
- Product use** : Professional use.
- Supplier's details** : AQUA-AID, Inc.  
 dba AQUA-AID Solutions  
 5484 S. Old Carriage Road  
 Rocky Mount, NC 27803, USA
- e-mail address of person responsible for this SDS** : info@aquaaid.com
- Emergency telephone number (with hours of operation)** : +1-800-394-1551 (M-F 8:00 AM - 5:00 PM EST)

## Section 2. Hazards identification

- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- Classification of the substance or mixture** : SKIN CORROSION/IRRITATION - Category 1B  
 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
- Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.9%

### GHS label elements

#### Hazard pictograms



- Signal word** : Danger
- Hazard statements** : H314 Causes severe skin burns and eye damage.  
 H319 Causes serious eye irritation.

### Precautionary statements

#### Prevention

- : P260 Do not breathe mist/spray.  
 P264 Wash skin thoroughly after handling.  
 P280 Wear eye protection/ face protection.  
 P280 Wear protective gloves.

#### Response

- : 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 person 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.  
 P310 Immediately call a POISON CENTER or doctor/physician.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.

- Storage** : Not applicable.

- Disposal** : Not applicable.

## Section 2. Hazards identification

**Hazards not otherwise classified** : None known.

Concentrated product is corrosive as shown in this document. When diluted at least 1:1 (50% or less solution) with water, product is non-hazardous.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : ACIPHL

### CAS number/other identifiers

**CAS number** : Not applicable.

**Product code** : Not available.

Ingredient name	%	CAS number
hydrochloric acid	≥6 - <10	7647-01-0
phosphoric acid	≥6 - <10	7664-38-2
oxalic acid	<1	144-62-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give plenty of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : No specific data.

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media** : None.

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material into waterways, drains, and sewers

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers and water courses. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

hydrochloric acid

**ACGIH TLV (United States, 3/2015).**

C: 2 ppm

**OSHA PEL 1989 (United States, 3/1989).**

CEIL: 5 ppm

CEIL: 7 mg/m<sup>3</sup>

**NIOSH REL (United States, 10/2013).**

CEIL: 5 ppm

CEIL: 7 mg/m<sup>3</sup>

**OSHA PEL (United States, 2/2013).**

CEIL: 5 ppm

CEIL: 7 mg/m<sup>3</sup>

phosphoric acid

**ACGIH TLV (United States, 3/2015).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

STEL: 3 mg/m<sup>3</sup> 15 minutes.

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

STEL: 3 mg/m<sup>3</sup> 15 minutes.

**NIOSH REL (United States, 10/2013).**

TWA: 1 mg/m<sup>3</sup> 10 hours.

STEL: 3 mg/m<sup>3</sup> 15 minutes.

**OSHA PEL (United States, 2/2013).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

oxalic acid

**ACGIH TLV (United States, 3/2015).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

STEL: 2 mg/m<sup>3</sup> 15 minutes.

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

STEL: 2 mg/m<sup>3</sup> 15 minutes.

**NIOSH REL (United States, 10/2013).**

TWA: 1 mg/m<sup>3</sup> 10 hours.

STEL: 2 mg/m<sup>3</sup> 15 minutes.

**OSHA PEL (United States, 2/2013).**

TWA: 1 mg/m<sup>3</sup> 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## Section 8. Exposure controls/personal protection

<b>Environmental exposure controls</b>	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<b>Individual protection measures</b>	
<b>Hygiene measures</b>	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection</b>	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.
<b>Skin protection</b>	
<b>Hand protection</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Body protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Brownish
<b>Odor</b>	: Acrid.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: <3
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: 1.04 g/cm <sup>3</sup> (8.68 lb/gal).
<b>Solubility</b>	: Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrochloric acid	Eyes - Mild irritant	Rabbit	-	0.5 minutes 5 milligrams	-
	Skin - Mild irritant	Human	-	24 hours 4 Percent	-

#### Conclusion/Summary

- Skin** : Causes skin irritation.
- Eyes** : Causes serious eye damage.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Carcinogenicity

Product/ingredient name	OSHA	IARC	NTP
hydrochloric acid	-	3	-

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
hydrochloric acid	Category 3	Not applicable.	Respiratory tract irritation

## Section 11. Toxicological information

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
hydrochloric acid	Acute LC50 240000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
	Acute LC50 282 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-	-	-
<b>Label</b>						
<b>Packing group</b>	-	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	Marine Pollutant: No	No.
<b>Additional information</b>	-	-	-	-	-	-



## Section 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 311:** Hydrochloric acid; Phosphoric acid  
**Clean Air Act (CAA) 112 regulated toxic substances:** Hydrochloric acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Listed

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
hydrochloric acid	≥8.1 - <10	Yes.	500	-	5000	-

**SARA 304 RQ** : 60241 lbs / 27349.4 kg [6790.4 gal / 25704.3 L].

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
hydrochloric acid	≥8.1 - <10	No.	No.	No.	Yes.	No.
phosphoric acid	≥8.1 - <10	No.	No.	No.	Yes.	No.

### State regulations

**Massachusetts** : The following components are listed: Hydrochloric acid; Phosphoric acid.

**New York** : The following components are listed: Hydrochloric acid; Phosphoric acid.

**New Jersey** : The following components are listed: Hydrochloric acid; Phosphoric acid.

**Pennsylvania** : The following components are listed: Hydrochloric acid; Phosphoric acid.

## Section 15. Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Turkey</b>	: Not determined.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 1B	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method

### History

<b>Date of printing</b>	: 11/30/2018
<b>Date of issue/Date of revision</b>	: 11/30/2018
<b>Date of previous issue</b>	: 03/18/2016
<b>Version</b>	: 1.1

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

## Section 16. Other information

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its 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 materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.