1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Identifier</th>
<th>Other Means of Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>ACID Magic® Advanced Formula</td>
</tr>
<tr>
<td>SDS #</td>
<td>USA/SDS/I04</td>
</tr>
<tr>
<td>Product Code</td>
<td>USA</td>
</tr>
<tr>
<td>UN/ID No.</td>
<td>UN1760</td>
</tr>
<tr>
<td>Synonyms</td>
<td>The User Friendly Muriatic Acid™*</td>
</tr>
</tbody>
</table>

*ACID Magic should not be used to aid or effect any pool disinfectant product or other water modifier.

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: Cleans, clarifies and etches like full strength muriatic acid.*

Details of the Supplier of the Safety Data Sheet

Supplier Address: Certol International, LLC.
6120 East 58th Avenue
Commerce City, Colorado 80022
www.Certol.com
Phone: 303-799-9401
Toll-Free: 1-800-843-3343
Fax: 303-799-9408

24 Hour Emergency Telephone

INFOTRAC: 1-800-535-5053 (North America)
INFOTRAC: 1-352-323-3500 (International)
2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive to Metals</td>
<td>Category 1</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Iritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute Toxicity- Oral</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Signal Word

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger</td>
<td>May be corrosive to metal.</td>
</tr>
<tr>
<td>Health Hazards:</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td></td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td></td>
<td>May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td>Environmental Hazards:</td>
<td>May be corrosive to metals.</td>
</tr>
</tbody>
</table>

Precautionary Statements:

**Prevention:**
- P202: Do not handle until all safety precautions have been read and understood.
- P280: Wear eye protection.
- P260: Do not breathe dust/fumes/gas/mist/vapors/spray.

**Response:**
- P301: IF SWALLOWED: Immediately call a Poison Control Center or doctor/physician. Rinse mouth.
- P304: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Control Center or a doctor/physician.

**Storage:**
- P403: Store in a well-ventilated place.
- P406: Store in a corrosive resistant container.
- P411: Store at temperatures not below 32°F (0°C).

**Disposal:**
- P501: Dispose according to all local, state and federal regulations.

**Hazard(s) not otherwise classified (HNOC):** Not determined.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>**</td>
</tr>
<tr>
<td>Others</td>
<td>Various</td>
<td>***</td>
</tr>
</tbody>
</table>

** The exact percentage is a trade secret.
*** The specific chemical identity of this composition is being withheld as a trade secret.

4. FIRST AID MEASURES

**Inhalation:**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a physician or Poison Control Center immediately.

**Eye Contact:**
Immediately flush with plenty of water. Remove any contact lenses and continue flushing for several minutes and call a physician immediately.

**Ingestion:**
Rinse mouth and drink plenty of water. Do not induce vomiting. Never give anything by mouth to a person who is unconscious. Call a physician or Poison Control Center immediately.

**Skin Contact:**
Wash off immediately with plenty of water for several minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: get medical attention.

**Symptoms:**
Inhalation of fumes or acid mist can cause irritation and corrosive burns to the upper respiratory tract. Ingestion may cause burning of the mouth, throat, and digestion tract. Treat symptomatically.

**Note to Physician:**
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**
None Determined.

**Specific Hazards Arising from the Chemical**
Contact with metals may evolve flammable hydrogen gas. The decomposition can lead to the release of toxic/corrosive gases and vapors.

**Hazardous Combustion Products**
Hydrogen Chloride.

**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.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**
Use personal protective equipment as required.
Restrict access to spill area. Ventilate the area.
Prevent entry into waterways, sewers, basements or confined areas.

**Methods and Material for Containment and Cleaning Up**
Prevent further leakage or spillage if safe to do so.
Soak up with inert absorbent material. Flush residue with water.
Neutralize with soda ash or other acid-neutralizing agent.

7. HANDLING AND STORAGE

**Precautions for Safe Handling**
Wash face, hands, and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing vapors, mist or gas. Use only in well-ventilated areas.
Keep out of the reach of children and pets.

**Conditions for Safe Storage, Including any Incompatibilities**
Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Keep away from heat. Store away from incompatible materials. Store in a closed, properly labeled, and acid resistant container. Avoid storing below 32°F (0°C). Do not store near alkalis, highly flammable or oxidizing substances. Product must not contact chlorine bleach or cyanide.
Keep in original container.
Do not store near alkalis, highly flammable or oxidizing substances. Product must not contact chlorine bleach or cyanide.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid 7647-01-0</td>
<td>Ceiling: 2 ppm</td>
<td>(vacated) Ceiling: 5 ppm</td>
<td>IDLH: 50 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling: 7 mg/m³</td>
<td>Ceiling: 5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling: 5 ppm</td>
<td>Ceiling: 7 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exposure Guidelines**
See above occupational exposure limits.

**Appropriate Engineering Controls**

**Individual Protection Measures, such as Personal Protective Equipment**
Wear goggles or chemical safety glasses. Face protection shield.
Wear water-resistant gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact.
Under normal conditions, respirator is not normally required. Use acid resistant respirator if concentration is high.
Handle in accordance with good industrial hygiene and safety practices.

**Eye/Face Protection**

**Skin and Body Protection**

**Respiratory Protection**

**General Hygiene Considerations**

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>&lt; 1 (25°C / 77°F)</td>
</tr>
<tr>
<td>Melting Point / Freezing Point</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range</td>
<td>212°F / 100°C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Flammability (Solid/Gas)</td>
<td>N/A - Liquid</td>
</tr>
<tr>
<td>Flammability Limits In Air</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Reacts with carbon steel, aluminum and copper.

Hazardous Polymerization: Aldehydes & epoxides, in the presence of HCl, will cause hazardous polymerization.

Conditions to Avoid: Avoid high temperatures. Incompatible materials. Avoid storing below 32°F (0°C).


Vapor Pressure: HCl gas evolved from heating; hydrogen gas evolved by reaction.

Vapor Density: Not Determined.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Information on Likely Routes of Exposure:

- Ingestion: Harmful if swallowed.
- Inhalation: Avoid breathing vapors or mists.
- Skin Contact: No effect for healthy, intact skin. Slight to moderate irritant in some individuals.
- Eye Contact: Avoid contact with eyes.

Component Information:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD₅₀</th>
<th>Dermal LD₅₀</th>
<th>Inhalation LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>&gt; 5010 mg/kg (Rabbit)</td>
<td>3124 ppm (Rat) 1 hr.</td>
</tr>
<tr>
<td>7647-01-0</td>
<td>700 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity: The product as a whole has not been tested.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>N/A</td>
<td>Group 3</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>7647-01-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH (The American Conference of Governmental Industrial Hygienists)
A4- Not Classifiable as a Human Carcinogen.

IARC( International Agency for Research on Cancer)
Group 3 - Not Carcinogenic to Humans

Numerical Measures of Toxicity: Not Determined.
12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>EC₅₀ Selenastum capricornutum (Green Algae): 0.0492 mg/L/72 hr. (pH 5.3)</td>
<td>282: 96 hr. Gambusia affinis mg/L LC₅₀ static</td>
<td>None Known</td>
<td>LC₅₀; Species: Cragnon cragnon (Common shrimp, adult); Conditions: saltwater, renewal, 15° C; Concentration: 260 mg/L for 48 hr.</td>
</tr>
</tbody>
</table>

Persistence and Degradability
Not Determined.

Bioaccumulation
Not Determined.

Mobility
Not Determined.

Other Adverse Effects
Not Determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Dispose according to all local, state and federal regulations.

Contaminated Packaging
Dispose according to all local, state and federal regulations.

Steps to be Taken in Case Material is Released or Spilled
Deny access to the area. Ventilate the area well. Large spills or leaks should be cleaned up and controlled with an inert absorbent material. Flush surface with water and neutralize with soda ash or other acid-neutralizing agent. Prevent material from entering waterways. CERCLA reportable Quantity (RQ) is 5,000 lbs.

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Quarts and gallons are shipped as Limited Quantity. Large sizes, 5 gallons or more, are shipped as class 8.

DOT
UN/ID No: UN1760
Proper Shipping Name: Corrosive Liquid, n.o.s. (Hydrochloric Acid)
Hazard Class: 8
Packing Group: III

IATA
UN/ID No: UN1760
Proper Shipping Name: Corrosive Liquid, n.o.s. (Hydrochloric Acid)
Hazard Class: 8
Packing Group: III

IMDG
UN/ID No: UN1760
Proper Shipping Name: Corrosive Liquid, n.o.s. (Hydrochloric Acid)
Hazard Class: 8
Packing Group: III

NMFC
NMFC 44155.4 Class 70
15. REGULATORY INFORMATION

International Inventories
Not Determined.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/
   European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations
SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>SARA-Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>Proprietary</td>
<td>1</td>
</tr>
</tbody>
</table>

Clean Water Act (CWA)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid 7647-01-0</td>
<td>5000 lb.</td>
<td>N/A</td>
<td>N/A</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid 7647-01-0</td>
<td>5000 lb.</td>
<td>5000 lb.</td>
<td>RQ 5000 lb. final RQ RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid 7647-01-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>Not Determined.</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Issue Date April 2017
Revision Date July 2018
Revision Note Advanced Formula
Disclaimer
This Safety Data Sheet was prepared to comply with the current OSHA hazard Communication Standard adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.

End of Safety Data Sheet