

**SAFETY DATA SHEET**

Version 6

Revision Date 22 May 2017

1. PRODUCT AND COMPANY IDENTIFICATION**1.1 Product identifiers**

Product name : Hydrochloric Acid Solution
Product Number : PN000790 and PN002244
CAS-No. : 7647-01-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemical/reagent

1.3 Details of the supplier of the safety data sheet

Company : Associates of Cape Cod, Inc.
124 Bernard E St Jean Drive
East Falmouth, MA 02536
USA

Telephone : +1 888-395-2221
: +1 508-540-3444

1.4 Emergency telephone number

Emergency Phone # : (800) 424-9300 Chemtrec® Domestic North America
: (703) 527-3887 Chemtrec® International

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Eye Damage (Category 1) Causes serious eye damage
Skin Irritant (Category 2) Causes skin irritation
Corrosive to metals (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger**Hazard statement(s)**

- May be corrosive to metals.
- Causes skin irritation.
- Causes serious eye damage

Precautionary statement(s)

- Wear eye protection/face protection.
- Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.

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- Immediately call a poison center or doctor
- Wash skin thoroughly after handling.
- Wear protective gloves.
- If on skin: Wash with plenty of water
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.
- Keep only in original container.
- Absorb spillage to prevent material damage.
- Store in corrosive resistant stainless steel container with a resistant inner liner.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Mixtures**

Formula : HCl

Molecular Weight : 36.46 g/mol

Hazardous Component

| Component | Classification | Concentration |
|--------------------------|----------------|---|
| Hydrochloric acid | | |
| CAS-No. | 7647-01-0 | Met. Corr. 1; Skin Irrit. 2; Eye Dam. 1 |
| | | 1 - 3% |

4. FIRST AID MEASURES**4.1 Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and seek immediate medical attention. Continue rinsing eyes during transport to hospital.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Burning, tearing, irritation, redness of eyes or skin

4.3 Indication of any immediate medical attention and special treatment needed

no data available



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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Components with workplace control parameters**

| Component | CAS-No. | Value | Control Parameters | Basis |
|-------------------|-----------|--|------------------------------|--|
| Hydrochloric acid | 7647-01-0 | C | 2 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation Not classifiable as a human carcinogen | | |
| | | C | 5 ppm 7 mg/m ³ | USA. NIOSH Recommended Exposure Limits |
| | | Often used in an aqueous solution. | | |
| | | C | 5 ppm 7 mg/m ³ | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m ³ is approximate. Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | C | 5 ppm 7 mg/m ³ | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |

8.2 Exposure controls**Personal protective equipment****Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

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9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

| | |
|---|-------------------|
| a) Appearance Form | liquid |
| b) Odor | no data available |
| c) Odor Threshold | no data available |
| d) pH | 0 (calculated) |
| e) Melting point/freezing point | no data available |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | not applicable |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapor pressure | no data available |
| l) Vapor density | no data available |
| m) Relative density | no data available |
| n) Water solubility | no data available |
| o) Partition coefficient n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY**10.1 Reactivity**

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Bases, Amines, Alkali metals, Metals, hexalithium disilicide, permanganates, e.g. potassium permanganate, fluorine

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

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11. TOXICOLOGICAL INFORMATION**Symptoms – No Information Available****11.1 Information on toxicological effects****Acute toxicity:** no data available**Inhalation:** no data available**Dermal:** no data available**Skin corrosion/irritation:** no data available**Serious eye damage/eye irritation:** no data available**Respiratory or skin sensitization:** no data available**Germ cell mutagenicity:** no data available**Carcinogenicity****IARC:** 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.**Reproductive toxicity:** no data available**Specific target organ toxicity - single exposure:** no data available**Specific target organ toxicity - repeated exposure:** no data available**Aspiration hazard:** no data available**Additional Information:** RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

no data available

12.2 Persistence and degradability

no data available

12.3 Bio accumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available



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13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1789 Class: 8 Packing group: III Proper shipping name: Hydrochloric acid
 Reportable Quantity (RQ): Marine
 Pollutant: No
 Poison Inhalation Hazard: No

IMDG

UN number: 1789 Class: 8 Packing group: III
 EMS-No: F-A, S-B Proper shipping name: HYDROCHLORIC ACID
 Marine pollutant: No

IATA

UN number: 1789 Class: 8 Packing group: III Proper shipping name: Hydrochloric acid

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|----------------------|-----------------------------|
| Hydrochloric acid | CAS-No. 7647-01-0 | Revision Date 1993-04-24 |
| SARA 311/312 Hazards | | |
| Acute Health Hazard | | |
| Massachusetts Right To Know Components | | |
| Hydrochloric acid | CAS-No. 7647-01-0 | Revision Date 1993-04-24 |
| Pennsylvania Right To Know Components | | |
| Water | CAS-No. 7732-18-5 | Revision Date 1993-04-24 |
| Hydrochloric acid | CAS-No. 7647-01-0 | |
| New Jersey Right To Know Components | | |
| Water | CAS-No. 7732-18-5 | Revision Date 1993-04-24 |
| Hydrochloric acid | CAS-No. 7647-01-0 | |



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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating

| | |
|-----------------|---|
| Health hazard: | 3 |
| Flammability: | 0 |
| Physical Hazard | 0 |

NFPA Rating

| | |
|--------------------|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

Further information

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Preparation Information

Associates of Cape Cod, Inc.

Version: 6

SDS 1 M HCl