

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

|              |                                  |
|--------------|----------------------------------|
| Product name | Hydrochloric Acid 0.01N Solution |
| CAS number   | 7647-01-0                        |
| Synonyms     | Muriatic Acid                    |

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

|                 |                       |
|-----------------|-----------------------|
| Identified uses | Laboratory chemicals. |
|-----------------|-----------------------|

#### 1.3 Details of the supplier of the safety data sheet

|           |  |
|-----------|--|
| Company   | Lab Alley, LLC<br>12501 Pauls Valley Road<br>Austin, Texas 78737<br>U.S.A. |
| Telephone | 512-668-9918   |
| Fax       | 512-886-4008   |

#### 1.4 Emergency telephone

|                   |                              |          |
|-------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053  | INFOTRAC |
|                   | International 1-352-323-3500 | INFOTRAC |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### 2.2 GHS Label elements, including precautionary statements

None required.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

| Chemical name     | Common name and synonyms | CAS number | Concentration |
|-------------------|--------------------------|------------|---------------|
| Water             | Aqua; H <sub>2</sub> O   | 7732-18-5  | >99.9%        |
| Hydrochloric acid | Muriatic acid            | 7647-01-0  | <0.1%         |

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

##### General advice

|                                |   |
|--------------------------------|---|
| <b>If inhaled</b>              | Remove to fresh air. Get medical attention immediately if symptoms occur.   |
| <b>In case of skin contact</b> | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| <b>In case of eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.         |
| <b>If swallowed</b>            | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.                   |

#### 4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. |
| <b>Unsuitable extinguishing media</b> | No information available.   |

#### 5.2 Specific hazards arising from the substance or mixture

None reasonably foreseeable. Hazardous Combustion Products: Hydrogen chloride gas.

### 5.3 Special 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.

### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

#### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 0      | 0            | 0           | N/A              |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

### 6.2 Environmental precautions

Should not be released into the environment.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements. See Section 12 for additional ecological information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Precautions on safe handling**

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities****Storage conditions**

Keep containers tightly closed in a dry, cool, and well-ventilated place.

**Incompatibilities**

Strong bases.

**SECTION 8: Exposure controls/personal protection**
**8.1 Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Component         | Type              | Value |         |
|-------------------|-------------------|-------|---------|
| Hydrochloric acid | Ceiling           | 5 ppm | 7 mg/m3 |
|                   | (Vacated) Ceiling | 5 ppm | 7 mg/m3 |

**US. ACGIH Threshold Limit Values**

| Component         | Type | Value |
|-------------------|------|-------|
| Hydrochloric acid | TLV  | 2 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Component         | Type    | Value  |         |
|-------------------|---------|--------|---------|
| Hydrochloric acid | IDLH    | 50 ppm |         |
|                   | Ceiling | 5 ppm  | 7 mg/m3 |

**Biological occupational exposure limits**

No information available.

**8.2 Exposure controls****Appropriate engineering controls**

None under normal use conditions.

**Personal protective equipment****Eye/face protection**

Wear appropriate protective eyeglasses or chemical safety goggles, as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

**Skin protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Body Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory protection**

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter.

**Control of environmental exposure**

No information available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

|   |                          |
|---|--------------------------|
| Physical State                            | Liquid                   |
| Appearance                                | Clear                    |
| Odor                                      | Pungent                  |
| Odor Threshold                            | No information available |
| pH  | 2                        |
| Melting Point/Range                       | No information available |
| Boiling Point/Range                       | No information available |
| Evaporation Rate                          | No information available |
| Flammability (solid)                      | Not applicable           |
| Flammability or explosive limit           | No data available        |
| Upper                                     |                          |
| Lower                                     |                          |
| Vapor Pressure                            | 23 hPa @ 20 °C           |
| Vapor Density                             | No information available |
| Density                                   | No information available |
| Solubility                                | Soluble in water         |
| Partition coefficient;<br>n-octanol/water | No data available        |
| Autoignition Temp                         | No information available |
| Decomposition Temp                        | No information available |
| Viscosity                                 | No information available |
| Molecular Formula                         | HCl                      |
| Molecular Weight                          | 36.46 g/mol              |
| VOC Content(%)                            | No information available |
| Oxidizing properties                      | No information available |

**9.2 Other safety information**

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known, based on information available.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products.

### 10.5 Incompatible materials

Strong bases.

### 10.6 Hazardous decomposition products

Hydrogen chloride.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

| Component         | LD50 Oral           | LD50 Dermal          | LC50 Inhalation      |
|-------------------|---------------------|----------------------|----------------------|
| Hydrochloric acid | 238-277 mg/kg (Rat) | >5010 mg/kg (Rabbit) | 1.68 mg/L (Rat) 1 hr |

#### Skin corrosion/irritation

No information available.

#### Serious eye damage/eye irritation

No information available.

#### Respiratory or skin sensitization

No information available.

#### Germ cell mutagenicity

No information available.

#### Carcinogenicity

| Component         | CAS       | IARC    | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------|-----------|---------|------------|------------|------------|------------|
| Hydrochloric acid | 7647-01-0 | Group 3 | Not listed | Not listed | Not listed | Not listed |

#### Specific target organ toxicity - single exposure

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Do not empty into drains.

| Product           | Species         | Test Results         |
|-------------------|-----------------|----------------------|
| Hydrochloric acid | Freshwater Fish | LC50 = 282 mg/L 96 h |
|                   | Water Flea      | EC50 = 56 mg/L 72 h  |

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information available.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Will likely be mobile in the environment due to its water solubility.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### SECTION 14: Transport information

|                 |                |
|-----------------|----------------|
| <b>DOT (US)</b> | Not regulated. |
| <b>IMDG</b>     | Not regulated. |
| <b>IATA</b>     | Not regulated. |

#### SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Listed, Hydrochloric acid (CAS# 7647-01-0), RQ: 5000 lb.

**SARA 304 Emergency release notification**  
Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Not applicable.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**SARA 302 Extremely hazardous substance**  
Not listed.

**SARA 311/312 Hazardous**  
See Section 2 for more information.

**SARA 313 (TRI reporting)**  
Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Listed, Hydrochloric acid (CAS# 7647-01-0).

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**Safe Drinking Water Act**  
Not regulated.



**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed, Hydrochloric acid (CAS# 7647-01-0).

**US. New Jersey Worker and Community Right-to-Know Act**

Listed, Hydrochloric acid (CAS# 7647-01-0).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Hydrochloric acid (CAS# 7647-01-0).

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

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**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.