

## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name Buffer, pH 1

CAS number N/A

Synonyms N/A

#### 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  
12501 Pauls Valley Road  
Austin, Texas 78737  
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)

Skin corrosion/irritation Category 1A

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Causes severe skin burns and eye damage

Precautionary statements

P260 - Do not breathe mist, spray, vapors  
P264 - Wash exposed skin thoroughly after handling  
P280 - Wear eye protection, protective gloves  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
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  
P321 - Specific treatment (see Personal precautions on this label)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to comply with local, state and federal regulations  
If inhaled: Remove person to fresh air and keep comfortable for breathing

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

No information available

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	H <sub>2</sub> O; Aqua	7732-18-5	99.58%
Potassium Chloride	KCl, muriate of potash	7447-40-7	0.37%
Hydrochloric Acid, 37% w/w	Muriatic acid	7647-01-0	0.05%

### SECTION 4: First aid measures

## 4.1 Description of first-aid measures

<b>General advice</b>	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
<b>If inhaled</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>In case of skin contact</b>	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
<b>In case of eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>If swallowed</b>	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

**Symptoms/injuries:** Causes severe skin burns and eye damage.

**Symptoms/injuries after inhalation:** May cause respiratory irritation.

**Symptoms/injuries after skin contact:** Caustic burns/corrosion of the skin.

**Symptoms/injuries after eye contact:** Causes serious eye damage.

**Symptoms/injuries after ingestion:** Irritation of the gastric/intestinal mucosa.

**Symptoms/injuries upon intravenous administration:** Not available.

**Chronic symptoms:** Affection/discolouration of the teeth. Dry skin. Inflammation/damage of the eye tissue. Irritation of the respiratory tract.

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

Obtain medical assistance.

# SECTION 5: Firefighting measures

## 5.1 Extinguishing media

**Suitable extinguishing media** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** Do not use a heavy water stream.

## 5.2 Specific hazards arising from the substance or mixture

**Fire hazard:** Not flammable.

**Explosion hazard:** Not applicable.

**Reactivity:** Thermal decomposition generates : Corrosive vapors.

## 5.3 Special protective equipment and precautions for firefighters

**Firefighting instructions:** Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## 5.4 Further information

**Flash Point** No information available

**Autoignition Temperature** No information available

### Explosion limits

**Upper** No information available

**Lower** No information available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

### NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

## SECTION 6: Accidental release measures

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

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4 Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, spray, vapors. Avoid contact during pregnancy/while nursing.

### Hygiene measures

Wash exposed skin thoroughly after handling.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep only in the original container in a cool, well ventilated place away from : incompatible materials. Keep container closed when not in use.

### Incompatibilities

Strong bases, silver nitrate, metals, sources of ignition, direct sunlight

## 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, 37% w/w	PEL (Ceiling)	5 ppm 7 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Hydrochloric Acid, 37% w/w	Ceiling	2 ppm 2.98 mg/m <sup>3</sup>

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

Component	Type	Value
Hydrochloric Acid, 37% w/w	REL (ceiling)	5 ppm 7 mg/m <sup>3</sup>

### Biological occupational exposure limits

No information available

### 8.2 Exposure controls

#### Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Personal protective equipment

##### Eye/face protection

Chemical goggles or face shield

**Skin protection**

Wear suitable protective clothing.

**Body Protection**

Wear suitable protective clothing.

**Respiratory protection**

Respiratory protection not required in normal conditions.

**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	Colorless
Odor	Odorless
Odor Threshold	No data available
pH	1 @ 25°C
Melting Point/Range	No data available
Boiling Point/Range	No data available
Evaporation Rate	No data available
Flammability (solid)	Non flammable
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	No data available
Solubility	Soluble in water
Partition coefficient;	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	No data available
Molecular Weight	No data available
VOC Content(%)	No data available
Oxidizing properties	None

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Thermal decomposition generates: Corrosive vapors.

### 10.2 Chemical stability

Not established.

### 10.3 Possibility of hazardous reactions

Not established.

### 10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5 Incompatible materials

Silver nitrate, Strong bases, Metals

### 10.6 Hazardous decomposition products

Chlorine, Thermal decomposition generates: Corrosive vapors.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Chloride	2600 mg/kg (Rat)	Not listed	Not listed
Hydrochloric Acid, 37% w/w	700 mg/kg (Rat)	5010 (Rabbit)	Not listed
Water	≥ 90000 mg/kg (Rat)	Not listed	Not listed

##### Skin corrosion/irritation

Causes severe skin burns and eye damage. pH: 1 @ 25°C

##### Serious eye damage/eye irritation

Not classified

##### Respiratory or skin sensitization

Not classified

#### **Germ cell mutagenicity**

Not classified

#### **Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Hydrochloric Acid, 37% w/w	7647-01-0	3 - Not classifiable	Not listed	Not listed	Not listed	Not listed

#### **Specific target organ toxicity - single exposure**

Not classified

#### **Specific target organ toxicity - repeated exposure**

Not classified

#### **Reproductive toxicity**

Not classified

#### **Chronic effects**

Affection/discolouration of the teeth. Dry skin. Inflammation/damage of the eye tissue. Irritation of the

### **11.2 Additional Information**

May cause respiratory irritation.  
Caustic burns/corrosion of the skin.  
Causes serious eye damage.  
Irritation of the gastric/intestinal mucosa.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Component	Freshwater Fish	Daphnia
Potassium Chloride	Not listed	EC50 = 825 mg/l
Hydrochloric Acid, 37% w/w	LC50 = 282 mg/l 96h	EC50 < 56 mg/l ( 72 h)

### **12.2 Persistence and degradability**

Not established.

### **12.3 Bio accumulative potential**

Not established.

### **12.4 Mobility in soil**

May be harmful to plant growth, blooming and fruit formation.



## 12.5 Results of PBT and vPvB assessment

Not established.

## 12.6 Endocrine disrupting properties

Not established.

## 12.7 Other adverse effects

Avoid release to the environment.

# SECTION 13: Disposal considerations

## 13.1 Waste Disposal Methods

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations. Avoid release to the environment.

# SECTION 14: Transport information

## DOT (US)

UN Number	UN1789
Proper Shipping name	Hydrochloric acid
Hazard Class	8
Packaging Group	III

## IMDG

UN Number	UN1789
Proper Shipping name	Hydrochloric acid
Hazard Class	8
Packaging Group	III

## IATA

UN Number	UN1789
Proper Shipping name	Hydrochloric acid
Hazard Class	8
Packaging Group	III

# SECTION 15: Regulatory information

## US federal

**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 applicable

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not applicable

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

500 lb

**SARA 311/312 Hazardous**

Immediate (acute) health hazard,

**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**

Not regulated.

**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.