SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Buffer, pH3
CAS number	See section 3
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)

This product is not categorized as hazardous in any GHS hazard class.

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	-	7732-18-5	98.90
Potassium Acid Phthalate	-	877-24-7	1.02
Hydrochloric Acid	-	7647-01-0	< 0.1

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice Show this sheet to a doctor if medical advice is needed.

If inhaled Not expected to require first aid. If necessary, remove to fresh air.

In case of skin contact May cause slight irritation.

In case of eye contact May cause slight irritation.

If swallowed Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Wash areas of contact with water. Does not present any significant health hazards. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use any means suitable for extinguishing surrounding fire (water or water spray). Neutralize with soda ash or slaked lime.

Unsuitable extinguishing media None identified.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard. May react with metals to release flammable Hydrogen gas.

5.3 Special protective equipment and precautions for firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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
1	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2 Environmental precautions

Do not allow release into the environment.

6.3 Methods and materials for containment and cleaning up

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

6.4 Reference to other sections

See section 8 for personal protective equipment. See section 13 for proper diposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

Hygiene measures

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protect from freezing and physical damage.

Incompatibilities

Most metals, Alkalis, active metals, Cyanides, Sulfides, Sulfites, Metal Oxides, Formaldehyde.

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	PEL-Ceiling	5 ppm; 7 mg/m3
	TWA	0.3 ppm
	TWA Ceiling	2 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
Hydrochloric Acid	TLV-Ceiling	2 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value

Hydrochloric Acid	TWA Ceiling	5 ppm

Biological occupational exposure limits

No additional information.

8.2 Exposure controls

Appropriate engineering controls

No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection

Safety glasses or goggles.

Skin protection

Chemical resistant gloves.

Body Protection

Appropriate protective work clothing.

Respiratory protection

Normal room ventilation is adequate.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	No data available
Odor Threshold	No data available
pH	3
Melting Point/Range	0.0°C
Boiling Point/Range	100°C
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	No data available
Lower	No data available

Vapor Pressure	No data available
Vapor Density	No data available
Density	1.0
Solubility	Miscible 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	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions of use and storage.

10.2 Chemical stability

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Data not available.

10.4 Conditions to avoid

Storage conditions on label.

10.5 Incompatible materials

Most metals, Alkalis, active metals, Cyanides, Sulfides, Sulfites, Metal Oxides, Formaldehyde.

10.6 Hazardous decomposition products

Will not occur.

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	Rabbit 900 mg/kg	-	LCLo, human 3000 ppm/5 minutes
Potassium Acid Phthalate	Rat > 3200 mg/kg	-	-

Skin corrosion/irritation

May cause slight irritation.

Serious eye damage/eye irritation

May cause slight irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Specific target organ toxicity - single exposure

No information available.

Specific target organ toxicity - repeated exposure

No information available.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Data not available.

12.2 Persistence and degradability

Data not available.

12.3 Bio accumulative potential

Data not available.

12.4 Mobility in soil

Data not available.

12.5 Results of PBT and vPvB assessment

Data not available.

12.6 Endocrine disrupting properties

Data not available.

12.7 Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Dispose in accordance with all applicable Federal, State and Local regulations.
Always contact a permitted waste disposer (TSD) to assure compliance.

SECTION 14: Transport information

DOT (US)

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Buffer, pH3

IMDG

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Buffer, pH3

IATA

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Buffer, pH3

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Hydrochloric Acid (CAS # 7647-01-0): 500 lb TPQ (gas only)
Hydrochloric Acid (CAS # 7647-01-0): 5000 lb EPCRA RQ (gas only)

SARA 311/312 Hazardous

Hydrochloric Acid (CAS # 7647-01-0): 2270 kg final RQ
Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ

SARA 313 (TRI reporting)

Hydrochloric Acid (CAS # 7647-01-0): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size).

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed.

Safe Drinking Water Act

Not listed.

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

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Hydrochloric Acid (CAS # 7647-01-0): Extraordinarily hazardous.

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

Not listed.

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

Hydrochloric Acid (CAS # 7647-01-0): Environmental hazard.
Water (CAS # 7732-18-5): Present.

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 6/10/2025

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.