

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name TISAB Buffer Solution

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)

Skin Corrosion/Irritation - Category 2

Eye Damage/Irritation - Category 1

Respiratory Sensitizer - Category 1

Specific Target Organs - single exposure - Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H370 Causes damage to organs. H373 May cause damage to organs through prolonged or repeated exposure
Precautionary statements	P260 Do not breathe fumes, mist, vapors, or spray. P261 Avoid breathing fumes, mist, vapors, or spray. P264 Wash arms, hands and face thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves and eye protection. P285 In case of inadequate ventilation wear respiratory protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304+P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P307+P311 IF exposed: Call a POISON CENTER or physician. P310 Immediately call a POISON CENTER or physician. P314 Get medical attention if you feel unwell. P321 Specific treatment (Wash areas of contact with water immediately). P332+P313 If skin irritation occurs: Get medical attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or physician. P362 Take off contaminated clothing and wash it before reuse. P405 Store locked up. P501 Dispose of contents in accordance with local, state, federal and international regulations.

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	84.24
Acetic Acid	-	64-19-7	5.98
Sodium chloride	-	7647-14-5	5.80
Sodium hydroxide	-	1310-73-2	3.58
CDTA	-	13291-61-7	0.40

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
In case of skin contact	IF ON SKIN: Wash with plenty of soap and water. May cause irritation, redness, and pain
In case of eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.
If swallowed	Dilute with water or milk. Call a physician if necessary

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure. May cause irritation upon contact. Wash areas of contact with water. Does not present any significant health hazards. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). 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. Call a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use any means suitable for extinguishing surrounding fire.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

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 protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Liquid may be flushed to the sewer with plenty of water.

6.3 Methods and materials for containment and cleaning up

Absorb with suitable material (vermiculite, clay, paper towels, etc.). Treat the solid residue as normal refuse. Liquid may be flushed to the sewer with plenty of water

6.4 Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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

Hygiene measures

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

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

Incompatibilities

No information available.

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
Sodium Hydroxide	TWA	2 mg/m3
Acetic Acid	TWA	10 ppm, 25 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Sodium Hydroxide	TLV-Ceiling	2 mg/m3
Acetic Acid	TLV-STEL	15ppm
	TLV-TWA	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Wear protective gloves and eye protection. Chemical resistant gloves.

Skin protection

Wear protective gloves and eye protection. Chemical resistant gloves.

Body Protection

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate.
Chemical resistant gloves. Safety glasses or goggles.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate

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	Slight vinegar
Odor Threshold	No information available
pH	5.30 - 5.50
Melting Point/Range	No information available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	No information available
Upper	No information available
Lower	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	No information available
Molecular Weight	No information available
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

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

Stable under normal conditions of use and storage.

10.4 Conditions to avoid

Oxidizing agents.

10.5 Incompatible materials

Oxidizing agents.

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
Sodium chloride	3000 mg/kg	-	-

Skin corrosion/irritation

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN:

Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water immediately). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious eye damage/eye irritation

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory or skin sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

Germ cell mutagenicity

Not applicable.

Carcinogenicity

Not applicable.

Specific target organ toxicity - single exposure

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Reproductive toxicity

Not applicable.

Chronic effects

Not applicable.

11.2 Additional Information

Not applicable.

SECTION 12: Ecological information

12.1 Toxicity

Not applicable.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

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

No information available.

SECTION 14: Transport information

DOT (US)	Not regulated
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IMDG	Not regulated.
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IATA	Not regulated.
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SECTION 15: Regulatory information

US federal regulations

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

No information available.

CERCLA Hazardous Substance List (40 CFR 302.4)

No information available.

SARA 304 Emergency release notification

No information available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 kg final RQ

Acetic Acid (CAS # 64-19-7): 5000 lb final RQ; 2270 kg final RQ

SARA 313 (TRI reporting)

Not listed.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

No information available.

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

No information available.

Safe Drinking Water Act

No information available.

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

No information available.

US state regulations**US. Massachusetts RTK - Substance List**

Sodium Hydroxide (CAS # 1310-73-2): Present

Acetic Acid (CAS # 64-19-7): Present (including glacial)

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

Sodium Hydroxide (CAS # 1310-73-2): corrosive

Sodium Hydroxide (CAS # 1310-73-2): sn 1706

Acetic Acid (CAS # 64-19-7): corrosive

Acetic Acid (CAS # 64-19-7): sn 0004

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

Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard

Sodium Hydroxide (CAS # 1310-73-2): Present

Acetic Acid (CAS # 64-19-7): Environmental hazard; Environmental hazard (water solutions)

Acetic Acid (CAS # 64-19-7): Present (including water solutions)

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

Water (CAS # 7732-18-5): Present

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 4/11/2023

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.