Bioland Scientific LLC

Material Safety Data Sheet

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name 50x TAE Buffer (Tris-acetate-EDTA)

Catalog Number TAE01

Brand Bioland Chemicals

Company Bioland Scientific LLC

14925 Paramount Blvd., Suite C

Paramount, CA 90723

USA

Telephone 1-562-377-2668 Fax 1-562-733-6008 Emergency Phone # 1-562-377-2668

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Description: Solution

Components			
7732-18-5	water	>50%	
6850-28-8	[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]ammonium acetate	10-25%	
77-86-1	trometamol	10-25%	
139-33-3	disodium dihydrogenethylenediaminetetraacetate	1-2.5%	
	Warning: 3.1.0/4		

Other components:

Components not listed here are not hazardous or their concentrations do not exceed the limits specified in the OSHA Hazard Communication Standard 29 CFR 1910.1200

3. HAZARDS IDENTIFICATION

Hazard description: Not applicable

Information pertaining to particular dangers for man and environment:

The product does not have to be labeled due to the calculation procedure of international Guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0 - 4)

	• '
Health	0
Fire	0
Reactivity	0

HMIS ratings (scale 0-4)

Health	0
Fire	0
Reactivity	0

GHS label elements void

4.	FIRST AI	D MEASURES		

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special protective equipment for firefighters

No special measures required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Not required

Methods for cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Measures for environmental protection

Do not allow to enter sewers/ surface or ground water.

7. HANDLING AND STORAGE

Handling

No special measures required.

Storage

Requirements to be met by storerooms and receptacles. No special requirements.

Information about storage in one common storage facility: Not required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be Monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment

Respiratory protection	Not required
Hand protection	The glove material has to be impermeable and resistant to the product
Eye protection	Safety glasses with side-shields
Skin and body protection.	Lightweight protective clothing
Hygiene measures	The usual precautionary measures for handling chemicals should be followed
Environmental exposure controls	Prevent product from entering drains

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

9. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Materials to be avoided:

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: No dangerous decomposition products known.

10. TOXICOLOGICAL INFORMATION

Acute Toxicity

Eyes Skin	No irritant effect
Inhalation	No information available
Ingestion	No information available

Carcinogenic effe	cts No information available
Mutagenic effects	No information available
Reproductive toxic	city No information available
Sensitization	No information available

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

11. ECOLOGICAL INFORMATION

General Notes

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

12. DISPOSAL CONSIDERATIONS

Recommendation:

Smaller quantities can be disposed of with household waste.

Uncleaned packaging's Recommendation:

Disposal must be made according to official regulations.

13. TRANSPORT INFORMATION

DOT regulations:

Hazard class: -

Land transport ADR/RID (cross-border):

ADR/RID class: -

Maritime transport IMDG:

IMDG Class: -

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: -

UN "Model Regulation": -

14. REGULATORY INFORMATION

Sara:

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65:

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Cancerogenity categories

EPA (Environmental Protection Agency):

None of the ingredients is listed.

IARC (International Agency for Research on Cancer):

None of the ingredients is listed.

NTP (National Toxicology Program):

None of the ingredients is listed. TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients is listed.

Product related hazard information:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

15. OTHER INFORMATION

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Thermo Fisher Scientific is not held liable for any damage resulting from handling or from contact with the above mentage products.

MSDS has been prepared in accordance with ISO 11014-1 Standard and OSHA Hazard Communication Standard 29 CFR 1910.1200.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

USA End of Safety Data Sheet