

TBE Electrophoresis Buffer 20X

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



1. Identification of the substance and of the company

Product name	TBE Electrophoresis Buffer (Tris Borate, EDTA), 20X conc.
Catalog Number	TBE-50, TBE-1000
Supplier Information	Bento Bioworks Ltd 5 Hancock Road London, E3 3DA United Kingdom
Emergency telephone number (CHEMTREC)	Within the USA & Canada: 1-800-424-9300 Outside the USA & Canada: 1-703-741-5970

2. Hazards identification

Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (EU-GHS/CLP)

Repr. 1B, H360FD

Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word	Danger
Hazard statement(s)	H360FD May damage fertility. May damage the unborn child.
Precautionary statement(s)	P201 Obtain special instructions before use. P280 Wear protective gloves/protective clothing/eye protection/face protection. P308 + 313 IF exposed or concerned: Get medical advice/attention.
Other hazards	Not applicable

3. Composition / information on ingredients

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Boric acid (H3BO3)
CAS number	10043-35-3
EIN / ECS number	233-139-2
Weight %	5.5 - 10

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REACH registration number 01-2119486683-25-XXXX
Classification Repr. 1B, H360FD

4. First aid measures

If inhaled If breathed in, move person into fresh air. If not breathing give artificial respiration.

If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water.

In case of skin contact Wash off with soap and plenty of water.

In case of eye contact Flush eyes with water as a precaution.

Notes to physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H360 - May damage fertility or the unborn child

Indication of any immediate medical attention

Get medical advice/attention if you feel unwell.

5. Firefighting measures

Extinguishing media Dry chemical, CO₂, water spray or alcohol resistant foam.

Special hazards Not applicable.

Firefighting precautions Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions Avoid contact with skin, eyes or clothing.

Environmental precautions Avoid discharge into drains and waterways whenever possible.

Methods for cleaning up Soak up with inert absorbent material (sand, diatomite, acid binders, universal binders, sawdust).

7. Handling and storage

Precautions for safe handling Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage Store at ambient temperature in a dry, cool place.

Specific end use(s) For research and educational use only.

8. Exposure controls/personal protection

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory Protection Respiratory protection is not required.

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Hand Protection	For prolonged or repeated contact use protective gloves.
Eye Protection	Safety glasses.
Skin and Body Protection	Wear laboratory coat for body protection.
Hygiene Measures	Handle in accordance with good safety practice.

9. Physical and chemical properties

Appearance	Colourless liquid
Odour	Not defined
pH value	7.0 - 7.5
Boiling point	Undetermined
Melting point	Undetermined
Flash point	Not applicable
Autoignition	Not applicable
Explosion hazard	Not applicable
Vapour pressure	No information available
Relative density	No information available
Water solubility	Soluble

10. Stability and reactivity

Chemical stability	Stable under normal conditions.
Conditions to avoid	None, if used according to specifications.
Incompatible materials	Strong oxidizing agents, acids and alkali.
Hazardous decomposition	Products formed under fire conditions: carbon oxides, nitrogen oxides (NOx), oxides of phosphorus, lithium oxides.

11. Toxicological information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Boric acid (H3BO3)	= 2660 mg/kg (Rat) = 3765 mg/kg	No data available (Rat)	>0.16mg/L(Rat) >=2120mg/m3(Rat)

Routes of Exposure

Acute toxicity	Data insufficient for classification
Irritation and corrosion	Data insufficient for classification
Sensitisation	Data insufficient for classification
Chronic exposure	Data insufficient for classification
Exposure Symptoms	Dermatitis

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
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Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Target Organs	Liver, Kidney

12. Ecological information

Ecotoxicity	No information available.
Degradability	No information available.
Accumulation	No information available.
Mobility	No information available.

13. Disposal considerations

Waste treatment methods	Observe all federal, state, and local environmental regulations.
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14. Transport information

ADR/RID/ICAO/IATA class	This substance is considered to be non-hazardous for transport.
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15. Regulatory information

Labelling according to EU guidelines	This product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials.
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16. Other Information

This information is based on available knowledge and shall be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution.

This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Bento Bioworks Ltd is not held liable for any damage resulting from handling or from contact with the above mentioned products.

References

ECHA	https://echa.europa.eu/
TOXNET	https://www.nlm.nih.gov/toxnet/index.html
eChemPortal	https://www.echemportal.org/