

Trade name: 10X KBB Buffer

Product No: KBB1001

Version: 3.0

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier: Tris-TAPS Electrophoresis Buffer (mixture)****Product name: 10X KBB electrophoresis buffer, 1 liter****Cat. No.: KBB1001****Other means of ID: None****Hazard components for labelling: None****1.2 Relevant identified uses of the substance or mixture and uses advised against****Recommended Use:** For use with gel electrophoresis of DNA.**Restrictions on Use:** Not for use outside of life sciences research.**1.3 Details of the supplier of the safety data sheet:****Supplier:**

Sage Science, Inc.
500 Cumming Center
Suite 2400
Beverly, MA 01915
Tel: 978-922-1832
E-Mail : support@sagescience.com

1.4 EMERGENCY TELEPHONE NUMBER:**(US) 1-978-922-1832 (staffed Mon–Fri, 9:00–17:30 EST)**

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Classification in accordance with OSHA HazCom Standard 29 CFR 1910.1200(d).

Upon assessment, this mixture does not meet the criteria for classification as a health or physical hazard.

2.2. Label elements

Label information in accordance with OSHA HazCom Standard 29 CFR 1910.1200(f).

Hazard pictograms: None

Signal words: None

Hazard statements: None

Precautionary statements: None

2.3. Other hazards not otherwise classified (HNOC):

None identified.

SECTION 3: Composition/information on ingredients

This product is a mixture. All ingredients are present below applicable cut-off/concentration limits for health hazard classification under OSHA 29 CFR 1910.1200.

CAS-No.	EC-No.	Classification (OSHA 29 CFR 1910.1200(d))	Concentration (wt/v)
Tris (hydroxymethyl)aminomethane (Tris)			
77-86-1	201-064-4	Not Classified	<15%
3-(Tris(hydroxymethyl)methylamino)propane-1-sulphonic acid (TAPS)			
29915-38-6	249-954-1	Not Classified	<15%
Ethylenediaminetetraacetic acid (EDTA)			
60-00-4	200-449-4	Not Classified	<1%
Water			
7732-18-5	231-791-2	Not Classified	>75%

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SECTION 4: First Aid measures**4.1 Description of first aid measures****General information**

Standard laboratory protection (coat, glasses and gloves) should be observed.

Following inhalation

Aqueous solution, no special measures are necessary. If inhalation occurs, seek medical advice.

Following skin contact

Normal washing of skin is sufficient. If symptoms occur, seek medical advice.

Following eye contact

Rinse eyes thoroughly with water. If symptoms occur, seek medical advice.

Following ingestion

Rinse mouth with water. If symptoms occur, seek medical advice.

Self-protection of the first aider:

Not applicable.

4.2 Most important symptoms and effects, both acute and delayed

No further information is available

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Not applicable.

5.2 Special hazards arising from the substance or mixture

Not applicable.

5.3 Advice for fire-fighters

Not applicable.

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Not applicable

For emergency responders

Not applicable

6.2 Environmental precautions

Non hazardous. Users should follow procedures and regulations set by their facility with regards to discharge.

6.3 Methods and material for containment and cleaning up

Standard materials may be used (i.e paper towels, mop)

6.4 Reference to other sections

Not applicable.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Protective measures**

No special measures are required.

Advice on general occupational hygiene

Standard laboratory protection (coat, glasses and gloves) should be observed.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Store at room temperature. No special measures are required.

7.3 Specific end uses

Dilute 1:10 and use as electrophoresis buffer

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

OSHA PEL: None established for any ingredient in this mixture.

ACGIH TLV: None established for any ingredient in this mixture.

8.2 Exposure controls

Engineering controls: No special engineering controls required for normal laboratory use.

Personal protective equipment: Standard laboratory protection should be observed — lab coat, safety glasses, and gloves.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Clear Aqueous Liquid **Physical state:** Liquid **Colour:** Clear

Odour: None **Odour threshold:** Not Applicable

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	No Data Available					
Melting point/freezing point	Not Applicable					
Initial boiling point/boiling range	Not Applicable					
Flash point	Not Applicable					
Evaporation rate	Not Applicable					
Flammability (solid, gas)	Not Applicable					
Upper/lower flammability or explosive limits	Not Applicable					
Upper explosive limits	Not Applicable					
Lower explosive limits	Not Applicable					
Vapour pressure	Not Applicable					
Vapour density	Not Applicable					
Relative density	No Data Available					
Solubility(ies)	Miscible with water					
Partition coefficient: n-octanol/water	Not Applicable					
Auto-ignition temperature	Not Applicable					
Decomposition temperature	Not Applicable					
Viscosity	Not Applicable					
Viscosity, dynamic	Not Applicable					
Viscosity, cinematic	Not Applicable					
Explosive properties	Not Applicable					
Oxidising properties	Not Applicable					

9.2 Other information: No data available

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SECTION 10: Stability and reactivity**10.1 Reactivity**

Not indicated.

10.2 Chemical stability

The product is stable at normal storage and handling conditions

10.3 Possibility of hazardous reactions

Not indicated.

10.4 Conditions to avoid:

Not indicated.

10.5 Incompatible materials:

Not indicated.

10.6 Hazardous decomposition products:

Not indicated.

SECTION 11: Toxicological information**Likely routes of exposure:** inhalation, skin contact, eye contact, ingestion.**Symptoms related to the physical, chemical and toxicological characteristics:**

Not Applicable.

Delayed and immediate effects; chronic effects from short- and long-term exposure:

No chronic effects are anticipated from normal laboratory use.

Acute toxicity:

EDTA (CAS 60-00-4): LD50 Rat (Oral) >2,000 mg/kg

Source: PubChem,NIH. <https://pubchem.ncbi.nlm.nih.gov/compound/Edetic-acid#section=Toxicity>

Tris (CAS 77-86-1): No data available.

TAPS (CAS 29915-38-6): No data available.

Eye damage/irritation:

To the best of our knowledge this product does not cause eye damage. May cause irritation with susceptible persons.

Practical experience / human evidence:

In our experience there are no adverse effects from exposure to this product.

Sensitisation to the respiratory tract:

To the best of our knowledge this product does not cause irritation to the respiratory tract.

Skin sensitisation:

To the best of our knowledge this product does not cause skin irritation.

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CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) :

To the best of our knowledge this product does not cause any CMR effects.

Specific target organ toxicity (repeated exposure):

To the best of our knowledge this product does not cause organ toxicity.

Aspiration hazard:

To the best of our knowledge this product is not an aspiration hazard.

Carcinogenicity: No ingredient in this product is listed as a carcinogen or potential carcinogen by NTP, IARC, or OSHA.**SECTION 12: Ecological information****12.1 Toxicity:****Aquatic toxicity**

EDTA: LC50 Fish = >500 mg/l

Tris and TAPS: No data available.

Sediment toxicity

No data available

Terrestrial toxicity

No data available

12.2 Persistence and degradability

No data available on persistence and degradability, but there is no reason to suppose the product is persistent.

12.3 Bioaccumulative potential

No data available, but there is no reason to suppose the product bioaccumulates.

12.4 Mobility in soil

No data available, but there is no reason to suppose the product is ecologically harmful.

12.5 Other adverse effects:

The product and components have a very low global warming potential and no ozone depleting potential.

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SECTION 13: Disposal considerations**13.1 Waste treatment methods****Before intended use**

Properties of waste which render it hazardous: none

Disposal operations: Non-hazardous, aqueous. Dispose in accordance with applicable federal, state, and local regulations.

Recovery operations: not applicable

After intended use

Properties of waste which render it hazardous: none

Disposal operations: Non-hazardous, aqueous. Dispose in accordance with applicable federal, state, and local regulations.

Recovery operations: not applicable

Polypropylene containers can be recycled.**SECTION 14: Transport Information**

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air) data sheet.

14.1. UN number

Not classified as dangerous goods.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This product is subject to OSHA Hazard Communication Standard 29 CFR 1910.1200. No other federal regulatory listings apply to this mixture.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment is not required.

SECTION 16: Other information**16.1 Indication of changes**

Version 1.0: Original document.

Version 2.0 (12.04.2025): Revised document.

Version 3.0 (05.19.2026): Revised document.

16.2 Abbreviations and acronyms

Not applicable.

16.3 Key literature references and sources for data

Toxicity data for EDTA were obtained from PubChem, provided by the US National Institute of Health (NIH). <https://pubchem.ncbi.nlm.nih.gov/compound/Edetic-acid#section=Toxicity>

16.4 Training advice

Not applicable

16.5 Date of last revision: 05.19.2026