

SAFETY DATA SHEET (SDS)

TBE premixed buffer

Issue date: 09-07-2025

Section 1: Product Identifier and Chemical Identity

Product Identifier	
Product Name:	TBE premixed buffer, 20x concentration TBE premixed buffer, working solution
Product Codes:	MC44.12 MC44.15
Other means of identification:	
Chemical formula, alternative names:	Tris borate EDTA buffer solution
Recommended use of the chemical and restrictions on use	
Recommended Use:	Laboratory chemical used in gel electrophoresis
Suppliers name, address and phone number	
Supplier's Name:	Southern Biological
Supplier's ABN:	94 630 703 810
Supplier's Address:	168 Fulham Road Alphington Victoria 3078 Australia
Supplier's Phone No.:	1300 138 561
Emergency Phone number (BH)	1300 138 561

Section 2: Hazard Identification

Classification of the Hazardous Chemical	
Hazard Category	Reproductive toxicity category 1B
Label elements	
Hazard Pictograms:	
Signal Word:	Danger
Hazard Statements:	May damage fertility May damage the unborn child
Precautionary Statements:	Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not ingest. Do not handle unless all safety precautions have been read and understood. Should not be handled by pregnant people.

Section 3: Composition/information on ingredients

Ingredients		
Name	CAS	Proportion
Water	7732-18-5	balance
Tris base	77-86-1	1% - <30%
Boric acid	10043-35-3	<1% - 11%
EDTA	6381-92-6	<2%

Section 4: First Aid Measures

Necessary first aid measures	
After inhalation:	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms; call a doctor.
After skin contact:	Wash with water and soap and rinse thoroughly. If skin irritation occurs: Get medical advice/ attention.
After eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
After swallowing:	DO NOT INDUCE VOMITING. Wash out mouth with water. Drink water. Consult a physician/doctor.
Symptoms caused by exposure	
Acute:	None reasonably foreseeable
Delayed:	May damage fertility or the unborn child
Aggravated:	None reasonably foreseeable
Medical attention and special treatment	
Indications of any immediate medical attention and special treatment needed	Treat symptomatically

Section 5: Firefighting measures

Extinguishing media	
Suitable extinguishing equipment:	Use extinguishing measures that are appropriate to local circumstances and the surrounding fire
Specific hazards arising from the chemical:	No further relevant information available.
Advice for firefighters	
Special protective equipment and precautions:	Do not enter the fire area without proper protective equipment including respiratory equipment.

Section 6: Accidental release measures

General Information	
Personal precautions, protective equipment and emergency procedures:	Not required
Environmental precautions:	Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if spill to sewers or public waters. Soak up with inert absorbent material and dispose. Keep in suitable, closed containers for disposal.

Methods and material for containment and cleaning up:	Dispose of contaminating material as waste according to item 13.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on protective equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

General Information	
Precautions for safe handling:	Ensure good ventilation/exhaustion at the workplace. Wash hands after use. Do not eat, drink or smoke when using this product. Wash contaminated clothing and protective equipment prior to entering eating area.
Information about fire – and explosion protection:	No special measures required.
Conditions for safe storage, including any incompatibilities.	
Storage:	Store in cool dry area out of direct sunlight and incompatible materials. Keep containers closed when not in use. Store in suitably labelled containers.
Requirements to be met by storerooms and receptacles:	No special requirements.
Information about storage in one common storage facility:	Not required.
Further information about storage conditions:	Keep container tightly sealed. Keep out of direct sunlight.

Section 8: Exposure controls/personal protection.

General information			
Additional information about design of technical facilities:		No further data: see section 7	
Control parameters:			
Ingredients with limit values that require monitoring at the workplace: N/A			
Name	STEL	TWA	
	mg/m ³ ppm	mg/m ³ ppm	Footnote
Additional information		The lists valid during the making were used as basis.	
Exposure Controls:			
General protective and hygienic measures:	Use only in systems, processes and procedures in which effective ventilation has been provided. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with eyes.		
Respiratory protection:	In case of significant exposure use respiratory filter device. Not normally required.		
Clothing / Foot-wear and equipment	No special requirements.		
Protection of hands:	PVC or rubber gloves		
Eye protection:	Tightly sealed goggles		
Skin protection:	Laboratory Coat		

Section 9: Physical and chemical properties

Appearance:	
Form:	Liquid
Colour:	Clear, may "gel" white in cold conditions
Odour:	Not determined
Odour Threshold:	Not determined
pH value:	Not determined
Change in Condition:	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Flash point:	Not determined
Flammability (solid / gaseous)	Not determined
Ignition Temperature	
Decomposition temperature:	Not determined
Self-igniting:	Not determined
Danger of explosion:	Not classified as explosive
Explosion limits	
Lower:	Not determined
Upper:	Not determined
Vapour pressure:	Not determined
Density:	Not determined
General Info	
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in/ Miscibility with water:	Soluble
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	Not determined
Other information:	Not determined

Section 10: Stability and reactivity

Reactivity	
General	No further relevant information available.
Chemical Stability	
Thermal decomposition / conditions to be avoided:	Stable under normal conditions
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	No data available
Incompatible materials:	Strong oxidising agents, potassium, acid anhydrides, the generally known reaction partners of water
Hazardous decomposition products:	Products formed under fire conditions: carbon oxides, nitrogen oxides (NO _x), oxides of phosphorus, lithium oxides.

Section 11: Toxicological information

Information on toxicological effects			
Acute toxicity:	No data available		
Skin corrosion/irritation	Rabbit - no skin irritation – 24h		
Serious eye damage/irritation:	Rabbit - no eye irritation – 24h		
Inhalation:	No data available		
Germ cell mutagenicity:	No data available		
Carcinogenicity:	No data available		
Reproductive toxicity:	May damage fertility or the unborn child		
Specific target organ toxicity (STOT) – single exposure:	No data available		
Specific target organ toxicity (STOT) – single exposure:	No data available		
Aspiration hazard:	No data available		
Toxicology data for the components:			
Component	LD50 oral	LD50 dermal	LC50 inhalation
Boric acid	rat – 3000-4000 mg/kg	Rabbit – 2000 mg/kg	Rat – >0.16 mg/L 4 hr

Section 12. Ecological information

Ecotoxicity: boric acid	
Toxicity to fish	LC50 Pimephales promelas (fathead minnow) – 79.7 mg/L 96 hr
Toxicity to aquatic invertebrates	EC50 Daphnia magna (water flea) – 133 mg/L 48 hr
Toxicity to algae	EC50 Pseudokirchneriella subcapitata (green algae) – 52.4 mg/L 74.5 hr
Persistence and degradability:	No further relevant information available.
Behaviour in environmental systems	
Bio-accumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information	
Results of PBT and vPvB assessment	PBT: Not applicable vPvB: Not applicable
Other adverse effects:	No further relevant information available.

Section 13. Disposal Considerations

Waste treatment methods	
Recommendation	Prevent this material from entering waterways, drains and sewers. Comply with official regulations.
Uncleaned packaging:	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleansing agents:	Water, if necessary, together with cleansing agents.

Section 14. Transport information

General	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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Section 15. Regulatory Information

Safety health and environmental regulations/legislation specific for the substance or mixture	
Australian Inventory of Chemical Substances:	Substances are listed.
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

Section 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- End of SDS -