

# TBE Buffer (10X)

Catalog Numbers AM9865, AM9863, AM9864

Pub. No. MAN0018494 Rev. A.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](http://thermofisher.com/support).

## Product description

10X TBE is a pH-adjusted blend of ultrapure-grade Tris buffer, ACS-reagent-grade Boric Acid, and EDTA which, comes as a crystalline powder (Cat. No. AM9864) or liquid concentrate (Cat. Nos. AM9863 and AM9865) which are reconstituted to a 1X working solution.

## Contents and storage

Contents	Catalog No.	Quantity	Appearance	Storage conditions
TBE Buffer (10X)	AM9863	1 L	Colorless liquid	Store at room temperature. Protect from moisture.
	AM9864	10 pack <sup>[1]</sup>	White crystalline powder	
	AM9865	4 × 1 L	Colorless liquid	

<sup>[1]</sup> Each packet is reconstituted to 1 L of 10X TBE buffer upon addition of water.

## Product specifications

<b>1X concentration:</b>	89 mM Tris, 89 mM borate, 2 mM EDTA
<b>pH at 25°C:</b>	8.0–8.5
<b>MW of components:</b>	<ul style="list-style-type: none"> <li>• Tris base, 121.14 g/mol</li> <li>• Boric acid, 61.83 g/mol</li> <li>• EDTA, 372.3 g/mol</li> </ul>
<b>Usage:</b>	<ul style="list-style-type: none"> <li>• Used in nucleic acid gel electrophoresis as a buffer so that DNA is deprotonated and soluble in water.</li> <li>• Used for electrophoresis with higher voltage or longer runs time due to better buffering capacity.</li> </ul>

## Prepare 10X TBE from powder

One packet of 10X TBE powder makes 1 liter of 10X TBE buffer concentrate upon addition of water.

1. Fill a graduated cylinder or beaker with approximately 600 mL of distilled water and place a magnetic stir bar into the container.
2. Place the container on a stir plate and slowly add the contents of 1 package of 10X TBE to the water.
3. Mix the solution until the TBE is completely dissolved, then add distilled water to bring the final volume to 1 L.

## Prepare 1 L 1X TBE

Prepare 1X TBE from 10X TBE concentrate. Store 1X TBE at room temperature.

1. Check the 10X TBE concentrate for salt precipitation before each use. If necessary, re-dissolve any precipitate by warming the solution at 37°C, then cool back down to 25°C before use.
2. Dilute 100 mL of 10X TBE with 900 mL of deionized or distilled water. Label as 1X TBE.

## Limited product warranty

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Thermo Fisher Scientific Baltics UAB | V.A. Graiciuno 8, LT-02241 | Vilnius, Lithuania

For descriptions of symbols on product labels or product documents, go to [thermofisher.com/symbols-definition](http://thermofisher.com/symbols-definition).

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