



Tris-Acetate-EDTA buffer

pH 8.3

Product	Catalog No.	Package size
50X Tris-Acetate-EDTA buffer pH 8.3 (500 mL/bag)	61252	5 bags

Product description

In molecular biology, TAE buffers are used for agarose and polyacrylamide gel electrophoresis. TAE is advantageous for high resolution of long nucleic acid fragments (longer than 1500 bp) on agarose gels. It has a lower buffering capacity than TBE and in general, nucleic acid fragments move slower in TAE gels (apart from linear dsDNA, which tends to run faster). TBE has a greater buffering capacity and will give sharper resolution than TAE. However, TBE gels in general afford a poor recovery of nucleic acids compared with TAE gels. TAE is also used for native (non-denaturing) RNA analysis and in denaturing gels (instead of MOPS buffer) using prior denaturation of the RNA samples in hot formamide. Our TAE buffer is supplied as a pre-weighed powder mix in sealed bags, each giving 500 mL of 50X Tris-acetate-EDTA buffer with pH 8.3 at 25°C.

Product Specifications

Chemicals	Analytical grade
RNase/DNase activity	Not detectable
Format	Pre-weighed powder
Composition	2.000 M Tris-Acetate 0.050 M EDTA
Volume	500 mL
pH (25°C)	8.3 ± 0.10
Shelf life	Three years after production date

Applications

- Nucleic acid electrophoresis running buffer for agarose and polyacrylamide gels
- Native and denaturing RNA analysis
- Northern blotting

Product Use

Empty 1 bag into a laboratory flask or beaker placed on a magnetic stirrer. Add 350 mL of deionized water and stir the solution for a few minutes. Adjust the volume to 500 mL and stir until fully dissolved. The buffer is ready to use.

Stability

TAE buffer is shipped at room temperature. Store the bags in a dry place at room temperature. Shelf life is three years after production date.

Tips and tricks

If the contents of the bag do not dissolve properly, make sure:

- the water temperature is 25°C (do not exceed this temperature)
- the buffer solution is properly stirred.

Sterilization can be performed by filtration or autoclaving. Filter the buffer solution through a 0.22 µm filter into a sterile flask or autoclave for 15 to 20 minutes. Keep the buffer solution at +4°C.

Safety information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDSs). These are available online as pdf-file or upon request (contact@cube-biotech.com).