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# **ATR-MED®**

# **Product Information**

# TBE (Tris-Borate-EDTA) Buffer, 10X non-sterile; 0.2 μm filtered

Catalogue Number (10X – 100 mL): 87472-100mL

Catalogue Number (10X - 500 mL): 87472-500mL

## **Product Description**

TBE (Tris-Borate-EDTA) buffer is widely used to separate nucleic acids in horizontal gel electrophoresis, and occasionally in vertical polyacrylamide gels. TBE Buffer is recommended for high resolution of small DNA fragments (<1.5kb), e.g., PCR products or products of restriction enzyme digestion, however, it is also suitable for RNA polyacrylamide electrophoresis. In general, TBE is better suited for high-voltage (>150V) electrophoresis because of its higher buffering capacity and lower conductivity than TAE buffer. TBE buffer is applicable for the middle-sized DNA fragments ranging from 300-bp to 20-kb.

# **Highlights**

- Compatible with horizontal agarose and vertical polyacrylamide gels
- Used with non-denatured and denatured DNA and nondenatured RNA
- Better than TAE buffer for long runs due to higher buffering capacity and less heating

## **Product Composition**

The working concentration is either 1X or 0.5X. A 1:10 dilution of TBE 10X stock solution with dH<sub>2</sub>O will create a 1X working solution which contains: 89 mM Tris, 89 mM boric acid and 2 mM EDTA (pH  $8.00 \pm 0.1$ ).

## **Applications**

- Nucleic acid electrophoresis running buffer for agarose and polyacrylamide gels
- Agarose and polyacrylamide gel preparation
- Native and denaturing RNA analysis

Transfer buffer in Northern Blotting

#### **Product Procedure**

- **1.** Take a bottle of TBE (Tris-Borate-EDTA) Buffer, 10X from specified storage conditions at 15-30°C and read the label.
- 2. Ensure that the cap of the bottle is tight.
- **3.** Gently swirl the solution in the bottle to ensure homogeneity.
- **4.** A 10X concentrate that can be diluted to a 1X or 0.5X working solution with deionized water.

# Storage/Stability

Store at room temperature (15-30°C) and keep away from light. The shelf life is 12 months.

# **Shipping**

TBE (Tris-Borate-EDTA) buffer, 10X is shipped at RT.

#### **Precautions and Disclaimer**

This product is for R&D use only, not for use in drug, diagnostic procedures, household, or other uses. When working with the product, always wear a suitable lab coat and disposable gloves, protective eyewear. For more information, please consult the appropriate material safety data sheets (MSDSs). These are available online as pdf-file or on request (info@atrmed.com). To the extent allowed by law, ATR-MED Inc. will not be liable for special, incidental, indirect, punitive, multiple, or consequential damages in connection with or arising from this document, including your use of it. By use of this product, you accept all the terms and conditions of ATR-MED products. All trademarks are the property ATR-MED unless otherwise specified.

#### **Limited product warranty**

ATR-MED® warrants its products as set forth in the ATR-MEDs' General Terms and Conditions of Sale at www.atrmed.com/terms-and-conditions.html. If you have any questions, please contact ATR-MED at www.atrmed.com/support.

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