

# TBE Powder (1 L of 1×)

## 1 Contents

Components	HY-K1016-10 pouches	HY-K1016-50 pouches
TBE Powder (1 L of 1×)	10 pouches	5 × 10 pouches

## 2 Introduction

TBE buffer is widely used in biological experiments, especially in agarose gel electrophoresis of nucleic acid. DNA fragments (< 1 kb) can be separated effectively under TBE buffer. TBE buffer is also suitable for long-time electrophoresis.

MCE TBE Powder (1 L of 1×) consists of Tris, Boric Acid and EDTA. Each pouch can be diluted to 1 L 1× TBE buffer, in which the concentration of Tris is 89 mM, the concentration of Boric Acid is 89 mM and the concentration of EDTA is 2 mM. This product provides a convenient way to make TBE solution and eliminates the need to weigh and mix individual components.

## 3 General Protocol

1. Add 1 pouch of TBE Powder into the cleaned beaker, dissolve with 600 mL distilled water under a magnetic stirrer.

2. Add distilled water to the solution in step 1 until the total volume is 1 L. The final solution is 1× TBE buffer.

Note: a. The pH of the 1× TBE buffer is  $8.35 \pm 0.15$  @ 25°C.

b. The usual working concentration of TBE buffer is 0.5×, please dilute before use.

3. Store at room temperature for 1 month. TBE solutions may precipitate at low temperatures. If precipitation is observed, place in a 37°C water bath until completely dissolved before use.

## 4 Storage

Store at room temperature for 3 years

## 5 Precautions

1. As TBE buffer is easy to cause high electroosmosis and to form non-covalent complex with agarose, it is not recommended for DNA gel extraction.
2. The usual working concentration of TBE buffer is 0.5×, please dilute before use.
3. This product is for R&D use only, not for drug, household, or other uses.
4. For your safety and health, please wear a lab coat and disposable gloves to operate.