



# **BES** buffer free acid

Cell culture Tested

### Product Code: TC042

#### **Product Description :**

Molecular Formula: C<sub>6</sub>H<sub>15</sub>NO<sub>5</sub>S Molecular Weight: 213.25 CAS No.: 10191-18-1 Synonyms: N,N-bis [2-Hydroxyethyl]-2aminoethanesulfonic acid

BES buffer is a zwitterionic biological buffer used in bio-chemistry, cell culture and molecular biology. It has a pKa of 7.15 at 25°C and a useful buffering range of 6.40-7.80. BES is one of the 'Good' buffers selected by Dr Norman Good and colleagues in 1966 and has the following properties.

. Maximum solubility in water and minimum solubility in other buffers.

. Low contribution of ions to the medium.

. pKa is minimally influenced by buffer concentration, temperature and ionic constitution of the medium.

. Forms soluble complexes with metal.

. Resists enzymatic and non-enzymatic alterations and does not react with any component of the medium.

. Does not absorb light at wavelength longer than 230nm.

. Is easy to prepare and easy to purify.

#### Appearance

White crystalline powder.

**Solubility** Clear colorless solution at 50gm in 100ml of water.

**pH of 1 M solution** 2.50 -5.00

Heavy metal (as Pb) NMT 0.0005%

**Residue on Ignition** NMT 0.01%

Assay NLT 99%

Cell Culture Test Passes

#### Storage and Shelf Life:

Store at 15-30°C. Shelf life of the product is 48 months. Use before expiry date given on the product label.

#### **Directions :**

Preparation Instructions BES buffer free acid is completely soluble in water at 500mg/ml.

## **Quality Control:**

#### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia<sup>™</sup> Publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia<sup>™</sup> Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

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