BES buffer free acid

Cell culture Tested

Product Code: TC042

Product Description :

Molecular Formula: $C_6H_{15}NO_5S$
Molecular Weight: 213.25
CAS No.: 10191-18-1
Synonyms: N,N-bis [2-Hydroxyethyl]-2-aminoethanesulfonic 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.

Directions :

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

Quality Control:

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.