BIO BUFFER SOLUTIONS

REAGENT

HEPES

CAS #: 7365-45-9 **Formula: $C_8H_{18}N_2O_4S$** **F.W.: 238.31 g/mol**

HEPE-5251

BIO ULTRA GRADE

ANALYSIS	SPECIFICATIONS
Assay (by Titration, Dried Basis)	> = 99.0%
pH (5% at 25°C)	5.0 – 6.5
Loss on Drying (105°C, 3 hours)	< = 1.0%
UV Absorbance (260nm, 1mol/L, 1cm)	< = 0.1
UV Absorbance (280nm, 1mol/L, 1cm)	< = 0.1
Iron	< = 0.0005%
Sulfate	< = 0.05%
Heavy Metals (as Pb)	< = 0.0005%
Endotoxin, 0.2% Solution	< = 0.10 EU/mL
Sulfated Ash (600°C)	< = 0.2%
pKa at 20°C	7.35 – 7.69
pKa at 25°C	7.2 – 7.8
Solubility (1 mol/L, Soln.in H_2O)	Clear, Complete and Colorless
Identification	IR Matches Reference
Appearance	White Crystalline Powder

Industry Application

Suitable for use in biological and biotech chemical process applications from R&D through scale production.

Click here to view SDS, CoAs and other supporting regulatory documents on our website.

General Product Overview

HEPES is a zwitterionic buffer used to maintain pH of media used in cell cultures. It is one of Good's buffers that has a pKa value similar to its pH value, making it an ideal buffer for pH maintenance. A known limitation is its interference with the Folin protein assay. This buffer can form radicals, so it is not suitable for redox studies. HEPES is a Good's buffer because it has low UV absorptivity, minimal reactivity, stable pH and is soluble in water.

Key Product Features

- Appears as a white crystalline powder
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: N-(2-Hydroxyethyl) Piperazine-N'-2-Ethanesulfonic Acid; 4-(2-Hydroxyethyl) Piperazine-1-Ethanesulfonic Acid

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf-Life Policy

Typical shelf-life for this material is a two- year retest date with a three-year expiry from the date of manufacturing or repackaging. Please inquire for further information.

Package Sizes

1kg, 5kg, 10kg, 25kg, 50kg