

HEPES

ENDOTOXIN TESTED

CAS #: 7365-45-9

Formula: $C_8H_{18}N_2O_4S$

F.W.: 238.31 g/mol

HEPE-5251

BIO ULTRA GRADE

ANALYSIS		SPECIFICATIONS
Absorbance (1M)	260 nm 280 nm	≤ 0.1 a.u. ≤ 0.1 a.u.
Appearance and Color		White Crystalline Powder
Assay, Dried Basis		$\geq 99.0\%$
Endotoxin (0.2% solution)		≤ 0.10 EU/mL
Heavy Metals (Pb)		≤ 5 ppm
Identification, IR		Conforms to Reference Standard
Iron (Fe)		≤ 5 ppm
Loss on Drying		$\leq 1.0\%$
pH (5%)		5.0 – 6.5
pKa, 20°C		7.35 – 7.69
pKa, 25°C		7.2 – 7.8
Residue on Ignition		$\leq 0.2\%$
Solubility (1M)		Clear, Complete and Colorless
Sulfate		≤ 500 ppm

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

Please inquire for information regarding shelf-life.

Package Sizes

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

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.](#)

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