

**Certificate of Analysis**

**Name of Product** : HEPES  
**Manufacturer** : Proteogenix, Pearls Business Park, Netaji Subhash Palace, New Delhi 110034, India  
**Manufacturing Date** : 04-03-2025  
**Expiry Date** : 04-03-2030

**Product Number** : PX-BF-201  
**Batch Number** : PBF2012502  
**CAS Number** : 7365-45-9  
**Chemical Name** : 4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid  
**Chemical Formula** : C<sub>8</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>S  
**Mol. Wt.** : 238.30 g/mol

**Quality Control Assessment**

Parameter	Property	QC Result
Appearance (Color)	Colourless or White	Pass
Appearance (Form)	Crystals or Powder	Pass
Solubility (Color)	Colourless	Pass
Solubility (Turbidity)	Clear	Pass
<sup>1</sup> H NMR	Conforms to Structure	Pass
pH range	5.0 - 6.5	5.9
DNases	None Detected	Pass
RNases	None Detected	Pass
Protease	None Detected	Pass
Water (K.F.)	<=0.1 %	0.06%
Titration (NaOH)	99.5% - 100.5%	99.9%
<b>Metal Trace Analysis (ICP)</b>	Corresponds to Requirements	
Aluminum	< 5 mg/kg	< 5 mg/kg
Barium	< 5 mg/kg	< 5 mg/kg

**Release Date:** 10-03-2025  
**Product Code:** PX-BF-201

**Product Name:** HEPES Buffer

Parameter	Property	QC Result
Bismuth	< 5 mg/kg	< 5 mg/kg
Calcium	< 10 mg/kg	< 10 mg/kg
Cadmium	< 5 mg/kg	< 5 mg/kg
Cobalt	< 5 mg/kg	< 5 mg/kg
Chromium	< 5 mg/kg	< 5 mg/kg
Copper	< 5 mg/kg	< 5 mg/kg
Iron	< 5 mg/kg	< 5 mg/kg
Potassium	< 50 mg/kg	< 50 mg/kg
Lithium	< 5 mg/kg	< 5 mg/kg
Magnesium	< 5 mg/kg	< 5 mg/kg
Manganese	< 5 mg/kg	< 5 mg/kg
Molybdenum	< 5 mg/kg	< 5 mg/kg
Sodium	< 50 mg/kg	< 50 mg/kg
Nickle	< 5 mg/kg	< 5 mg/kg
Lead	< 5 mg/kg	< 5 mg/kg
Zinc	< 5 mg/kg	< 5 mg/kg
Arsenic	< 0.5 mg/kg	< 0.5 mg/kg
Chloride	< 50 mg/kg	< 50 mg/kg
Sulfate	< 50 mg/kg	< 50 mg/kg
UV Absorbance at 260nm	< 0.04	0.02
UV Absorbance at 280nm	< 0.04	0.02

**Storage Recommendations**

**Release Date:** 10-03-2025  
**Product Code:** PX-BF-201

**Product Name:** HEPES Buffer

# Certificate of Analysis

Store at Room Temperature.

---

**Test Conducted by** Dr. Megha Kaushik

**Testing Date** 10-03-2025

**Authorized Signature**



Dr. Megha Kaushik  
Chief Scientific Officer  
Proteogenix

---

**Disclaimer:** This certificate certifies that the product meets the outlined specifications. We are committed to ensure that our products meet the highest quality standards, and we stand behind the efficacy and reliability of our offerings. If you have any questions or require further information, please reach out at technical services. Actual results may differ based on experimental techniques and sample types. Users should perform their own validations tailored to their specific use case.

**Release Date:** 10-03-2025  
**Product Code:** PX-BF-201

**Product Name:** HEPES Buffer