



INDOFINE Chemical Company, Inc.

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Certificate of Analysis

Catalogue Number	BIO-200
Lot Number	001135-0510308
Product	4-(2-Hydroxyethyl)-1-piperazineethanesulfonic acid HEPES
CAS Number	7365-45-9
Molecular Formula	C ₈ H ₁₈ N ₂ O ₄ S
Molecular Weight	238.3

Appearance	White powder
Solubility	Clear, colorless solution (1M solution in Water)
pH	5.3 (5% solution in H ₂ O)
pKa	7.48 (25 °C)
UV Ratios	UV absorbance (0.1 M aq.) at 260 nm: 0.0122; UV absorbance (0.1 M aq.) at 280 nm: 0.0078 UV absorbance (0.1 M aq.) at 260 nm: 0.0213
Loss on Drying	0.2%
Ash	< 0.1%
Assay by titration	100.0% (anhydrous basis)
Application	Non-toxic to cell. It is hydrogen ion buffer, which can control the constant pH range for long term. Concentration is 10-50mmol/L. Generally, 20mmol/LHEPES in nutrient solution can get buffer ability.
Storage	Store at RT