



INDOFINE Chemical Company, Inc.

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Certificate of Analysis

Catalogue Number	BIO-200
Product	4-(2-Hydroxyethyl)-1-piperazineethanesulfonic acid
Lot Number	001135-0420408 HEPES
CAS Number	7365-45-9
Molecular Formula	$C_8H_{18}N_2O_4S$
Molecular Weight	238.3

Appearance	White powder
Solubility	Clear and complete (0.1M in Water)
pH	5.3 (5% Solution in H ₂ O)
pKa	7.54 (25 °C)
Loss on Drying	0.1%
Ash	< 0.1%
Assay by titration	99.9% (Dry basis)
Application	Non-toxic to cell. It is used as a hydrogen ion buffer, which can control the constant pH range for long term. The concentration is 10-50mmol/L. Generally, 20mmol/LHEPES in nutrient solution can get buffer ability.
Storage	Store at RT
Additional Information	UV absorbance (1M in Water) at 260 nm: 0.0181 UV absorbance (1M in Water) at 280 nm: 0.0107 UV absorbance (33% in Water) at 290 nm: 0.0148