



Certificate of Analysis

HEPES, FREE ACID

N-(2-Hydroxyethyl) Piperazine-N'(2-Ethanesulfonic Acid)

<u>Catalog #</u>	<u>Size</u>
IB01130	50gm
IB01131	250gm
IB01132	500gm
IB01133	1Kg

Catalog Number: IB01130, IB01131, IB01132, IB01133

Lot Number: 14B4001

Molecular Formula: C₈H₁₈N₂O₄S

Molecular Weight: 238.31

Appearance: Crystalline powder

Color: White

<u>Assay</u>	<u>Min</u>	<u>Max</u>	<u>Actual</u>
Assay (by titration)	≥99.0%		100.8
Absorbance (0.5M solution in H ₂ O)			
260 nm		≤0.05	0.010
280 nm		≤0.05	0.008
pH (0.5M solution in H ₂ O)	5.1	6.5	5.3
Water (by Karl Fischer)		≤0.25%	0.16
Heavy Metals (as Pb)		≤0.001%	<0.0005
Iron (Fe)		≤0.0005%	<0.0005
Sulfates (SO ₄)		≤0.05%	<0.05
DNase Assay			NONE
RNase Assay			NONE
Protease Assay			NONE
Cell Culture Test (5.95g/L in H ₂ O)			PASS

Storage

Store at room temperature. Protect from moisture.

This signature indicates that the above material has met all quality specifications and has been reviewed by a quality representative.

Signature: *K. McCarthy*
Date: 02/12/2014