

BIOBUFFER SOLUTIONS

100 Majestic Way, Bangor, PA 18013 / www.biospectra.us

Effective Date:	24-Jun-2025	24-Jun-2028	: Date of Next Review
Prepared By:	Taylor Yurick	BSI-COA-0067 v.6.3	: Supersedes
QA/QC Approval:	Jessica DeMaio	Hannah Kuchmas	: Management Approval
Reason for Revision:	See Revision History in MasterControl.		

CERTIFICATE OF ANALYSIS

HEPES

BIO ULTRA GRADE / HEPE-5201-26

LOT: HEPE-E03-0326-0016

C8H18N2O4S * F.W. 238.30 g/mol. * CAS# 7365-45-9
 Manufacturing Date: 06/01/26 Retest Date: 03/31/28
 Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS		SPECIFICATION	TEST RESULT
Absorbance (0.1M)	280 nm	0.0500 a.u. max.	0.0030 a.u.
	260 nm	0.0500 a.u. max.	0.0036 a.u.
Appearance and Color		White / Powder	White / Powder
Ash (Sulfurated)		0.2% max.	< 0.2%
Assay, Dried Basis		99.0% min.	100.1%
Enzymes	DNase	None Detected	None Detected
	RNase	None Detected	None Detected
	Protease	None Detected	None Detected
Moisture		1.0% max.	< 1.0%
pH (5% Soln)		5.0 – 6.5	5.3
pK _a		Report from MFG CoA	7.55
Trace Metals	Arsenic (As)	0.00005% max.	< 0.00005%
	Iron (Fe)	0.0005% max.	< 0.0005%
	Lead (Pb)	0.0005% max.	< 0.0005%

TEST METHOD REFERENCE: DCN: BSI-ATM-0070

MANUFACTURING DATE: The manufacturing date is representative of the final packaging date at BioSpectra.

INTENDED USE: Material represented by this Certificate of Analysis is suitable for use as a process chemical. The material represented by this Certificate of Analysis is not suitable to be used as an Excipient, Active Pharmaceutical Ingredient, Drug, Drug Product or Household Item.

Prepared By: David McCall Date: 6/12/26 Title: QA Tech III

Reviewed By: Joan Bugh Date: 6/12/26 Title: QA Supervisor

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