

BIO SPECTRA

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

Effective Date:	05-Feb-2025	05-Feb-2028	: Date of Next Review
Prepared By:	Taylor Yurick	BSI-COA-0005 v.6.3	: Supersedes
QA/QC Approval:	Jessica DeMaio	Carissa Albert	: Management Approval
Reason for Revision:	See Revision History in MasterControl.		

CERTIFICATE OF ANALYSIS

MES MONOHYDRATE

BIO PHARMA GRADE / MESM-4220-26

LOT: MESM-E02-0426-0034

 $C_6H_{13}NO_4S \cdot H_2O$ * F.W. 213.3 g/mol. * CAS# 145224-94-8

Manufacturing Date: 4/6/26 Retest Date: 4/30/28

Manufacturing Site: 100 Majestic Way, Bangor PA, 18013

Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS		SPECIFICATION	TEST RESULT
Absorbance (1M)	260 nm	0.1000 a.u. max.	0.0031 a.u.
	280 nm	0.1000 a.u. max.	0.0024 a.u.
Appearance and Color		White / Crystals	White / Crystals
Assay		99.0% min.	100.3%
Chloride		0.005% max.	<0.005%
Color (1M, Alkaline)		Colorless	Colorless
Enzymes	DNase	None Detected	None Detected
	RNase	None Detected	None Detected
	Protease	None Detected	None Detected
Heavy Metals		2 ppm max.	<0.15 ppm
Identification (IR)		Passes Test	Passes Test
Loss on Drying @ 130°C		7 – 10%	9%
pH (5% Soln.)		3.0 – 3.5	3.5
pH (0.5M)		2.5 – 4.5	3.3
pK _a		5.9 – 6.3	6.1
Residue on Ignition		0.05% max.	0.01%
Solubility (5%)		Passes Test	Passes Test
Sulfate		0.005% max.	<0.005%


ANALYSIS	SPECIFICATION	TEST RESULT	
Trace Elements	Arsenic (As)	5 ppm max.	<0.45 ppm
	Copper (Cu)	5 ppm max.	<1.5 ppm
	Iron (Fe)	5 ppm max.	<1.5 ppm
	Lead (Pb)	5 ppm max.	<0.15 ppm

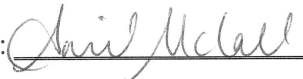
COUNTRY OF ORIGIN: U.S.A.

TEST METHOD REFERENCE: DCN: BSI-ATM-0009

INTENDED USE: Material represented by this Certificate of Analysis is suitable for use as a process chemical. It is manufactured in accordance with the IPEC-PQG Joint Good Manufacturing Practice Guide. The material represented by this Certificate of Analysis is not suitable to be used as an Active Pharmaceutical Ingredient, Drug, Drug Product or Household Item.

OVI STATEMENT: Based on the manufacturing process and the controlled handling, storage and analysis of this product, this product complies with the requirements and specifications listed in the current USP method <467> Tables 1, 2, 3, or 4.

Prepared by:  Date: 5/12/20 Job Title: QA Tech II

Reviewed by:  Date: 5/12/20 Job Title: QA Tech III