

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

Effective Date:	10-Jun-2022	10-Jun-2025	: Date of Next Review
Prepared By:	Brett Brink	BSI-COA-0052 v.4.1	: Supersedes
QA/QC Approval:	Jaron Hughes	Carissa McCollian	: Management Approval
Reason for Revision:	See Revision History in MasterControl.		

CERTIFICATE OF ANALYSIS

MOPS

BIO ULTRA GRADE / MOPS-5220-51

LOT: MOPS-0122-00185

$C_7H_{15}NO_4S$ * F.W. 209.26 g/mol. * CAS#: 1132-61-2

Manufacturing/Packaging Date: 07/23/22 Retest Date: 07/31/24

Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS		SPECIFICATION	TEST RESULT
Absorbance	260 nm	0.030 a.u. max.	0.004 a.u.
Appearance and Color		White / Crystals	White / Crystals
Assay		99.0% min.	100.4%
Identification (IR)		Passes Test	Passes Test
pH (1% solution)		2.5-4.5	4.3 @ 23.1°C
Solubility (5% solution)		Passes Test	Passes Test

TEST METHOD REFERENCE: DCN: BSI-ATM-0008

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: M. Shafer Date: 07/29/22 Job Title: QA Tech. I

Reviewed by: Jaron Hughes Date: 7/29/22 Job Title: QA Specialist

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

Effective Date:	10-Jun-2022	10-Jun-2025	: Date of Next Review
Prepared By:	Brett Brink	BSI-COA-0052 v.4.1	: Supersedes
QA/QC Approval:	Jaron Hughes	Carissa McCollian	: Management Approval
Reason for Revision:	See Revision History in MasterControl.		

CERTIFICATE OF ANALYSIS
MOPS
BIO ULTRA GRADE / MOPS-5220-51
LOT: MOPS-0122-00186
 $C_7H_{15}NO_4S \cdot \Delta$ F.W. 209.26 g/mol. Δ CAS#: 1132-61-2
 Manufacturing/Packaging Date: 07/23/22 Retest Date: 07/31/24
 Packaging Site: 100 Majestic Way, Bangor PA, 18013

ANALYSIS		SPECIFICATION	TEST RESULT
Absorbance	260 nm	0.030 a.u. max.	0.003 a.u.
Appearance and Color		White / Crystals	White / Crystals
Assay		99.0% min.	100.3%
Identification (IR)		Passes Test	Passes Test
pH (1% solution)		2.5-4.5	4.3 @ 24.4°C
Solubility (5% solution)		Passes Test	Passes Test

TEST METHOD REFERENCE: DCN: BSI-ATM-0008

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: M. Shafiq Date: 07/29/22 Job Title: QA Tech. IReviewed by: Jaron Hughes Date: 7/29/22 Job Title: QA Specialist