

# **BIOBUFFER SOLUTIONS**

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

|                      |                                        |                    |                       |
|----------------------|----------------------------------------|--------------------|-----------------------|
| Effective Date:      | 29-Jun-2026                            | 29-Jun-2029        | : Date of Next Review |
| Prepared By:         | Taylor Vazquez                         | BSI-COA-0352 v.1.0 | : Supersedes          |
| QA/QC Approval:      | Carissa Albert                         | Hannah Kuchmas     | : Management Approval |
| Reason for Revision: | See Revision History in MasterControl. |                    |                       |

## CERTIFICATE OF ANALYSIS

### MOPS

### BIO ULTRA GRADE / MOPS-5222

### LOT: MOPS-L03-0926-0012

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

Manufacturing Date: 10/03/26 Expiration Date: 12/31/27

Packaging Site: 100 Majestic Way, Bangor PA, 18013

| ANALYSIS               |        | SPECIFICATION            | TEST RESULT   |
|------------------------|--------|--------------------------|---------------|
| Absorbance (0.1M)      | 260 nm | $\leq 0.02$ a.u.         | $< 0.02$ a.u. |
| Appearance and Color   |        | White Crystalline Powder | Passes Test   |
| Assay, Dried Basis     |        | $\geq 99.0$ %            | 100.1 %       |
| Color of Solution (1M) |        | $\leq 50$ APHA           | $< 50$ APHA   |
| Heavy Metals (Pb)      |        | $\leq 5$ ppm             | $< 1.0$ ppm   |
| Loss on Drying         |        | $\leq 0.5$ %             | 0.2 %         |
| pH (1%)                |        | 2.5 – 4.5                | 4.4           |
| pKa                    |        | 7.10 – 7.30              | 7.2           |
| Solubility (10%)       |        | Passes Test              | Passes Test   |

TEST METHOD REFERENCE: DCN: BSI-ATM-0008

MANUFACTURING DATE: The manufacturing date is representative of the date of 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: 10/5/26 Job Title: QA Tech III

Reviewed by: James Berglin Date: 10/6/26 Job Title: QA Supervisor