



|                             |               |
|-----------------------------|---------------|
| Version                     | 00            |
| Molecular weight            | 209.26        |
| Quality Test / Release Date | 05/06/2019    |
| Molecular Formula           | C7 H15 N O4 S |
| CAS No                      | 1132-61-2     |
| Linear Formula              |               |
| Flash Point (°C)            | 116           |

## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

|                              |   |   |
|------------------------------|---|---|
| <b>Catalog Number</b>        | 32766   | <b>Quality Test / Release Date</b> 05/06/2019 |
| <b>Lot Number</b>            | A0402630  |   |
| <b>Description</b>           | MOPS, 99.5%, for molecular biology, Dnase, Rnase, Prot. free, f or peptide sequencing |   |
| <b>Country of Origin</b>     | ISRAEL  |   |
| <b>Declaration of Origin</b> | synthetic   |   |

|                        |  |
|------------------------|--|
| <b>BSE/TSE comment</b> |  |
|------------------------|--|

|                         |  |
|-------------------------|--|
| <b>Chemical Comment</b> |  |
|-------------------------|--|

| Result name                     | Units | Specifications           | Test Value               |
|---------------------------------|-------|--------------------------|--------------------------|
| Appearance (Color)              |       | White                    | White                    |
| Appearance (Form)               |       | Powder                   | Powder                   |
| Infrared spectrum               |       | Conforms                 | Conforms                 |
| Assay                           |       | ≥99.5 %                  | 100 %                    |
| Loss on drying                  |       | ≤0.5 % (105°C)           | 0.2 % (105°C)            |
| Heavy metals (as Pb)            |       | ≤5 ppm                   | ≤5 ppm                   |
| pH                              |       | 3.0 to 4.5 (1 % at 25°C) | 3.7 (1 % at 25°C)        |
| Dnase, Rnase, Protease activity |       | none detected            | none detected            |
| Solubility                      |       | (10 % in water) Complete | (10 % in water) Complete |
| UV                              |       | (0.1 M in water)         | (0.1 M in water)         |
| UV                              |       | at 260 nm A: ≤0.01       | at 260 nm A: 0.002       |
| UV                              |       | at 280 nm A: ≤0.01       | at 280 nm A: 0.003       |



A handwritten signature in black ink, which appears to read "L. Van den Broek".

L. Van den Broek, QA Manager

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Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticaalaa 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>  
 1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329