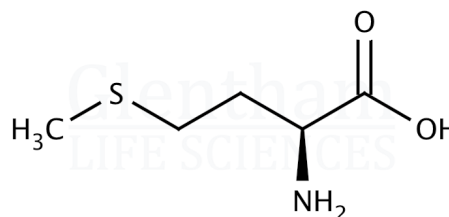


## Certificate of Analysis

|                   |                                                                              |
|-------------------|------------------------------------------------------------------------------|
| Product Name      | L-Methionine, 99%, GlenCell™, suitable for cell culture, Ph. Eur., USP grade |
| Glentham Code     | GM9348                                                                       |
| CAS Number        | 63-68-3                                                                      |
| EINECS            | 200-562-9                                                                    |
| MDL-Nummer        | MFCD00063097                                                                 |
| Batch Number      | 447PDY                                                                       |
| Molecular Weight  | 149.21                                                                       |
| Molecular Formula | C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub> S                             |
| Storage Temp.     | +20°C                                                                        |



| Property                       | Specification                         | Batch 447PDY               |
|--------------------------------|---------------------------------------|----------------------------|
| Physical Description           | White crystalline powder              | White crystalline powder   |
| Identification                 | To pass tests                         | Entspricht                 |
| Solubility (2.5% in water)     | Clear, colourless solution            | Clear, colourless solution |
| pH (2.5% in water)             | 5.6 - 6.1                             | 5.9                        |
| Specific Optical Rotation      | +23.0 - +24.0 ° (20°C, 2% in 6 M HCl) | +23.5°                     |
| Specific Optical Rotation      | +22.4 - +24.7 ° (25°C, 2% in 6 M HCl) | +23.6°                     |
| Ammonium (NH4)                 | ≤ 0.02%                               | ≤ 0.005%                   |
| Chloride (Cl)                  | ≤ 0.02%                               | ≤ 0.017%                   |
| Sulphate (SO4)                 | ≤ 0.03%                               | ≤ 0.02%                    |
| Iron (Fe)                      | ≤ 10ppm                               | Entspricht                 |
| Heavy Metals (as Pb)           | ≤ 5ppm                                | Entspricht                 |
| Arsenic (As2O3)                | ≤ 1ppm                                | Entspricht                 |
| Ninhydrin-positive substances  | ≤ 0.5%                                | ≤ 0.3%                     |
| Loss on Drying                 | ≤ 0.20%                               | 0.0%                       |
| Sulphated Ash                  | ≤ 0.1%                                | 0.0%                       |
| Endotoxins                     | ≤ 6.0EU/g                             | ≤ 3EU/g                    |
| Assay (Titration)              | 99.0 - 101.0 % (dried basis)          | 100.0%                     |
| Pharmacopoeia Specification(s) | EP, USP                               | Entspricht                 |
| Origin                         | Non-animal                            | Entspricht                 |

|                       |            |
|-----------------------|------------|
| Specification Version | v1.1       |
| Manufacture Date      | 2020-12-15 |
| Re-Test Date          | 2030-07-01 |

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glentham Life Sciences Ltd, 2025