Acros Organics BV (Thermo Fisher Scientific)
Janssen Pharmaceuticalaan 3a
Geel,
2440, Belgium

# CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek. Certificate Number. 2317548

| | |
|---|---|
| Catalogue Number | 16615 |
| Lot Number | A0480477 |
| Description | L-Histidine,98% |
| CAS Number | 71-00-1 |
| Quality Test/Release Date | 12/Feb/2026 |
| Suggested retest date | 12/Feb/2031 |
| Country of Origin | CHINA |
| Declaration of Origin | plant |
| BSE/TSE | The product is made by fermentation of molasse |

| Result Name | Units | Specifications | Test Value |
|---|---|---|---|
| Appearance (Color) | | White to almost white | almost white |
| Appearance (Form) | | Crystalline powder or crystals | Crystalline powder |
| Infrared spectrum | | Conforms | Conforms |
| Titration with HClO4 | % | 97.5 to 102.5 (On dry substance) | 99.3 (On dry substance) |
| Loss on drying | % | =<0.2 (105°C, 3 h) | 0.12 (105°C, 3 h) |
| Sulfated ash | % | =<0.4 | 0.04 |
| Specific optical rotation | | +11.5° to +14.0° (20°C, 589 nm) (c=11, 6 N HCl) | +12.3° (20°C, 589 nm) (c=11, 6 N HCl) |
| Chloride (Cl) | ppm | =<500 | =<500 |
| Sulfate (SO4) | ppm | =<300 | =<300 |
| Iron (Fe) | ppm | =<30 | =<30 |
| pH | | 7.0 to 8.5 (2 % in water) | 7.7 (2 % in water) |



Geert Torfs
Supervisor, QC

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.