

Certificate of Analysis

Product Name: L-4-HYDROXYPROLINE
BioChemika

Product Number: 99982

Batch Number: BCBN6490V

Brand: Fluka

CAS Number:

Formula:

Formula Weight:

Quality Release Date: 19 AUG 2014

Recommended Retest Date: JUL 2018

| TEST | SPECIFICATION | RESULT |
|---------------------------------------|-----------------------------|------------------|
| APPEARANCE (COLOR) | COLORLESS OR WHITE | WHITE |
| APPEARANCE (FORM) | POWDER OR CRYSTALS | CRYSTALS |
| TITRATION (NT) HClO ₄ 0.1M | 99.0 - 101.0 % | 100.4 % |
| PURITY (TLC AREA %) | ≥ 99.7 % | 99.7 % |
| SPECIFIC ROTATION (20/D) | -76.0 ± 1.5 DEGREES | -76.1 DEGREES |
| CONCENTRATION | C=5 IN WATER | C=5 IN WATER |
| SOLUBILITY (COLOR) | COLORLESS | COLORLESS |
| SOLUBILITY (TURBIDITY) | CLEAR (< 3.5 NTU) | CLEAR |
| SOLUBILITY (METHOD) | 1G IN 10ML WATER | 1G IN 10ML WATER |
| LOSS ON DRYING | ≤ 0.1 % | <0.05% |
| SULFATED ASH | ≤ 0.1 % | <0.05% |
| INFRARED SPECTRUM | CONFORMS TO STRUCTURE | CONFORMS |
| METAL TRACE ANALYSIS (ICP) | CORRESPONDS TO REQUIREMENTS | PASSED |
| CALCIUM (ICP) | ≤ 10 MG/KG | < 10 MG/KG |
| CADMIUM (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| COBALT (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| CHROMIUM (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| COPPER (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| IRON (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| POTASSIUM (ICP) | ≤ 50 MG/KG | < 50 MG/KG |
| MAGNESIUM (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| MANGANESE (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| SODIUM (ICP) | ≤ 50 MG/KG | < 50 MG/KG |
| NICKEL (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| LEAD (ICP) | ≤ 5 MG/KG | < 5 MG/KG |

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| ZINC (ICP) | ≤ 5 MG/KG | < 5 MG/KG |
| TOTAL SULFUR AS SO₄ (ICP) | ≤ 100 MG/KG | < 100 MG/KG |
| CHLORIDE (CL) | ≤ 100 MG/KG | <100MG/KG |
| ION CHROMATOGRAPHY (NH₄⁺) | ≤ 100 MG/KG | <100MG/KG |



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Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.