



INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

Certificate of Analysis

| | |
|--|--|
| Catalogue Number | 04-2221 |
| Product | L-Ornithine hydrochloride |
| Lot Number | O670260 L-Orn-OH•HCl (S)-2,5-Diaminopentanoic acid hydrochloride |
| CAS Number | 3184-13-2 |
| Molecular Formula | C ₅ H ₁₂ N ₂ O ₂ •HCl |
| Molecular Weight | 168.6 |
| <hr/> | |
| Appearance | White crystalline powder |
| Melting Point | 245 °C (dec.) |
| Heavy Metals | < 10 ppm |
| Arsenic (As₂O₂) | < 1 ppm |
| Anion | Sulfate: < 0.02% Chloride: 20.9% |
| Cation | Ammonium: < 0.02% Iron: < 10 ppm |
| pH | 5.4 |
| Optical Rotation | [α] _D ²⁰ = + 23.9 ° |
| Loss on Drying | 0.04% |
| Other Amino Acids | Not detected |
| Residue On Ignition | 0.02% |
| Assay (anhydrous basis) | 100.1% |
| Storage | Store at RT |

Prepared by:

Ramesh Mandadi

Ramesh Mandadi
Director of Operations

Reviewed and approved by:

Sujata Moton

S. Moton
VP