



CERTIFICATE OF ANALYSIS

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|--------------|---|
| Product | L-PROLINE |
| Grade | USP |
| Product Code | PB0923 |
| Formula | C ₅ H ₉ NO ₂ |
| MW | 115.14 |
| CAS# | 147-85-3 |
| LOT# | |

| Test Items | Specifications | Results |
|-------------------------------|--------------------------------------|---------|
| Appearance | White crystals or crystalline powder | |
| Identification (IR) | Conforms to Structure | |
| Assay | 98.5% ~101.5% | |
| Specific Rotation | -84.3° ~ -86.3° | |
| Chloride (as Cl) | ≤0.05% | |
| Sulfate (as SO ₄) | ≤0.03% | |
| Iron | ≤30ppm | |
| Heavy Metals (as Pb) | ≤15ppm | |
| Loss on Drying | ≤0.4% | |
| Residue on Ignition | ≤0.4% | |
| Organic Volatile Impurities | PASS | |

Storage: Store at room temperature. Protect from moisture.