

## Certificate of Analysis

Date of Testing: 2022-12-19 18:32:07

Date of Next Testing: 2026-12-18 18:32:07

Product Name: **D-Valine**

CAS Number: 640-68-6

Specifications &amp; Purity: 98%

Lot #: L2214545

SKU #: **V101067**Version: **0**Analysis #: **152836**

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	11.7-12.2 (%)	12.12 %
Carbon by Elemental Analysis	50.2-52.3 (%)	51.32 %
Purity(HPLC)	98-100 (%)	98.90000 %
Specific Rotation [α] <sub>20</sub> /D(c=8 in -29--26 (°) 6M HCl)		-26.89 °
Appearance (V101067)	White to Almost White Powder to Crystals and/or Chunks or Flakes	White to Almost White Powder to Crystals and/or Chunks or Flakes
Solubility in H <sub>2</sub> O , clear to slightly hazy(50mg/ml)	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure

John Su  
QA & QC Manager