

## Certificate of Analysis

Date of Testing: 2024-10-14 14:37:32  
Date of Next Testing: 2026-10-14 14:37:32  
Product Name: **4-Nitro-L-phenylalanine Hydrate**  
CAS Number: 949-99-5  
Specifications & Purity:  $\geq 98.0\%$ (HPLC)  
Lot #: F1701100  
SKU #: **N139482**  
Version: **0**  
Analysis #: **419564**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.40000 %
Water by Karl Fischer	0-10 (%)	5.30 %
Purity(Nonaqueous Titration)	97.5-102.5 (%)	100.40 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in } 1\text{mol/L HCl})$	5-7 ( $^{\circ}$ )	6.40 $^{\circ}$
Appearance (N139482)	White to Pale Reddish-Yellow Crystal or Powder	White to Pale Reddish-Yellow Crystal or Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager