

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-12-13 17:06:17
 Date of Next Testing: 2026-12-12 17:06:17
 Product Name: **N-[(S)-(+)-1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanine**
 CAS Number: 82717-96-2
 Specifications & Purity: $\geq 98\%$ (HPLC)
 Lot #: L2208170
 SKU #: **E130003**
 Version: **0**
 Analysis #: **114346**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D(c=1 \text{ in MeOH})}$	28-31 (°)	28.00600°
Purity(Nonaqueous Titration)	97.5-102.5 (%)	99.91000%
Carbon by Elemental Analysis	62.9-66.1 (%)	64.25000%
Melting point	148-154 (°C)	153.39000 °C
Purity(HPLC)	98-100 (%)	98.52600%
Nitrogen by Elemental Analysis	4.7-5.3 (%)	4.71000%
Appearance (E130003)	White powder	White powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in MeOH , clear, colorless solution,2.5%	pass	Pass



John Su
QA & QC Manager