

Certificate of Analysis

Date of Testing: 2024-10-21 14:16:14

Date of Next Testing: 2026-10-21 14:16:14

Product Name: **D-Valine Benzyl Ester p-Toluenesulfonate**

CAS Number: 17662-84-9

Specifications & Purity: $\geq 98\%$

Lot #: E1528154

SKU #: **S135773**

Version: **0**

Analysis #: **423950**

Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=3.2 \text{ in MeOH})$	2-5 ($^{\circ}$)	4.02 $^{\circ}$
Melting point	160-164 ($^{\circ}\text{C}$)	161.40000 $^{\circ}\text{C}$
Purity(Neutralization titration)	97.5-102.5 (%)	98.20 %
Purity(HPLC)	98-100 (%)	98.10000 %
Appearance (S135773)	White to Off-White Powder	White to Off-White Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager