

## Certificate of Analysis

Date of Testing: 2025-02-08 10:30:00

Date of Next Testing: 2027-02-08 10:30:00

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

CAS Number: 17662-84-9

Specifications & Purity:  $\geq 98\%$

Lot #: D2321206

SKU #: **S135773**

Version: **0**

Analysis #: **468000**

Storage Temperature: Store at -20°C

| Parameter                                                  | Limit Values              | Result                    |
|------------------------------------------------------------|---------------------------|---------------------------|
| Specific Rotation $[\alpha]_{20/D}(c=3.2 \text{ in MeOH})$ | 2-5 (°)                   | 3.34°                     |
| Melting point                                              | 160-164 (°C)              | 160.50000 °C              |
| Purity(Neutralization titration)                           | 97.5-102.5 (%)            | 101.30 %                  |
| Purity(HPLC)                                               | 98-100 (%)                | 99.50000 %                |
| Appearance (S135773)                                       | White to Off-White Powder | White to Off-White Powder |
| Proton NMR spectrum                                        | Conforms to Structure     | Conforms to Structure     |



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