

## Certificate of Analysis

Date of Testing: 2022-04-13 11:30:05  
Date of Next Testing: 2024-04-12 11:30:05  
Product Name: **5-Benzyl-D-Glutamate**  
CAS Number: 2578-33-8  
Specifications & Purity:  $\geq 98.0\%$ (HPLC)  
Lot #: E2009088  
SKU #: **B136140**  
Analysis: **086631**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.30000%
Melting point	167-178 (°C)	168.80000 °C
Purity(Neutralization titration)	98-100 (%)	98.30%
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in } 1\text{mol/L HCl})$	-31--25 (°)	-27.00°
Appearance (B136140)	white to off-white powder or flakes	white to off-white powder or flakes
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager