

## Certificate of Analysis

Date of Testing: 2023-08-04 17:05:17  
Date of Next Testing: 2026-08-03 17:05:17  
Product Name: **(S)-(+)-Alanine**  
CAS Number: 56-41-7  
Specifications & Purity: for synthesis  
Lot #: G23211138  
SKU #: **S432937**  
**Analysis:** **245478**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific rotation $[\alpha]_{20/D}(c=10 \text{ in HCl } 6 \text{ mol/l})$	14-15.5 (°)	14.39100°
Assay(Titration by HClO <sub>4</sub> )	99-100 (%)	99.89%
Appearance(S432937)	White Powder or Chunks	White Powder or Chunks
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager