

Certificate of Analysis

Date of Testing: 2023-03-29 13:40:08

Date of Next Testing: 2027-03-28 13:40:08

Product Name: **(S)- α -Amino- γ -butyrolactone hydrochloride**

CAS Number: 2185-03-7

Specifications & Purity: 97%

Lot #: C2324314

SKU #: **A101211**

Analysis: **191312**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Titration)	96.5-103.5 (%)	101.14 %
Specific Rotation $[\alpha]_{20/D}(c=0.2 \text{ in EtOH})$	-28--25 (°)	-27.94 °
Melting point	210-220 (°C)	219.79000 °C
Appearance (A101211)	white to brown powder	White to brown powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , very few cloudy	pass	Pass



John Su
QA & QC Manager