

## Certificate of Analysis

Date of Testing: 2022-10-09 14:52:26  
 Date of Next Testing: 2026-10-08 14:52:26  
 Product Name: **γ-Aminobutyric acid**  
 CAS Number: 56-12-2  
 Specifications & Purity: 99%  
 Lot #: I2223412  
 SKU #: **A104200**  
**Analysis:** **133362**  
 Storage Temperature: Desiccated

Parameter	Limit Values	Result
Purity(Titration by HClO <sub>4</sub> )(anhydrous)	98.5-101.5 (%)	99.09 %
Chloride (Cl <sup>-</sup> )	0-400 (ppm)	112.00 ppm
Melting point	196-204 (°C)	202.05000 °C
Heavy metal (as Pb)	0-10 (ppm)	5.30 ppm
Transmission(C=10, 2 N HCl, 430 nm,1 cm cell)	95-100 (%)	97.20 %
Sulfate(SO <sub>4</sub> <sup>2-</sup> )	0-500 (ppm)	151.00 ppm
Sulfate Ash	0-0.1 (%)	0.03 %
Loss on drying	0-0.5 (%)	0.23 %
Appearance (A104200)	White to Off-White Powder	White to Off-White Powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , colorless and clear (50mg/ml)	pass	Pass



John Su  
QA & QC Manager