

Certificate of Analysis

Date of Testing:	2023-01-16 09:41:07
Date of Next Testing:	2027-01-15 09:41:07
Product Name:	γ-Aminobutyric acid
CAS Number:	56-12-2
Specifications & Purity:	99%
Lot #:	A2305040
SKU #	A104200
Analysis:	166741
Storage Temperature:	Desiccated

Parameter	Limit Values	Result
Purity(Titration by HClO ₄)(anhydrous)	98.5-101.5 (%)	99.34 %
Chloride (Cl ⁻)	0-400 (ppm)	112.00 ppm
Melting point	196-204 (°C)	200.63000 °C
Heavy metal (as Pb)	0-10 (ppm)	5.00 ppm
Transmission(C=10, 2 N HCl, 430 nm,1 cm cell)	95-100 (%)	96.70 %
Sulfate(SO ₄ ²⁻)	0-500 (ppm)	122.00 ppm
Sulfate Ash	0-0.1 (%)	0.04 %
Loss on drying	0-0.5 (%)	0.30 %
Appearance (A104200)	White to off-white Powder or Crystals	White to Off-White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , colorless and clear (50mg/ml)	pass	Pass



ALADDIN SCIENTIFIC CORPORATION

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A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager