

## Certificate of Analysis

Date of Testing: 2022-12-09 14:07:29  
 Date of Next Testing: 2026-12-08 14:07:29  
 Product Name: **Gly-Glu**  
 CAS Number: 7412-78-4  
 Specifications & Purity: 98%  
 Lot #: L2205008  
 SKU #: **G121415**  
**Analysis: 127542**  
 Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.24400 %
Water by Karl Fischer	0-10 (%)	2.74 %
Purity(Nonaqueous Titration)(calcd.on dried substance)	97.5-102.5 (%)	100.52 %
Carbon by Elemental Analysis(anhydrous)	40.4-42 (%)	40.52 %
Nitrogen by Elemental Analysis (anhydrous)	13.4-14.1 (%)	13.40 %
Specific Rotation [α] <sub>20</sub> /D(c=5 in H <sub>2</sub> O)	-8--4 (°)	-6.00 °
Appearance (G121415)	white powder	White powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility,colorless clear,50 mg/mL, 80% HOAc and H <sub>2</sub> O	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager