

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-01-19 11:11:36  
Date of Next Testing: 2028-01-18 11:11:36  
Product Name: **N-Carbobenzoxy-L-pyroglutamic Acid**  
CAS Number: 32159-21-0  
Specifications & Purity: 98%  
Lot #: E1620094  
SKU #: **P111011**  
**Analysis:** **315929**  
Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Melting point	139-143 (°C)	141.50000 °C
Purity(HPLC)	98-100 (%)	98.30000 %
Specific Rotation [α] <sub>20</sub> /D(c=1 in MeOH)	-37--34 (°)	-35.22 °
Appearance (P111011)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Solubility in MeOH , Clear Colorless(100 mg/ml)	pass	Pass
Proton NMR spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager