

## Certificate of Analysis

Date of Testing: 2023-03-22 17:23:19  
Date of Next Testing: 2026-03-21 17:23:19  
Product Name: **N-Z-L-proline methyl ester**  
CAS Number: 5211-23-4  
Specifications & Purity: 98%  
Lot #: C2315484  
SKU #: **N341213**  
**Analysis:** **173423**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.79%
Specific Rotation [a] <sub>D</sub> 20/D(c=Neat)	-39~-35 (°)	-36.21°
Appearance(N341213)	colorless to yellow viscous liquid	Colorless to Yellow Viscous Liquid
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager