

Certificate of Analysis

Date of Testing: 2023-03-22 18:11:14

Date of Next Testing: 2027-03-21 18:11:14

Product Name: **DL-Pyroglutamic Acid Methyl Ester**

CAS Number: 54571-66-3

Specifications & Purity: >98.0%(GC)

Lot #: C23151831

SKU #: **M158587**

Analysis: **181277**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Refractive index n _{20/D}	1.485-1.489	1.49
Density (20°C)	1.248-1.252	1.25
Purity(GC)	98-100 (%)	99.34 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager