

## Certificate of Analysis

Date of Testing: 2025-04-09 14:27:31  
Date of Next Testing: 2029-04-08 14:27:31  
Product Name: **2,3-Pyrazinedicarboxylic acid**  
CAS Number: 89-01-0  
Specifications & Purity:  $\geq 97\%$   
Lot #: G2116179  
SKU #: **P100816**  
Version: **0**  
Analysis #: **491613**

Parameter	Limit Values	Result
Purity(Neutralization titration)	96.5-103.5 (%)	99.40%
Purity(HPLC)	97-100 (%)	97.90000%
Appearance (P100816)	white to light brown powder or crystals	white to light brown powder or crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager