

## Certificate of Analysis

Date of Testing: 2023-06-05 15:57:09  
Date of Next Testing: 2027-06-04 15:57:09  
Product Name: **2,3-Pyrazinedicarboxylic acid**  
CAS Number: 89-01-0  
Specifications & Purity: 97%  
Lot #: E23301224  
SKU #: **P100816**  
Analysis: **225558**

Parameter	Limit Values	Result
Purity(Neutralization titration)	96.5-103.5 (%)	101.82 %
Purity(HPLC)	97-100 (%)	99.95800 %
Appearance (P100816)	white to light brown powder or crystals	white to light brown powder or crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager