

Certificate of Analysis

Date of Testing: 2023-08-04 09:39:46

Date of Next Testing: 2027-08-03 09:39:46

Product Name: **Piperazine-1,4-dium tetrafluoroborate**

CAS Number: P493936

Specifications & Purity: 98%

Lot #: G2331100

SKU #: **P493936**

Analysis: **245990**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Purity(HPLC area)	98-100 (%)	99.69 %
Fluorine NMR Spectrum	Conforms to structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager