

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-13 14:14:00

Date of Next Testing: 2027-09-12 14:14:00

Product Name: **4-Pyrazoleboronic acid pinacol ester**

CAS Number: 269410-08-4

Specifications & Purity: $\geq 98\%$

Lot #: I2308419

SKU # **P123983**

Version **0**

Analysis #: **178925**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.66600 %
Nitrogen by Elemental Analysis	14-14.9 (%)	14.58000 %
Melting point	145-149 (°C)	147.76000 °C
Carbon by Elemental Analysis	54.1-57.7 (%)	56.72000 %
Appearance (P123983)	white to beige to brown powder or crystals	white to beige to 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