

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-12-17 10:18:52

Date of Next Testing: 2025-12-16 10:18:52

Product Name: **Piperazine Phosphate Monohydrate**

CAS Number: 18534-18-4

Specifications & Purity: $\geq 97\%$

Lot #: L2209807

SKU #: **P189055**

Version: **0**

Analysis #: **159498**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	7-10 (%)	8.66030 %
Purity(NonaqueousTitration)(calcd.onanh.substance)	97-103 (%)	98.48000 %
Appearance (P189055Color)	White to almost white	White to almost white
Appearance (P189055Form)	Powder to crystal	Powder to crystal
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager