

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-06-11 16:45:56  
Date of Next Testing: 2028-06-10 16:45:56  
Product Name: **Piperazine hexahydrate**  
CAS Number: 142-63-2  
Specifications & Purity: 98%  
Lot #: F2404417  
SKU #: **P105279**  
Version: **0**  
Analysis #: **343775**  
Storage Temperature: Desiccated

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.81600 %
Melting point	42-46 (°C)	44.75000 °C
Water by Karl Fischer	53-57.5 (%)	57.49 %
Appearance (P105279)	White to light yellow powder,crystals or solid	White to light yellow powder,crystals or solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager