

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-10-28 17:35:57

Date of Next Testing: 2029-10-27 17:35:57

Product Name: **Piperazine, anhydrous**

CAS Number: 110-85-0

Specifications & Purity:  $\geq 99\%$

Lot #: J2522307

SKU #: **P105274**

Version: **1**

Analysis #: **585484**

Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated, Cool

| Parameter             | Limit Values                                     | Result                                           |
|-----------------------|--------------------------------------------------|--------------------------------------------------|
| Water by Karl Fischer | 0-1 (%)                                          | 0.80250 %                                        |
| Purity(GC)            | 99-100 (%)                                       | 99.69900 %                                       |
| Appearance (P105274)  | White to Light Yellow Flakes, Crystals or Powder | White to Light Yellow Flakes, Crystals or Powder |
| Proton NMR spectrum   | Conforms to Structure                            | Conforms to Structure                            |
| Infrared spectrum     | Conforms to Structure                            | Conforms to Structure                            |



John Su  
QA & QC Manager