

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-04-08 11:46:58
Date of Next Testing: 2028-04-07 11:46:58
Product Name: **1-(m-Tolyl)piperazine**
CAS Number: 41186-03-2
Specifications & Purity: >95.0%(GC)
Lot #: G2001064
SKU #: **M157889**
Analysis: **341183**

| Parameter | Limit Values | Result |
|-------------------------------------|----------------------------------|----------------------------------|
| Density (20°C) | 1.043-1.047 | 1.04 |
| Purity(GC) | 95-100 (%) | 96.83 % |
| Refractive index n ₂₀ /D | 1.576-1.58 | 1.58 |
| Appearance (M157889) | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager