

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-10-12 15:15:05
 Date of Next Testing: 2025-10-11 15:15:05
 Product Name: **1,4-Bis(2-hydroxyethyl)piperazine**
 CAS Number: 122-96-3
 Specifications & Purity: $\geq 98\%$
 Lot #: D1615069
 SKU #: **W136083**
 Version: **1**
 Analysis #: **284538**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.10000 %
Melting point	136-140 (°C)	139.60000 °C
Purity(Nonaqueous Titration)	97.5-102.5 (%)	98.50000 %
Appearance (W136083)	White to pale yellow Crystal to Powder	White to pale yellow Crystal to Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager