

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-05-11 13:32:08
 Date of Next Testing: 2024-05-10 13:32:08
 Product Name: **1,4-Bis(2-hydroxyethyl)piperazine**
 CAS Number: 122-96-3
 Specifications & Purity: $\geq 98\%$
 Lot #: G2028075
 SKU #: **W136083**
 Version: **1**
 Analysis #: **090253**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.61600 %
Melting point	136-140 (°C)	136.01000 °C
Purity(Nonaqueous Titration)	97.5-102.5 (%)	98.14000 %
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