

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-04-25 14:51:55  
Date of Next Testing: 2028-04-24 14:51:55  
Product Name: **1,4-Piperazinediethanesulfonic acid(PIPES)**  
CAS Number: 5625-37-6  
Specifications & Purity: 99%  
Lot #: D2423358  
SKU #: **P105090**  
Analysis: **350808**

Parameter	Limit Values	Result
UV Absorbance 290nm(20% in 1N NaOH)	0-0.1	0.00
Heavy metal (as Pb)	0-5 (ppm)	2.00 ppm
Purity(Neutralization titration)	99-102.5 (%)	99.51%
Appearance (P105090)	Colorless or White Powder or Crystals	Colorless or White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility,0.25g/ml of 1N NaOH	Clear colorless	Clear Colorless



John Su  
QA & QC Manager