

## Certificate of Analysis

Date of Testing: 2022-08-01 15:45:10  
Date of Next Testing: 2026-07-31 15:45:10  
Product Name: **1-(2-Aminoethyl)piperazine**  
CAS Number: 140-31-8  
Specifications & Purity:  $\geq 99\%$   
Lot #: G2227574  
SKU #: **A101279**  
Version: **0**  
Analysis #: **113131**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Density (20°C)	0.983-0.987	0.98
Refractive index n <sub>20</sub> /D	1.495-1.501	1.50
Purity(GC)	99-100 (%)	99.39%
Appearance (A101279)	colorless viscous liquid	colorless viscous liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager