

## Certificate of Analysis

Date of Testing: 2024-07-10 16:17:06  
Date of Next Testing: 2028-07-09 16:17:06  
Product Name: **1-(2-Aminoethyl)piperazine**  
CAS Number: 140-31-8  
Specifications & Purity: 99%  
Lot #: G2405138  
SKU #: **A101279**  
Version: **0**  
Analysis #: **335479**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(GC)	99-100 (%)	99.69%
Refractive index n <sub>20</sub> /D	1.495-1.501	1.50
Density (20°C)	0.983-0.987	0.99
Appearance (A101279)	colorless viscous liquid	colorless viscous liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager