

## Certificate of Analysis

Date of Testing: 2024-12-04 15:46:05  
Date of Next Testing: 2028-12-03 15:46:05  
Product Name: **Morpholine**  
CAS Number: 110-91-8  
Specifications & Purity: AR, ≥99%  
Lot #: K2426740  
SKU #: **M109062**  
Version: **0**  
Analysis #: **436519**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Density (20°C)	0.996-1.007	1.00
Purity(GC)	99-100 (%)	99.88 %
Refractive index n <sub>20</sub> /D	1.452-1.456	1.45
Appearance (M109062)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager