

## Certificate of Analysis

Date of Testing: 2022-09-13 10:25:44  
Date of Next Testing: 2026-09-12 10:25:44  
Product Name: **Morpholine**  
CAS Number: 110-91-8  
Specifications & Purity: Analytical Reagent,99%  
Lot #: I2208382  
SKU #: **M109062**  
**Analysis:** **098478**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Density (20°C)	1-1.004	1.00
Refractive index n <sub>20</sub> /D	1.452-1.456	1.45
Purity(GC)	99-100 (%)	99.59 %
Appearance (M109062)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager