

## Certificate of Analysis

Date of Testing: 2023-07-07 14:15:53  
Date of Next Testing: 2025-06-26 14:15:53  
Product Name: **4-Methylmorpholine N-oxide**  
CAS Number: 7529-22-8  
Specifications & Purity: 50 wt. % in H<sub>2</sub>O  
Lot #: G2301551  
SKU #: **M105979**  
Version: **0**  
Analysis #: **224285**  
Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Density (20°C)	1.11-1.13	1.12
Refractive index n <sub>20</sub> /D	1.411-1.431	1.42
Purity(NonaqueousTitration)	50-55 (%)	50.19%
Appearance (M105979)	Colorless to Yellow Liquid	Colorless to Yellow Liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager