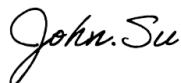


## Certificate of Analysis

Date of Testing: 2023-01-04 15:56:29  
Date of Next Testing: 2027-01-03 15:56:29  
Product Name: **N,N-Dimethylformamide**  
CAS Number: 68-12-2  
Specifications & Purity: >99.9% (GC)  
Lot #: L2223024  
SKU #: **D112000**  
Analysis: **173853**

Parameter	Limit Values	Result
Electric Conductivity	0-2 ( $\mu\text{S}/\text{cm}$ )	0.00 $\mu\text{S}/\text{cm}$
Color Test	0-10	0.00
Acidity	0-10 (ppm)	0.00 ppm
Water by Karl Fischer	0-500 (ppm)	300.00 ppm
Refractive index n <sub>20</sub> /D	1.428-1.432	1.43
Iron(Fe)	0-0.05 (ppm)	0.00 ppm
Purity(GC)	99.9-100 (%)	99.91%
Distillation range	0-2 ( $^{\circ}\text{C}$ )	1.00 $^{\circ}\text{C}$
Methanol(CH <sub>3</sub> OH)	0-20 (ppm)	8.00 ppm
Alkalinity	0-5 (ppm)	1.00 ppm
PH	6.5-8	6.91
Appearance (D112000)	Colorless Liquid	Colorless liquid



John Su  
QA & QC Manager