

## Certificate of Analysis

Date of Testing: 2024-10-18 16:45:19  
Date of Next Testing: 2026-10-18 16:45:19  
Product Name: **D-Cysteine Methyl Ester Hydrochloride**  
CAS Number: 70361-61-4  
Specifications & Purity:  $\geq 98\%$   
Lot #: E1927032  
SKU #: **S133993**  
Version: **2**  
Analysis #: **423150**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D(c=20 \text{ in MeOH})}$	1.5-3.5 ( $^{\circ}$ )	2.36 $^{\circ}$
Purity(Titration by Iodine)	97.5-102.5 (%)	100.02 %
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance(S133993)	White to Almost white powder to crystalline	White to Almost white powder to crystalline



John Su  
QA & QC Manager