

## Certificate of Analysis

Date of Testing: 2024-04-19 15:42:52

Date of Next Testing: 2028-04-18 15:42:52

Product Name: **D-Penicillamine**

CAS Number: 52-67-5

Specifications & Purity: >98.0%(T)

Lot #: D2412260

SKU #: **P115952**

**Analysis:** **328457**

Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Purity(Titration)	98-102 (%)	99.47 %
Loss on drying	0-0.5 (%)	0.36 %
Heavy metal (as Pb)	0-20 (ppm)	12.00 ppm
Sulfate Ash	0-0.1 (%)	0.06 %
UV Absorbance 268nm (c=0.2, H <sub>2</sub> O)	0-0.07	0.04
Specific Rotation [α] <sub>20</sub> /D(c=5 in 1 M NaOH)	-65--61 (°)	-61.77°
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (P115952)	White to pale cream powder or solid	White to pale cream powder or solid



John Su  
QA & QC Manager