

## Certificate of Analysis

Date of Testing: 2022-07-23 13:20:14

Date of Next Testing: 2026-07-22 13:20:14

Product Name: **L-Penicillamine**

CAS Number: 1113-41-3

Specifications & Purity: >98.0%(T)

Lot #: G2220844

SKU #: **S161218**

**Analysis:** **117020**

Storage Temperature: Store at 2-8°C

| Parameter                                                  | Limit Values                          | Result                                |
|------------------------------------------------------------|---------------------------------------|---------------------------------------|
| Specific Rotation [α] <sub>20/D</sub> (c=1 in 1mol/L NaOH) | 61-65 (°)                             | 61.37°                                |
| Purity(Titration by HClO <sub>4</sub> )                    | 97.5-102.5 (%)                        | 99.48 %                               |
| Appearance (S161218)                                       | White to Off-White Powder or Crystals | White to Off-White Powder or Crystals |
| Infrared spectrum                                          | Conforms to Structure                 | Conforms to Structure                 |
| Proton NMR spectrum                                        | Conforms to Structure                 | Conforms to Structure                 |



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