

## Certificate of Analysis

Date of Testing: 2022-09-09 18:52:12  
Date of Next Testing: 2026-09-08 18:52:12  
Product Name: **Ascorbic acid**  
CAS Number: 50-81-7  
Specifications & Purity: 99.99% metals basis  
Lot #: I2208273  
SKU #: **A103534**  
**Analysis:** **101530**  
Storage Temperature: Argon charged

| Parameter  | Limit Values                                      | Result  |
|--|---|---|
| Total Metallic Impuritie   | 0-100 (ppm)                                       | 22.00 ppm   |
| Purity(Iodometric Titration)   | 98.5-101.5 (%)                                    | 99.80 %   |
| Specific Rotation [a] <sub>20</sub> /D(c=10 in H <sub>2</sub> O)           | 20.5-21.5 (°)                                     | 21.00°  |
| Purity(Based On Trace Metals Analysis)                                     | 99.99-100 (%)                                     | 100.00 %  |
| Appearance (A103534)   | white to off-white powder, crystals and/or chunks | white to off-white powder, crystals and/or chunks |
| Proton NMR spectrum  | Conforms to Structure                             | Conforms to Structure                             |
| Solubility in H <sub>2</sub> O , Colorless to Faint Yellow,Clear ,50 mg/ml | pass  | Pass  |



John Su  
QA & QC Manager