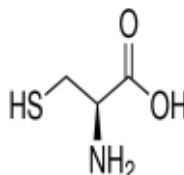


Certificate of Analysis

Product Name:
L-Cysteine - 97%

Product Number: 168149
Batch Number: BCCG5264
Brand: ALDRICH
CAS Number: 52-90-4
Formula: C₃H₇NO₂S
Formula Weight: 121,16 g/mol
Quality Release Date: 21 SEP 2021



| Test | Specification | Result |
|---|-----------------------|------------|
| Appearance (Color) | Colorless or White | White |
| Appearance (Form) | Powder or Crystals | Crystals |
| Redox Titration With KIO ₃ | 96.5 - 103.5 % | 100.4 % |
| Enantiomeric Excess 95.5 % (Minimum) | | 100.0 % EE |
| Specific Rotation (20/D) c = 2 in 5n Hydrochloric Acid | 5.0 - 8.0 deg | 7.7 deg |
| Solubility (Color) | Colorless | Colorless |
| Solubility (Turbidity) 5% in 1n Hydrochloric Acid | Clear | Clear |
| Infrared Spectrum | Conforms to Structure | Conforms |

Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland CH

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

