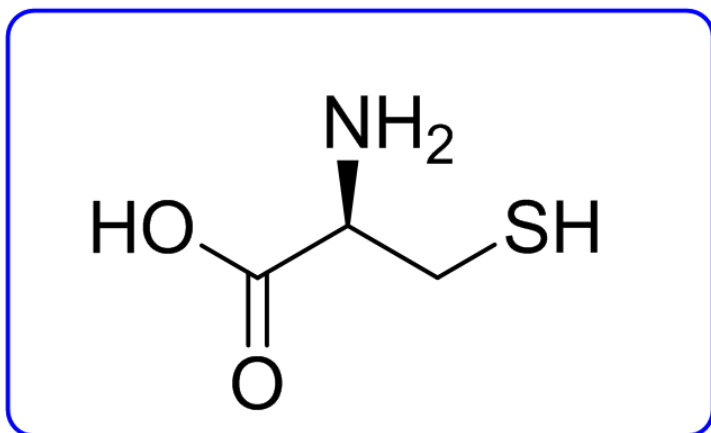


CERTIFICATE OF ANALYSIS

Certified Reference Standard

Acetylcysteine EP Impurity B

L-Cysteine



Product Number:
CAS Number: 52-90-4
Lot Number:
Molecular Formula: C₃H₇NO₂S
Molecular Weight: 121.16 g/mol

Long-term Storage: 2-8 °C
Appearance: Off White Solid
Melting Point: N.A.
Assay Purity: NLT 97%

| Sr.# | Test | Results | Data ref. |
|------|--------|---------|-----------------|
| 1 | 1H NMR | Conform | Report attached |
| 2 | Mass | Conform | Report attached |
| 3 | IR | Conform | Report attached |

Manufacturing Date: 2017

Expiration Date: 2019

This certificate is valid for two years from the date of manufacturing provided the substance is stored under the recommended conditions.