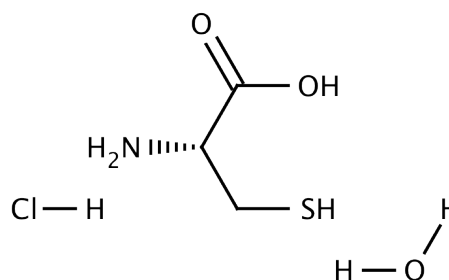


## Product Specification

Product Name : L-Cysteine hydrochloride monohydrate  
Glentham Code : GM4222  
CAS Number : 7048-04-6  
EINECS : 200-157-7  
MDL Number : MFCD00065606  
Additional CAS : 345909-32-2 ( $\cdot xH_2O$ )  
PubChem SID : 310270758



Molecular Weight : 175.64  
Molecular Formula : C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>S · HCl · H<sub>2</sub>O  
Storage Temp. : +20°C

Property	Specification
Physical Description	White powder
Specific Optical Rotation	+5.5 - +7.0 ° ([α] <sub>20</sub> /D)
pH	1.5 - 2.0
Chloride (Cl)	19.89 - 20.29 %
Ammonium (NH <sub>4</sub> )	≤ 0.02%
Sulphate (SO <sub>4</sub> )	≤ 0.02%
Iron (Fe)	≤ 10ppm
Other Amino Acids	Not detectable
Loss on Drying	8.5 - 12.0 %
Residue on Ignition	≤ 0.1%
Lead (Pb)	≤ 3ppm
Arsenic (As)	≤ 1ppm
Mercury (Hg)	≤ 0.1ppm
Cadmium (Cd)	≤ 1ppm
Assay	99.0 - 100.5 %

Specification Version : v1.0  
Date Created : 2015-04-21

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

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