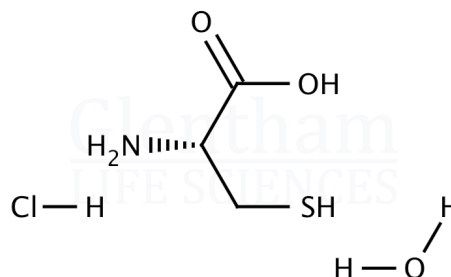


Certificate of Analysis

Product Name	L-Cysteine hydrochloride monohydrate
Glentham Code	GM4222
CAS Number	7048-04-6
EINECS	200-157-7
MDL-Nummer	MFCD00065606
Zusätzliche CAS	345909-32-2 ($\cdot xH_2O$)
PubChem SID	310270758
Batch Number	265ZGI

Molecular Weight	175.64
Molecular Formula	$C_3H_7NO_2S \cdot HCl \cdot H_2O$
Storage Temp.	+20°C



Property	Specification	Batch 265ZGI
Physical Description	White powder or colourless crystals	Colourless crystals
Identification (IR)	To conform to standard	Entspricht
Specific Optical Rotation ($[\alpha]_{20/D}$)	+5.5 - +7.0 ° (c=8, 1M HCl)	+6.8°
pH (5% in water)	1.5 - 2.0	1.7
Chloride (Cl)	19.89 - 20.29 %	20.1%
Ammonium (NH ₄)	≤ 0.02%	Entspricht
Sulphate (SO ₄)	≤ 0.02%	Entspricht
Iron (Fe)	≤ 10ppm	Entspricht
Other Amino Acids	Not detectable	Entspricht
Loss on Drying	8.5 - 12.0 %	10.1%
Residue on Ignition	≤ 0.1%	Entspricht
Lead (Pb)	≤ 3ppm	Entspricht
Arsenic (As)	≤ 1ppm	Entspricht
Mercury (Hg)	≤ 0.1ppm	Entspricht
Cadmium (Cd)	≤ 1ppm	Entspricht
Assay	99.0 - 100.5 %	100.0%

Specification Version	v1.1
Manufacture Date	2023-12-06
Re-Test Date	2031-09-23

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 or contact us using the details above for the current version of this document.

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