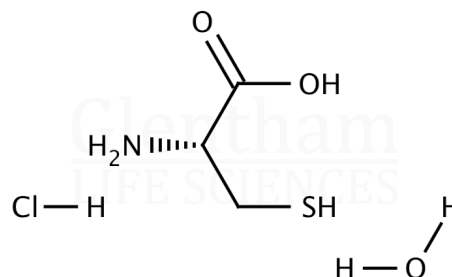


Certificate of Analysis

Product Name	L-Cysteine hydrochloride monohydrate, 99%, non-animal origin
Glentham Code	GM0119
CAS Number	7048-04-6
EINECS	200-157-7
MDL-Nummer	MFCD00065606
Zusätzliche CAS	345909-32-2 ($\cdot xH_2O$)
Batch Number	451NDZ
Molecular Weight	175.64
Molecular Formula	$C_3H_7NO_2S \cdot HCl \cdot H_2O$
Storage Temp.	+20°C



Property	Specification	Batch 451NDZ
Physical Description	White or colourless crystals	White crystals
Identification (IR)	To conform to standard	Entspricht
Solubility (2.5% in water)	Clear, colourless solution	Clear, colourless solution
Specific Optical Rotation ($[\alpha]_{20/D}$)	5.5 - 7.0 ° (c=8, HCl, dried basis)	+6.6 °
pH	1.5 - 2.0	1.64
Sulphates	≤ 0.02%	Entspricht
Ammonium	≤ 0.02%	Entspricht
Heavy Metals	≤ 10ppm	Entspricht
Any Individual Impurity	≤ 0.5%	Entspricht
Total Impurities	≤ 2.0%	Entspricht
Residue on Ignition	≤ 0.1%	0.03%
Loss on Drying	8.0 - 12.0 %	10.2%
Assay (Titration)	98.5 - 101.0 %	99.67%
Pharmacopoeia Specification(s)	Ph. Eur., USP	Entspricht

Specification Version	v1.0
Manufacture Date	2020-11-08
Re-Test Date	2029-09-02

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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