

Product Specification

Product Name:

L-Cysteine hydrochloride monohydrate - for biochemistry

Product Number:

1.02839

CAS Number:

7048-04-6

Formula:

 $C_3H_7NO_2S \cdot HCl \cdot H_2O$

Formula Weight:

175,60 g/mol

TEST	Specification
Assay	98.5 - 101.0 %
(Alcalimetric, Calculated on Dried Substance)	
HPLC Minor Component 1	$\leq$ 0.5 %
Ninhydrin-Positive Substances (Impurity A (570 nm))	
HPLC Minor Component 2	$\leq$ 0.2 %
Ninhydrin-Positive Substances (Any Ninhydrin-Positive Impurity)	
HPLC Minor Component 3	$\leq$ 0.02 %
Ninhydrin-Positive Substances (Ammonium (570 nm))	
HPLC Minor Component 4	$\leq$ 1.0 %
Ninhydrin-Positive Substances (Total Impurities)	
Specific Rotation	5.5 - 7.0 deg
a 20/D (80 g/L, Hydrochloric Acid 250 g/L, Calc. on Dried Substance)	
Loss on Drying	8.5 - 12.0 %
(Vacuum < 2.0 KPa, P2O5, 20 h)	
Sulphated Ash	$\leq$ 0.1 %
(600 °C)	
Infrared Spectrum	Passes Test
Appearance	Complying
White or Almost White, Crystalline Powder or Colorless Crystals	
Appearance of solution	Complying
(25 g/L, Water) Clear and Not More Intense in Color Than Reference Solution BY6	
Heavy Metal	$\leq$ 10 ppm
(as Pb)	
Identity	Passes Test
(Wet Chemistry)	

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.



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TEST	Specification
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Iron (Fe)

≤ 10 ppm

Sulfate (SO₄)

≤ 200 ppm

Specification: PRE.0.ZQ5.10000026631

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