



Certificate of Analysis

1.04350.0000 L-Histidine monohydrochloride monohydrate for biochemistry
Batch K56883750

	Spec. Values		Batch Values	
Assay (calculated on dried substance)	99.0 - 101.0	%	100.4	%
Identity (IR-spectrum)	passes test		passes test	
Identity (wet chemistry)	passes test		passes test	
Appearance	white to almost white crystalline powder or colorless crystals		passes test	
Appearance of solution (50 g/l CO ₂ -free water)	clear and not more intense in color than reference solution BY ₆		passes test	
Spec. rotation (α 20/D, 110 g/l, hydrochloric acid 120 g/l, calc. on dried substance)	+9.2 to +10.6	°	+9.9	°
Sulfate (SO ₄)	≤ 200	ppm	≤ 200	ppm
Heavy metals (as Pb)	≤ 10	ppm	≤ 10	ppm
As (Arsenic)	≤ 5	ppm	≤ 5	ppm
Ca (Calcium)	≤ 10	ppm	≤ 10	ppm
Co (Cobalt)	≤ 5	ppm	≤ 5	ppm
Fe (Iron)	≤ 5	ppm	≤ 5	ppm
K (Potassium)	≤ 5	ppm	≤ 5	ppm
Mg (Magnesium)	≤ 5	ppm	≤ 5	ppm
Na (Sodium)	≤ 50	ppm	≤ 50	ppm
Zn (Zinc)	≤ 5	ppm	≤ 5	ppm
Ninhydrin-positive substances (LC) (any ninhydrin-positive impurity)	≤ 0.2	%	< 0.2	%
Ninhydrin-positive substances (LC) (ammonium (570 nm))	≤ 0.02	%	< 0.02	%
Ninhydrin-positive substances (LC) (total impurities)	≤ 0.5	%	< 0.5	%
Loss on drying (150 °C)	7.0 - 10.0	%	8.6	%

Minimum shelf life (DD.MM.YYYY) 30.04.2030

Dr. Michael Memmel
Responsible laboratory manager quality control

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