

## Specification

## 1.00289.0000 L-Glutamine for biochemistry

	Specification	
Assay (perchloric acid titration, calculated on dried substance)	99.0 - 101.0	%
Identity (IR-spectrum)	passes test	
Appearance	white to almost white, fine powder	
Appearance of solution (25 g/l; CO <sub>2</sub> -free water)	clear and colorless	
Spec. rotation ( $\alpha$ 20/D, 100 g/l, hydrochloric acid 2 mol/l, calc. on dried substance)	+31,5 to +33,0	0
Chloride (CI)	≤ 200	ppm
Sulfate (SO <sub>4</sub> )	≤ 200	ppm
As (Arsenic)	≤ 5	ppm
Ca (Calcium)	≤ 10	ppm
Co (Cobalt)	≤ 5	ppm
Fe (Iron)	≤ 5	ppm
K (Potassium)	≤ 5	ppm
Mg (Magnesium)	≤ 5	ppm
Na (Sodium)	≤ 50	ppm
Zn (Zinc)	≤ 5	ppm
Ninhydrin-positive substances (LC) (any ninhydrin-positive impurity)	≤ 0.3	%
Ninhydrin-positive substances (LC) (ammonium (570 nm))	≤ 0.1	%
Ninhydrin-positive substances (LC) (total impurities)	≤ 0.5	%
Loss on drying (105 °C; 3 h)	≤ 0.3	%

Dr. Michael Memmel

Responsible laboratory manager quality control

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