

Certificate of Analysis

Product Name :

L-Glutamine meets USP testing specifications, suitable for cell culture, 99.0-101.0%, from non-animal source

Product Number :**G8540-1KG****Batch Number :****0000469816**

Source Batch :

SLCP9774

CAS Number :

56-85-9

MDL Number :

MFCD00008044

Molecular Formula :

C₅H₁₀N₂O₃

Formula Weight :

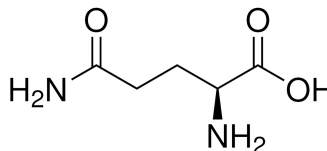
146.14 g/mol

Recommended Retest Date :

Dec 2025

Quality Release Date :

13 SEP 2022



Test	Specification	Result
Origin	Conforms	Conforms
Must Be Non-Animal Source		
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Turbidity)	Clear	Clear
25mg/ml in H ₂ O		
Solubility (Color)	Colorless	Colorless
Infrared Spectrum	Conforms to Structure	Conforms
Specific Rotation	31.5 - 33.0 °	32.7 °
C = 10 in 2 M HCl at 20 Deg C		
Specific Rotation	6.3 - 7.3 °	6.7 °
C = 4 in H ₂ O at 20 deg C		
Chloride Content	<= 0.020%	<= 0.020%
Ammonium	<= 0.10%	<= 0.10%
Sulfate	<= 0.020%	<= 0.020%
Iron (Fe)	<= 10 ppm	<= 10 ppm
Arsenic (As)	<= 1 ppm	<= 1 ppm
Loss on Drying	≤ 0.30 %	0.03 %
Residue on ignition (Ash)	≤ 0.10 %	0.02 %
Ninhydrin-Positive Substances	Conforms	Conforms
pH	4.5 - 6.0	5.4
2 % in H ₂ O		
Assay (Dry Basis)	99.0 - 101.0	100.1
Endotoxin Level	≤ 1 EU/ml	< 1 EU/ml
30 mg/mL		
Cell Culture Test	Pass	Pass
Cell Line	Attached Cell Line	CHO
Cell Line	Attached Cell Line	BHK

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. Purchase must determine the suitability of the product for its particular use. See reverse side of website or packing slip for additional terms and conditions of sale.

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Product G8540-1KG
Batch 0000469816

Cell Line
Residual Solvents

Attached Cell Line
Meets Requirements

3T3
No residual solvents are present



Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri
US

