

Certificate of Analysis

Product Name :

L-Isoleucine from non-animal source, meets EP, JP, USP testing specifications, suitable for cell culture, 98.5-101.0%

Product Number :

I7403-BULK

Batch Number :

0000447704

CAS Number :

73-32-5

MDL Number :

MFCD00064222

Molecular Formula :C₆H₁₃NO₂**Formula Weight :**

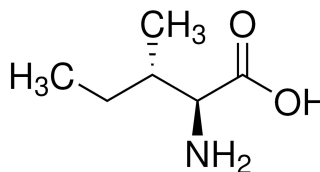
131.17 g/mol

Recommended Retest Date :

Jun 2029

Quality Release Date :

02 Jun 2025



Test	Specification	Result
Origin	Non-Animal Source	Conforms
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity)	Clear	Clear
0.5 g to 10 ml of 1M HCl		
Identity by IR	Conforms to Structure	Conforms
Specific Rotation	40.0 - 41.5 °	41.1 °
EP/JP at 20 deg C; c = 4 in 6 M HCl		
Specific Rotation	38.9 - 41.8 °	40.7 °
USP at 25 deg C; c = 4 in 6 M HCl		
Chloride Content	Conforms	Conforms
< or = 0.020%		
Ammonium	Conforms	Conforms
< or = 0.02%		
Sulfate	Conforms	Conforms
< or = 0.020%		
Iron (Fe)	Conforms	Conforms
< or = 10 ppm		
Heavy Metals	Conforms	Conforms
< or = 10 ppm		
Arsenic (As)	Conforms	Conforms

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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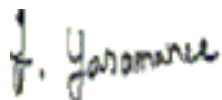
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Product I7403-BULK
Batch 0000447704

< or = 1 ppm

Loss on Drying	≤ 0.20 %	0.00 %
Residue on ignition (Ash)	≤ 0.10 %	0.01 %
Residual Solvents USP <467>	Meets Requirements	No residual solvents are present
Ninhydrin-Positive Substances	Conforms	Conforms
pH	5.5 - 7.0	6.6
USP; 1.0 % in H ₂ O		
pH	5.5 - 6.5	6.0
by EP/JP; 1.0 % in H ₂ O		
Assay	98.5 - 101.0 %	99.9 %
dry basis		
Endotoxin Assay	≤ 1 EU/mg	< 0 EU/mg
Cell Culture Test	Pass	Pass
Cell Line	Attached Cell Line	L929
Cell Line	Attached Cell Line	CHO
Cell Line	Attached Cell Line	BHK



Jagodige Yasomanee, Supervisor
Quality Assurance
St. Louis, Dekalb
US

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