

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

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Product Specification

Product Name:

N-Acetyl-L-cysteine - PharmaGrade, Ajinomoto, Manufactured under appropriate GMP controls for pharma or biopharmaceutical production, suitable for cell culture

Product Number:

A5099

CAS Number:

616-91-1

MDL:

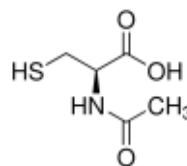
MFCD00004880

Formula:

C₅H₉NO₃S

Formula Weight:

163.19 g/mol



TEST	Specification
Not Derived From Animal Origin	Confirmed
Appearance (Color)	White
Appearance (Form)	Crystalline Powder
Solubility (Turbidity)	Clear
5.0% aqueous	
Solubility (Color)	Colorless
5.0% aqueous	
Solubility (Form)	Solution
5.0% aqueous	
pH	2.0 - 2.8
1.0% aqueous	
Endotoxin Assay	≤ 1 EU/mg
Cytotoxicity	Pass
Identification IR	Conforms to Reference
Melting Point	106 - 110 °C
Specific Rotation	21 - 27 °
C = 5, EDTA phosphate buffer (dried basis)/20°C	
Residue on Ignition	≤ 0.20 %
Heavy Metals	≤ 10 ppm
Chloride	≤ 0.040 %
Ammonium	≤ 0.02 %
Sulfate (SO ₄)	≤ 0.030 %
Iron (Fe)	≤ 10 ppm

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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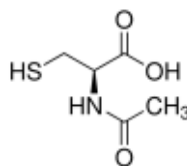
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TEST	Specification
Arsenic (As)	≤ 1.0 ppm
Loss on Drying under vacuum	≤ 0.50 %
Titration by Iodine 0.1 N Iodine	98.5 - 101.0 %
TLC - Single Spot 4 n-Butanol: 1 Water: 1 Acetic Acid Normal Phase (Silica on Aluminum) Ninhydrin	Conforms
Recommended Retest Period 1,095 days	-----

Specification: PRD.1.ZQ5.10000040585

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