

CERTIFICATE OF ANALYSIS

1. Identification

Catalogue Number

Lot Number

712205521-2-1

Product Name

L-Cysteine-13C3

Synonyms

C995004

L-Cysteine-1,2,3-13C3

Structure

CAS Number

202114-66-7

Solubility

Methanol (Very Slightly), Water

(Sparingly)

Purity

Source of Product

Shipping Condition

This Product Is Stable To Be Shipped At Room

Temperature

Molecular Formula

 $^{13}C_3H_7NO_2S$ N/A

Molecular Weight

124.14 >95% **Long Term Storage Conditions**

4°C

2. Warnings

Not Determined

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	Results
Appearance	White to Off-White Solid	White to Off-White Solid
NMR	Conforms to Structure	Conforms
C NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 29.02, %H: 5.49, %N: 11.14
HPLC Purity	>95%	98.62% (ELSD)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.3%
Specific Rotation	Report Result	$+6.0^{\circ} (c = 0.1.5 \text{N HCI})$

Additional Information

Normalized Intensity: ${}^{13}C_0 = 0.00\%$, ${}^{13}C_1 = 0.00\%$, ${}^{13}C_2 = 2.21\%$, ${}^{13}C_3 = 97.79\%$

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed.

The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed by Reviewed by A . Vijoyo

Do lovia Christina Gouliaras **Test Date** 4/14/2025 **Retest Date** 4/12/2029

Vijaya Annapareddy Toni Rantanen **Product Quality Specialist** Manager, Quality Assurance

Quality Assurance Associate

C of A Approved by