

D-Carnitine

CERTIFICATE OF ANALYSIS

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1. Identification

Product:

Structure:

Catalogue C184105 CAS 541-14-0 Number: Number:

> Synonym: (2S)-3-Carboxy-2-hydroxy-N,N,N-trimethyl-1-

> > propanaminium Inner Salt; D-(3-Carboxy-2hydroxypropyl)trimethyl Ammonium Hydroxide Inner Salt; (+)-Carnitine; (+)-D-Carnitine; D-(+)-Carnitine; d-Carnitine;

Molecular Formula:

C7H15NO3

Molecular weight:

161.2

Source of Product:

N/A

Solubility:

DMSO (Slightly, Sonicated), Methanol (Slightly, Sonicated),

Water (Slightly)

Purity: 13-QIU-64-1 97% Number:

Storage This Product Is Stable To Be Shipping

Condition: -20°C Condition: Shipped At Room Temperature

2. Warning

Lot

Warning 1: Warning 2: Warning 3:

N⁺Me₃

3. Analytical Information

Tests: Specifications: Results:

Appearance White to Beige Solid White to Beige Solid

NMR Conforms to Structure Conforms

Elemental Analysis Conforms %C: 51.89, %H: 9.41, %N: 8.63

MS Conforms to Structure Conforms

Specific Rotation Report Result $+27.5^{\circ}$ (c = 0.2, Methanol)

HPLC Purity 97.08% (ELSD) Report Result

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of \pm 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

C of A Approved **Reviewed By Reviewed By Test Date Retest Date** Neha Khanna Toni Rantanen Chanell Chu 12/14/2021 12/12/2025