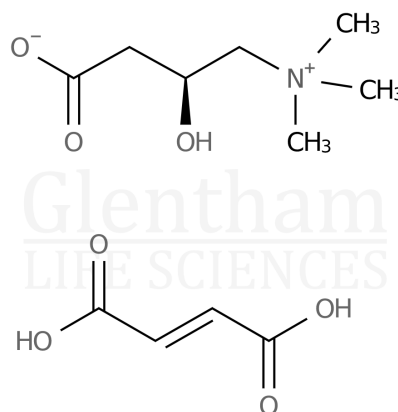


Certificate of Analysis

Product Name	L-Carnitine fumarate
Glentham Code	GX6145
CAS Number	90471-79-7
EINECS	291-749-4
MDL Number	MFCD01631178
Additional CAS	541-15-1
Batch Number	660BYX

Molecular Weight	277.27
Molecular Formula	$C_{15}H_{25}NO_7$
Storage Temp.	+20°C



Property	Specification	Batch 660BYX
Physical Description	White crystalline powder	White crystalline powder
Solubility (5% in water)	Clear, colourless solution	Conforms
pH	3.0 - 4.0	3.3
Specific Optical Rotation	-18.5 - -16.5 °	-17.2°
Residue on Ignition	≤ 0.5%	0.1%
Heavy Metals	≤ 10ppm	Conforms
Cadmium (Cd)	≤ 1ppm	Conforms
Lead (Pb)	≤ 3ppm	Conforms
Mercury (Hg)	≤ 0.1ppm	Conforms
Arsenic (As)	≤ 1ppm	Conforms
Water	≤ 1.0%	0.1%
D-Enantiomer	≤ 1.0%	0.1%
L-Carnitine Content	56.5 - 60.5 %	58.0%
Assay	97.5 - 102.5 % (L-Carnitine + Fumaric acid, dried basis)	99.7%

Specification Version	v1.0
Manufacture Date	2024-03-14
Re-Test Date	2032-09-23

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glentham.com or contact us using the details above for the current version of this document.

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