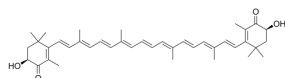


Certificate of Analysis

Product Name: Astaxanthin
Cat. No.: CS-0020413
CAS No.: 472-61-7
Batch No.: 36858
Chemical Name: β,β -Carotene-4,4'-dione, 3,3'-dihydroxy-, (3S,3'S)-

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula: C₄₀H₅₂O₄
Molecular Weight: 596.84
Storage: -20°C, protect from light, stored under nitrogen
Chemical Structure:



ANALYTICAL DATA

Appearance: Dark purple to black (Solid)
¹H NMR Spectrum: Consistent with structure
MS: Consistent with structure
Purity (NMR): $\geq 98.0\%$
Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

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