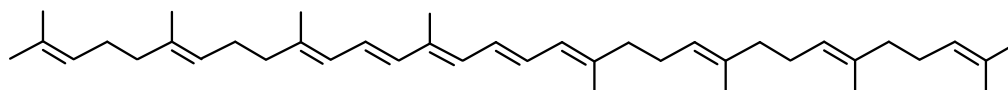




>>Entry Name: 7,7',8,8',11,12-Hexahydrolycopene

ENTRY UNDER REVIEW

Synonym(s): 7,7',8,8',11,12-Hexahydro- ψ,ψ -carotene



CAS Registry Number: 540-05-6

Molecular Formula: C₄₀H₆₂

Molecular Weight: 542.93

Accurate Mass: 542.48515

Percentage Composition: C 88.49%; H 11.51%

Biological Source: Constit. of *Neurospora* spp. and other microorganisms. Widespread in plants

Physical Description: Pale yellow oil with brilliant green fluorescence

Other Data: The (all-*E*) and several mono- and di-*Z* isomers appear to occur naturally

>>Derivative: 1,2-Epoxyde

Synonym(s): 1,2-Epoxy-1,2,7,7',8,8',11,12-octahydro- ψ,ψ -carotene

CAS Registry Number: 51598-36-8

Molecular Formula: C₄₀H₆₂O

Molecular Weight: 558.929

Accurate Mass: 558.480065

Percentage Composition: C 85.96%; H 11.18%; O 2.86%

Biological Source: Isol. from tomatoes (*Lycopersicon esculentum*)

Other Data: Not separated from the 1',2'-epoxide

>>Derivative: 1',2'-Epoxide

Synonym(s): 1,2-Epoxy-1,2,7,7',8,8',11',12'-octahydro- ψ,ψ -carotene

CAS Registry Number: 51599-11-2

Molecular Formula: C₄₀H₆₂O

Molecular Weight: 558.929

Accurate Mass: 558.480065

Percentage Composition: C 85.96%; H 11.18%; O 2.86%

Biological Source: Isol. from tomatoes (*Lycopersicon esculentum*)

UV: [neutral] $\lambda_{\max}$ 331 (); 348 (); 367 () (petrol)

>>Variant: 9*Z*-form

CAS Registry Number: 151767-13-4

Molecular Formula: C₄₀H₆₂

Molecular Weight: 542.93

Accurate Mass: 542.48515

Percentage Composition: C 88.49%; H 11.51%

Biological Source: Constit. of *Dunaliella bardawil*

Use/Importance: Branch point for the formation of 9-*cis*- β -carotene in *Dunaliella bardawil*

Physical Description: Pale yellow liq.

UV: [neutral] $\lambda_{\max}$ 332 (); 348 (); 367 () (hexane)

>>Variant: 15*Z*-form

Synonym(s): Phytofluene

CAS Registry Number: 27664-65-9

Molecular Formula: C₄₀H₆₂

Molecular Weight: 542.93

Accurate Mass: 542.48515

Percentage Composition: C 88.49%; H 11.51%

Biological Source: Widespread in plants

Physical Description: Pale yellow oil