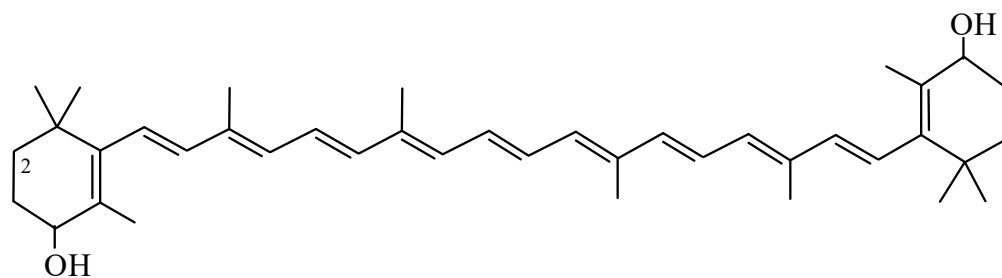




>>Entry Name: Isozeaxanthin

ENTRY UNDER REVIEW

Synonym(s): β,β -Carotene-4,4'-diol. Aphanicol



CAS Registry Number: 29065-03-0

Molecular Formula: $C_{40}H_{56}O_2$

Molecular Weight: 568.881

Accurate Mass: 568.42803

Percentage Composition: C 84.45%; H 9.92%; O 5.62%

Biological Source: Widespread in marine animals. Additive for salmon feed

Physical Description: Fine red needles (AcOH/petrol)

Melting Point: Mp 149-151°

>>Derivative: Diketone

Synonym(s): **Canthaxanthin**. β,β -Carotene-4,4'-dione. Chlorellaxanthin. Aphanicin. Euglenanone. Carophyll red

CAS Registry Number: 514-78-3

Molecular Formula: $C_{40}H_{52}O_2$

Molecular Weight: 564.85

Accurate Mass: 564.39673

Percentage Composition: C 85.06%; H 9.28%; O 5.67%

Biological Source: Constit. of *Cantharellus cinnabarinus*, *Corynebacterium michiganense* and the feathers and skin of *Phaeniconaias minor*

Use/Importance: Food colouring

Physical Description: Purple cryst. (C_6H_6 /MeOH)

Melting Point: Mp 218°

Solubility: BERDY SOL: Sol. $CHCl_3$, hexane; poorly sol. H_2O

UV: [neutral] λ_{max} 470 (E1%/1cm 2250) (cyclohexane) (Berdy)

Other Data: Identity with Euglenanone is not certain

>>Derivative: Diketone, 2-hydroxy

Synonym(s): **2-Hydroxycanthaxanthin**. 2-Hydroxy- β,β -carotene-4,4'-dione

CAS Registry Number: 100485-10-7

Molecular Formula: $C_{40}H_{52}O_3$

Molecular Weight: 580.849

Accurate Mass: 580.391645

Percentage Composition: C 82.71%; H 9.02%; O 8.26%

Biological Source: Isol. from *Daphnia magna*

Other Data: λ_{max} 470 nm (Me_2CO)

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