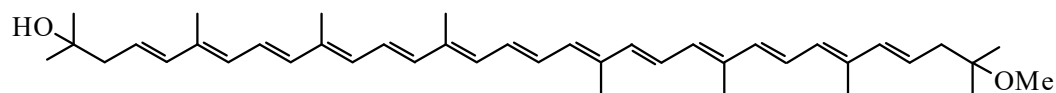




>>Entry Name: **Bacteriopurpurin**

Synonym(s): 3,3',4,4'-Tetradehydro-1,1',2,2'-tetrahydro-1'-methoxy- ψ,ψ -caroten-1-ol. Bacterioerythrin. *OH*-Spirilloxanthin. Monodemethylspirilloxanthin. *O*-Demethylspirilloxanthin. Hydroxyspirilloxanthin. Dehydrorhodovibrin. α -Bacteriopurpurin



CAS Registry Number: 16176-79-7

Molecular Formula: C₄₁H₅₈O₂

Molecular Weight: 582.908

Accurate Mass: 582.44368

Percentage Composition: C 84.48%; H 10.03%; O 5.49%

General Statement: The name Hydroxyspirilloxanthin is misleading. The name α -Bacteriopurpurin may refer either to this compd. or to the Me ether below

Biological Source: Minor constit. of purple photosynthetic bacteria eg. *Rhodospirillum rubrum*, *Rhodopseudomonas palustris* and *Rhodopseudomonas gelatinosa*

Physical Description: Dark violet needles (Me₂CO/petrol)

Melting Point: Mp 214-214.5°

UV: [neutral] $\lambda_{\max}$ 469 (ϵ 128000); 498 (ϵ 184000); 531 (ϵ 161000) (Me₂CO)

>>Derivative: Me ether

Synonym(s): 3,3',4,4'-Tetradehydro-1,1',2,2'-tetrahydro-1,1'-dimethoxy- ψ,ψ -carotene. **Spirilloxanthin**. Rhodoviolascin. Spirillotoxin

CAS Registry Number: 34255-08-8

Molecular Formula: C₄₂H₆₀O₂

Molecular Weight: 596.935

Accurate Mass: 596.45933

Percentage Composition: C 84.51%; H 10.13%; O 5.36%

Biological Source: Principal carotenoid of Athiorhodaceae and Thiorhodaceae spp.

Physical Description: Violet cryst.

Melting Point: Mp 216°

UV: [neutral] $\lambda_{\max}$ 481 (ϵ 103000); 509 (ϵ 144000); 546 (ϵ 122000) (C₆H₆)

>>Derivative: 3,4-Dihydro

Synonym(s): 3,4-Didehydro-1,1',2,2'-tetrahydro-1-methoxy- ψ,ψ -caroten-1'-ol. **Rhodovibrin**

CAS Registry Number: 5017-53-8

Molecular Formula: C₄₁H₆₀O₂

Molecular Weight: 584.924

Accurate Mass: 584.45933

Percentage Composition: C 84.19%; H 10.34%; O 5.47%

Biological Source: Constit. of *Rhodospirillum rubrum* and *Rhodopseudomonas palustris*

Physical Description: Dark red needles (Et₂O/petrol)

Melting Point: Mp 191°

>>Derivative: 3,4-Dihydro, Me ether

Synonym(s): 3,4-Didehydro-1,1',2,2'-tetrahydro-1,1'-dimethoxy- ψ,ψ -carotene. **3,4-Dihydrospirilloxanthin**

CAS Registry Number: 31159-50-9

Molecular Formula: C₄₂H₆₂O₂

Molecular Weight: 598.951

Accurate Mass: 598.47498

Percentage Composition: C 84.22%; H 10.43%; O 5.34%

Biological Source: Isol. from diphenylamine-inhibited cultures of *Rhodospirillum rubrum*

UV: [neutral] $\lambda_{\max}$ 453 (); 480 (); 512 () (petrol)