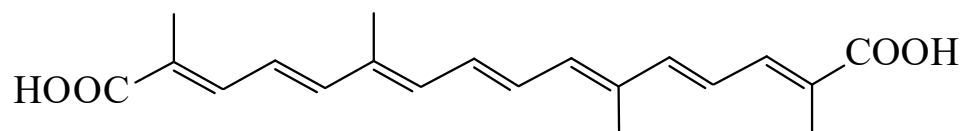




>>Entry Name: Crocetin

ENTRY UNDER REVIEW

Synonym(s): 2,6,11,15-Tetramethyl-2,4,6,8,10,12,14-hexadecaheptaenedioic acid. 8,8'-Diapo-8,8'-carotenedioic acid. Nyctanthin. α -Crocetin. **Gardenidin**‡



Molecular Formula: C₂₀H₂₄O₄

Molecular Weight: 328.407

Accurate Mass: 328.16746

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

>>Variant: (all-*E*)-form

CAS Registry Number: 27876-94-4

Molecular Formula: C₂₀H₂₄O₄

Molecular Weight: 328.407

Accurate Mass: 328.16746

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Biological Source: Isol. from *Gardenia* spp. from *Nyctanthes arbor-tristis*, *Cedrela toona*, *Mimosa pudica* and others

Use/Importance: Singlet oxygen quencher

Physical Description: Red cryst. (Ac₂O)

Melting Point: Mp 285-287°

UV: [neutral] $\lambda_{\max}$ 411 (); 436 (); 464 () (Py)

>>Derivative: Mono-Me ester

Synonym(s): β -Crocetin

CAS Registry Number: 25368-09-6

Molecular Formula: C₂₁H₂₆O₄

Molecular Weight: 342.434

Accurate Mass: 342.18311

Percentage Composition: C 73.66%; H 7.65%; O 18.69%

Physical Description: Cryst. (CHCl₃)

Melting Point: Mp 218°

>>Derivative: Di-Me ester

Synonym(s): γ -Crocetin

CAS Registry Number: 5892-54-6

Molecular Formula: C₂₂H₂₈O₄

Molecular Weight: 356.461

Accurate Mass: 356.19876

Percentage Composition: C 74.13%; H 7.92%; O 17.95%

Biological Source: Isol. from saffron

Physical Description: Orange-red cryst. (CHCl₃/MeOH)

Melting Point: Mp 222-225°

>>Derivative: Mono- β -D-glucopyranosyl ester

CAS Registry Number: 58050-17-2

Molecular Formula: C₂₆H₃₄O₉

Molecular Weight: 490.549

Accurate Mass: 490.220285

Percentage Composition: C 63.66%; H 6.99%; O 29.35%

Biological Source: Isol. from saffron

Other Data: $\lambda_{\max}$ 419, 440, 468 nm (Py)