



Percentage Composition: C 58.89%; H 6.79%; O 34.32%
Biological Source: Isol. from saffron and *Nyctanthes arbor-tristis*
Physical Description: Red prismatic needles (MeOH)
Melting Point: Mp 204-208°
Other Data: $\lambda_{\max}$ 418, 439, 467 nm (Py); $\lambda_{\max}$ 430, 455 nm (MeOH)

>>Derivative: β -D-Flucopyranosyl Me diester
Synonym(s): Crocin 4

CAS Registry Number: 55750-86-2

Molecular Formula: C₂₇H₃₆O₉
Molecular Weight: 504.576
Accurate Mass: 504.235935
Percentage Composition: C 64.27%; H 7.19%; O 28.54%
Biological Source: Isol. from Saffron (*Crocus sativus*)
Physical Description: Light red microprisms (Me₂CO)
Melting Point: Mp 230-236°
Other Data: $\lambda_{\max}$ 435, 460 nm (MeOH)

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

CAS Registry Number: 57710-64-2

Molecular Formula: C₃₂H₄₄O₁₄
Molecular Weight: 652.691
Accurate Mass: 652.27311
Percentage Composition: C 58.89%; H 6.79%; O 34.32%
Biological Source: Isol. from saffron (*Crocus sativus*)
Physical Description: Wine red cryst.
Other Data: $\lambda_{\max}$ 425, 447, 475 nm (Py)

>>Derivative: [β -D-Glucopyranosyl-(1 $\rightarrow$ 6)- β -D-glucopyranosyl] diester
Synonym(s): α -Crocin. Crocin. Gardenin

CAS Registry Number: 42553-65-1

Molecular Formula: C₄₄H₆₄O₂₄
Molecular Weight: 976.975
Accurate Mass: 976.37876
Percentage Composition: C 54.09%; H 6.60%; O 39.30%
Biological Source: Constit. of gardenia and crocus, esp. saffron
Use/Importance: Choleric agent
Physical Description: Red cryst. (MeOH) or brown-red needles
Melting Point: Mp 215° (186° dec.)
Optical Rotation: $[\alpha]_D^{21}$ +1760 (H₂O)
Calculated Log P Data: Log P -5.64 (uncertain value) (calc)

Aldrich: 19961-3

>>Derivative: [β -D-Glucopyranosyl-(1 $\rightarrow$ 6)- β -D-glucopyranosyl] β -D-glucopyranosyl diester
Synonym(s): Crocin 2

CAS Registry Number: 55750-84-0

Molecular Formula: C₃₈H₅₄O₁₉
Molecular Weight: 814.833
Accurate Mass: 814.325935
Percentage Composition: C 56.01%; H 6.68%; O 37.31%
Biological Source: Isol. from saffron (*Crocus sativus*) and *Nyctanthes arbor-tristis*
Physical Description: Dark red rectangular prisms (MeOH)
Melting Point: Mp 208-210°
UV: [neutral] $\lambda_{\max}$ 410 (); 440 (ϵ 84000); 460 () (EtOH) (Berdy)
Other Data: $\lambda_{\max}$ 421, 443, 471 nm (Py)