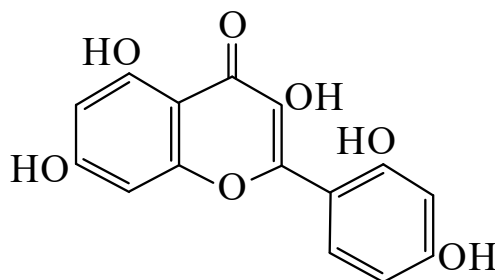




>>Entry Name: 2',3,4',5,7-Pentahydroxyflavone

Synonym(s): 2-(2,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4*H*-1-benzopyran-4-one, 9CI. 2',4',5,7-Tetrahydroxyflavonol. **Morin.** 2'-Hydroxypelargidenolon 1522. C.I. Natural yellow 8. C.I. Natural yellow 11. C.I. 75660



CAS Registry Number: 480-16-0

Molecular Formula: C₁₅H₁₀O₇

Molecular Weight: 302.24

Accurate Mass: 302.042655

Percentage Composition: C 59.61%; H 3.33%; O 37.06%

Biological Source: Constit. of various woods, e.g. *Morus alba*. First isol. in 1830

Use/Importance: Used as fluorescent alumina absorbent for column chromatography. Used as 0.025% soln. in EtOH for photometric detn. of In, rare earth elements, Sc, Th, Sn, W, V, Hf, Zr ($\lambda_{\max}$ 420 nm, ϵ 51000). Textile dye

Biological Use/Importance: Shows antiperoxidative activity *in vitro* and anti-HIV activity

Physical Description: Pale-yellow needles + 1H₂O (AcOH aq.)

Melting Point: Mp 303-304°

Solubility: Sol. EtOH, alkalis; sl. sol. Et₂O, H₂O; BERDY SOL: Sol. EtOH

Calculated Log P Data: Log P -0.36 (calc)

Hazard & Toxicity: LD₅₀ (mus, ipr) 555 mg/kg

Aldrich: M8763-0

Sigma: M4008

>>Derivative: 7-*O*- β -D-Glucopyranoside

CAS Registry Number: 148351-61-5

Molecular Formula: C₂₁H₂₀O₁₂

Molecular Weight: 464.382

Accurate Mass: 464.09548

Percentage Composition: C 54.32%; H 4.34%; O 41.34%

Biological Source: Constit. of *Elshotzia eriostachya*

>>Derivative: Glycoside

Synonym(s): Moroside

Molecular Formula: C₂₇H₃₀O₁₆

Molecular Weight: 610.524

Accurate Mass: 610.15339

Percentage Composition: C 53.12%; H 4.95%; O 41.93%

Biological Source: Isol. from *Morus mesozygia*

Melting Point: Mp 198°

Other Data: Gives Morin + 1Rha + 1Glu on hydrol.

>>Derivative: Penta-Ac

Molecular Formula: C₂₅H₂₀O₁₂

Molecular Weight: 512.426

Percentage Composition: C 58.60%; H 3.93%; O 37.47%

Physical Description: Prisms (EtOH) and needles (Et₂O)

Melting Point: Mp 146-147° (prisms). Mp 115-116° (needles) (dimorph.)