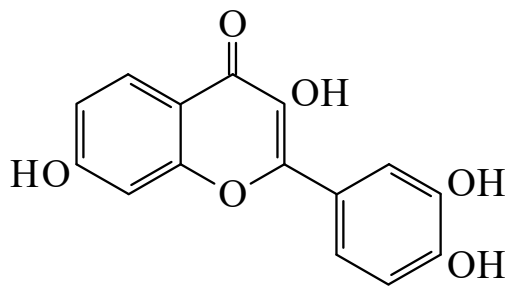




>>Entry Name: 3,3',4',7-Tetrahydroxyflavone

Synonym(s): 2-(3,4-Dihydroxyphenyl)-3,7-dihydroxy-4*H*-1-benzopyran-4-one, 9Cl. 3',4',7-Trihydroxyflavonol. **Fisetin**



CAS Registry Number: 528-48-3

Molecular Formula: C₁₅H₁₀O₆

Molecular Weight: 286.24

Accurate Mass: 286.04774

Percentage Composition: C 62.94%; H 3.52%; O 33.54%

Biological Source: Colouring matter obtained from *Rhus* spp., also in *Trachylobium verrucosum*, *Anthyllis vulneraria*, *Butea frondosa*, *Gleditsia* spp., *Acacia* spp. and others

Use/Importance: Used as EtOH soln. for photometric detn. of Al, B, Be, Bi, Cd, Cu, Fe, Pb, Sb, U, Zr, Cr and rare earths ($\lambda_{\max}$ 430 nm, ϵ 17000)

Physical Description: Yellow cryst.

Melting Point: Mp 330°

Solubility: Sol. EtOH, MeOH; BERDY SOL: Sol. MeOH, Me₂CO, bases, AcOH; poorly sol. H₂O, Et₂O, CHCl₃, hexane, C₆H₆

UV: [neutral] $\lambda_{\max}$ 252 (); 320 (); 360 () (EtOH) (Berdy)

Other Data: Shows brilliant yellow fluor.

Hazard & Toxicity: LD₅₀ (mus, ivn) 180 mg/kg

Sigma: F4043

>>Derivative: 3-*O*- β -D-Glucopyranoside

CAS Registry Number: 20633-87-8

Molecular Formula: C₂₁H₂₀O₁₁

Molecular Weight: 448.382

Accurate Mass: 448.100565

Percentage Composition: C 56.25%; H 4.50%; O 39.25%

Biological Source: Isol. from *Baptisia lecontii* and *Callistemon* spp.

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

Molecular Formula: C₂₁H₂₀O₁₁

Molecular Weight: 448.382

Accurate Mass: 448.100565

Percentage Composition: C 56.25%; H 4.50%; O 39.25%

Biological Source: Isol. from *Rhus succedanea*

>>Derivative: 4'-*O*- β -D-Glucopyranoside

CAS Registry Number: 95399-27-2

Molecular Formula: C₂₁H₂₀O₁₁

Molecular Weight: 448.382

Accurate Mass: 448.100565

Percentage Composition: C 56.25%; H 4.50%; O 39.25%

Biological Source: Isol. from *Phyllanthus niruri*

>>Derivative: 3,7-Di-*O*- β -D-glucopyranoside

CAS Registry Number: 83086-31-1

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 *Medicago sativa*