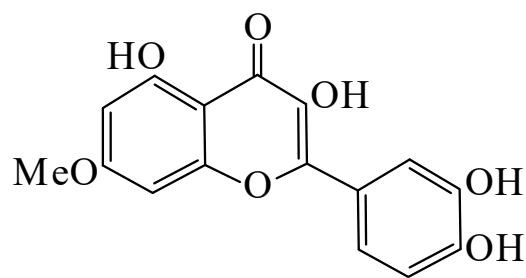




>>Entry Name: 3,3',4',5-Tetrahydroxy-7-methoxyflavone

Synonym(s): 2-(3,4-Dihydroxyphenyl)-3,5-dihydroxy-7-methoxy-4*H*-1-benzopyran-4-one, 9Cl. 3',4',5-Trihydroxy-7-methoxyflavonol. **Rhamnetin**. Quercetin 7-methyl ether. β -Rhamnocitrin



CAS Registry Number: 90-19-7

Related CAS Registry Numbers(s): 1324-63-6 55196-43-5 62858-07-5

Molecular Formula: C₁₆H₁₂O₇

Molecular Weight: 316.267

Accurate Mass: 316.058305

Percentage Composition: C 60.76%; H 3.82%; O 35.41%

Biological Source: Found in the fruit of *Rhamnus cathartica*, other *Rhamnus* spp., *Artemisia*, *Citrus* and many other plants

Use/Importance: Used as a 0.4% aq. soln. for photometric detn. of U ($\lambda_{\max}$ 505 nm), Th, Fe

Physical Description: Yellow cryst. (EtOH)

Melting Point: Mp 294-296°

Solubility: Sol. EtOH, H₂O; BERDY SOL: Sol. MeOH, Et₂O, bases; poorly sol. H₂O

UV: [neutral] $\lambda_{\max}$ 256 (ϵ 42200); 371 (ϵ 43500) (EtOH) (Berdy)

>>Derivative: 3-*O*-Sulfate

CAS Registry Number: 60889-05-6

Molecular Formula: C₁₆H₁₂O₁₀S

Molecular Weight: 396.331

Accurate Mass: 396.01512

Percentage Composition: C 48.49%; H 3.05%; O 40.37%; S 8.09%

Biological Source: Isol. from *Ammi visnaga* and *Flaveria chloraefolia*

>>Derivative: 3,3'-*O*-Disulfate

Molecular Formula: C₁₆H₁₂O₁₃S₂

Molecular Weight: 476.395

Accurate Mass: 475.971935

Percentage Composition: C 40.34%; H 2.54%; O 43.66%; S 13.46%

Biological Source: Constit. of the roots of *Argyrea mollis*

>>Derivative: 3,3',4'-Tri-*O*-sulfate

Synonym(s): Rhamnetin 3,3',4'-trisulfate

CAS Registry Number: 119560-48-4

Molecular Formula: C₁₆H₁₂O₁₆S₃

Molecular Weight: 556.459

Accurate Mass: 555.92875

Percentage Composition: C 34.54%; H 2.17%; O 46.00%; S 17.29%

Biological Source: Constit. of *Tamarix amplexicaulis*

Other Data: Isol. as tri-K salt to which registry number refers