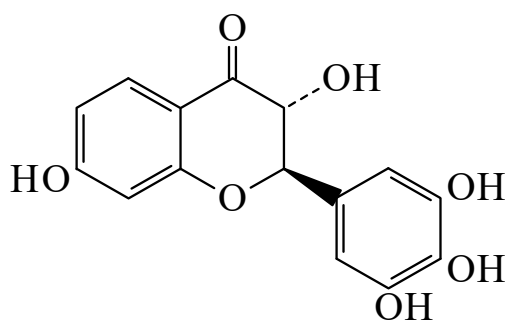




>>Entry Name: 3,3',4',5',7-Pentahydroxyflavanone

Synonym(s): 2,3-Dihydro-3,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one. 3',4',5',7-Tetrahydroxydihydroflavanol. **Dihydrorobinetin**



CAS Registry Number: 70460-55-8

Related CAS Registry Numbers(s): 2542-38-3 7400-09-1

Molecular Formula: C<sub>15</sub>H<sub>12</sub>O<sub>7</sub>

Molecular Weight: 304.256

Accurate Mass: 304.058305

Percentage Composition: C 59.22%; H 3.98%; O 36.81%

>>Variant: (2R,3R)-form

CAS Registry Number: 4382-33-6

Molecular Formula: C<sub>15</sub>H<sub>12</sub>O<sub>7</sub>

Molecular Weight: 304.256

Accurate Mass: 304.058305

Percentage Composition: C 59.22%; H 3.98%; O 36.81%

Biological Source: Isol. from *Robinia pseudoacacia* and *Adenanthera pavonina*. Also reported from *Schinopsis*, *Gleditsia*, *Mimosa* and *Wisteria* spp.

Physical Description: Cryst. (H<sub>2</sub>O)

Melting Point: Mp 246° (225-226°)

Optical Rotation:  $[\alpha]_D^{20} +13.8$  (Me<sub>2</sub>CO aq.)

>>Derivative: 7-O-[β-D-Glucopyranosyl-(1→4)-α-L-rhamnopyranoside]

CAS Registry Number: 83459-39-6

Molecular Formula: C<sub>27</sub>H<sub>32</sub>O<sub>16</sub>

Molecular Weight: 612.54

Accurate Mass: 612.16904

Percentage Composition: C 52.94%; H 5.27%; O 41.79%

Melting Point: Mp 97-99°

Other Data: Incorrectly named in CA

>>Derivative: 4'-Me ether

Synonym(s): 3,3',5',7-Tetrahydroxy-4'-methoxyflavanone. **Sepinol**

CAS Registry Number: 72061-63-3

Molecular Formula: C<sub>16</sub>H<sub>14</sub>O<sub>7</sub>

Molecular Weight: 318.282

Accurate Mass: 318.073955

Percentage Composition: C 60.38%; H 4.43%; O 35.19%

Biological Source: Isol. from *Gliricidia sepium*

Physical Description: Off-white prisms (Me<sub>2</sub>CO/EtOAc)

Melting Point: Mp 253-254°

Optical Rotation:  $[\alpha]_D^{22} -7.6$  (MeOH)

#### References:

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King, H.G.C. *et al.*, *Proc. Chem. Soc., London*, 1957, 341

Saayman, H.M. *et al.*, *Biochem. J.*, 1965, **97**, 794, (*biosynth*)

Gennaro, A. *et al.*, *Phytochemistry*, 1972, **11**, 1515

Manners, G.D. *et al.*, *Phytochemistry*, 1979, **18**, 1037, (*Sepinol*)