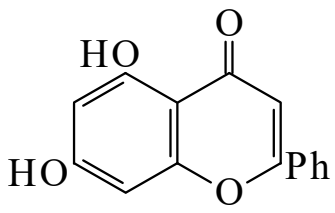
>>**Entry Name: 5,7-Dihydroxyflavone**
Synonym(s): 5,7-Dihydroxy-2-phenyl-4*H*-1-benzopyran-4-one, 9CI. **Chrysin.** Chrysinic acid



CAS Registry Number: 480-40-0

Molecular Formula: $C_{15}H_{10}O_4$
Molecular Weight: 254.242
Accurate Mass: 254.05791
Percentage Composition: C 70.86%; H 3.96%; O 25.17%
Biological Source: Isol. from *Ulmus sieboldiana*, *Flourensia resinosa*, *Oroxylum indicum* (bark), *Pinus* and *Scutellaria* spp. and others
Use/Importance: Used as EtOH soln. for photometric detn. of Th (λ_{max} 380 nm, pH 2.8); reactions with Al, Th. Used as complexing agent for Cu
Biological Use/Importance: Shows antifungal activity
Physical Description: Yellowish plates
Melting Point: Mp 285-286°. Mp 290° (275°)
Solubility: Sol. EtOH; BERDY SOL: Sol. Et_2O, bases; fairly sol. $CHCl_3$, EtOH; poorly sol. H_2O
pKa Value: pK_{a1} 9.05; pK_{a2} 7.42 (20°,50% EtOH) pK_{a1} 12.37; pK_{a2} 8.37 (25°,50% dioxan)
UV: [neutral] λ_{max} 249 (); 272 (); 316 () (MeOH) (Berdy) [base] λ_{max} 252 (); 282 (); 332 (); 382 () (MeOH-NAOH) (Berdy) [neutral] λ_{max} 212 (); 269 (); 318 () (EtOH) (Berdy)
Other Data: λ_{max} 348 nm

Aldrich: C8010-5
Sigma: C3018

>>**Derivative:** Di-Ac

CAS Registry Number: 6665-78-7
Molecular Formula: $C_{19}H_{14}O_6$
Molecular Weight: 338.316
Accurate Mass: 338.07904
Percentage Composition: C 67.45%; H 4.17%; O 28.37%
Physical Description: Needles (EtOH)
Melting Point: Mp 198-200° (192°)

>>**Derivative:** 5-*O*-β-D-Glucopyranoside
Synonym(s): Toringin

CAS Registry Number: 1329-10-8

Molecular Formula: $C_{21}H_{20}O_9$
Molecular Weight: 416.384
Accurate Mass: 416.110735
Percentage Composition: C 60.58%; H 4.84%; O 34.58%
Biological Source: Occurs in bark of *Docyniopsis tschonoski* and in *Malus* spp.
Physical Description: Needles (MeOH)
Melting Point: Mp 240°
Optical Rotation: $[\alpha]_D^{25}$ –71.3 (Py)
Other Data: Originally descr. as the 7-glycoside

>>**Derivative:** 7-*O*-β-D-Glucopyranoside
Synonym(s): Aequinoctin. Equinoctin. Aequinetin

CAS Registry Number: 31025-53-3

Molecular Formula: $C_{21}H_{20}O_9$
Molecular Weight: 416.384
Accurate Mass: 416.110735
Percentage Composition: C 60.58%; H 4.84%; O 34.58%
Biological Source: Isol. from leaves of *Populus deltoides*, roots of *Scutellaria orientalis*, from *Sarothamnus patens, Enkianthus* spp. and *Prunus aequinoctalis*
Physical Description: Pale yellow needles (EtOH aq.)
Melting Point: Mp 245° (201-203°)
Optical Rotation: [α]