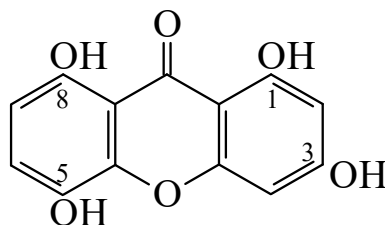




>>Entry Name: **1,3,5,8-Tetrahydroxyxanthone**

Synonym(s): 1,3,5,8-Tetrahydroxy-9*H*-xanthen-9-one, 9Cl. **Bellidin**†. Demethylbellidifolin



CAS Registry Number: 2980-32-7

Molecular Formula: C₁₃H₈O₆

Molecular Weight: 260.203

Accurate Mass: 260.03209

Percentage Composition: C 60.01%; H 3.10%; O 36.89%

Biological Source: Constit. of *Gentiana bellidifolia* and of *Swertia* spp.

Physical Description: Cryst. (EtOH)

Melting Point: Mp 293-295°. Mp 315-320°

>>Derivative: 8-*O*-β-D-Glucopyranoside

Synonym(s): Norswertianolin

CAS Registry Number: 54954-12-0

Molecular Formula: C₁₉H₁₈O₁₁

Molecular Weight: 422.345

Accurate Mass: 422.084915

Percentage Composition: C 54.03%; H 4.30%; O 41.67%

Biological Source: Isol. from *Swertia purpurascens* and *Swertia randaiensis*

Biological Use/Importance: Shows tuberculostatic props.

Physical Description: Cream-coloured microcryst. + 1H₂O (MeOH/dioxan)

Melting Point: Mp 263-266°

Optical Rotation: [α]_D²⁵ -111 (c, 0.28 in 60% MeOH aq.)

>>Derivative: 3-Me ether

Synonym(s): 1,5,8-Trihydroxy-3-methoxyxanthone. **Bellidifolin**. Bellidifolium

CAS Registry Number: 2798-25-6

Molecular Formula: C₁₄H₁₀O₆

Molecular Weight: 274.229

Accurate Mass: 274.04774

Percentage Composition: C 61.32%; H 3.68%; O 35.01%

Biological Source: Constit. of *Gentiana bellidifolia*, other *Gentiana* spp. and *Swertia* spp.

Physical Description: Yellow needles (Me₂CO or EtOH)

Melting Point: Mp 270-271°

>>Derivative: 3-Me ether, 5-*O*-β-D-glucopyranoside

Synonym(s): Bellidifoloside. **Isoswertianolin**

CAS Registry Number: 53734-78-4

Molecular Formula: C₂₀H₂₀O₁₁

Molecular Weight: 436.371

Accurate Mass: 436.100565

Percentage Composition: C 55.05%; H 4.62%; O 40.33%

Biological Source: Isol. from *Swertia japonica*

Physical Description: Pale yellow needles + 2H₂O (MeOH)

Melting Point: Mp 259°

Optical Rotation: [α]_D -33.2 (c, 0.16 in Py)

Other Data: The name Bellidifoloside is given by CAS for the 5-glucoside but this does not appear to be a nat. prod. All refs. refer to the 8-glucoside below