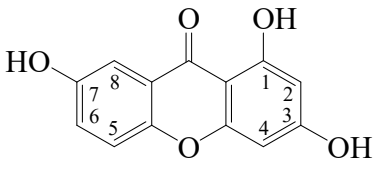
>>**Entry Name: 1,3,7-Trihydroxyxanthone**
**Synonym(s):** 1,3,7-Trihydroxy-9*H*-xanthen-9-one, 9Cl. **Gentisein**




**CAS Registry Number:** 529-49-7

**Molecular Formula:** $C_{13}H_8O_5$
**Molecular Weight:** 244.203
**Accurate Mass:** 244.037175
**Percentage Composition:** C 63.94%; H 3.30%; O 32.76%
**Biological Source:** Isol. from *Gentiana lutea, Haploclathra* sp., *Hypericum* spp. and *Swertia* sp.
**Physical Description:** Orange-yellow needles (MeOH)
**Melting Point:** Mp 321-323°
**UV:** [neutral] $\lambda_{max}$ 204 (ε 8912); 237 (ε 19500); 260 (ε 24550); 310 (ε 7580); 374 (ε 2450) (MeOH) (Berdy)

>>**Derivative:** 3-*O*-β-D-Glucopyranoside
**Synonym(s): Xanthohypericoside**

**Molecular Formula:** $C_{19}H_{18}O_{10}$
**Molecular Weight:** 406.345
**Accurate Mass:** 406.09
**Percentage Composition:** C 56.16%; H 4.46%; O 39.37%
**Biological Source:** Constit. of *Hypericum annulatum*
**Physical Description:** Yellow needles
**Melting Point:** Mp 233-234°
**UV:** [neutral] $\lambda_{max}$ 205 (); 236 (); 260 (); 302 (); 376 () (MeOH)

>>**Derivative:** Tri-Ac

**Molecular Formula:** $C_{19}H_{14}O_8$
**Molecular Weight:** 370.315
**Percentage Composition:** C 61.63%; H 3.81%; O 34.56%
**Melting Point:** Mp 229-230°

>>**Derivative:** 1-Me ether
**Synonym(s):** 3,7-Dihydroxy-1-methoxyxanthone

**CAS Registry Number:** 16850-68-3
**Molecular Formula:** $C_{14}H_{10}O_5$
**Molecular Weight:** 258.23
**Accurate Mass:** 258.052825
**Percentage Composition:** C 65.12%; H 3.90%; O 30.98%
**Physical Description:** Yellow needles (MeOH aq.)
**Melting Point:** Mp 178°

>>**Derivative:** 3-Me ether
**Synonym(s):** 1,7-Dihydroxy-3-methoxyxanthone. **Gentisin. Gentianin‡.** Gentianic acid

**CAS Registry Number:** 437-50-3

**Molecular Formula:** $C_{14}H_{10}O_5$
**Molecular Weight:** 258.23
**Accurate Mass:** 258.052825
**Percentage Composition:** C 65.12%; H 3.90%; O 30.98%
**Biological Source:** Pigment from root of *Gentiana lutea*
**Physical Description:** Yellow needles
**Melting Point:** Mp 273-275° (266-267°)