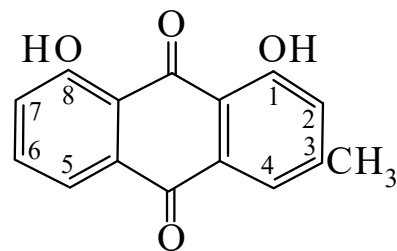




>>Entry Name: 1,8-Dihydroxy-3-methylanthraquinone

Synonym(s): 1,8-Dihydroxy-3-methyl-9,10-anthracenedione, 9Cl. **Chrysophanol**. 3-Methylchrysazin. Rheic acid. Chrysophanic acid. Archinin. Rumicin



CAS Registry Number: 481-74-3

Molecular Formula: C₁₅H₁₀O₄

Molecular Weight: 254.242

Accurate Mass: 254.05791

Percentage Composition: C 70.86%; H 3.96%; O 25.17%

Biological Source: Constit. of *Cassia*, *Rumex*, *Rheum*, *Asphodelus* and *Muehlenbeckia* spp., etc. Also isol. from *Monilinia fructicola*. V. widely distributed

Use/Importance: Antimicrobial, cathartic agent

Physical Description: Golden-yellow plates (C₆H₆)

Melting Point: Mp 200-201° (196°)

pKa Value: pK_a 8.91 (20°, H₂O)

Calculated Log P Data: Log P 2.42 (calc)

UV: [base] λ_{max} (solvent not reported) (Derep) [neutral] λ_{max} 223 (ε 36000); 253 (ε 20000); 274 (ε 10000); 285 (ε 11000); 405 (sh) (ε); 427 (ε 11000); 450 (sh) (ε) (MeOH) (Derep)

Aldrich: 22907-5

Fluka: 37700

Rare Chemicals Library: S40719-4

Sigma: C4398

>>Derivative: 1-O-β-D-Glucopyranoside

Synonym(s): **Pulmatin**

CAS Registry Number: 4839-60-5

Molecular Formula: C₂₁H₂₀O₉

Molecular Weight: 416.384

Accurate Mass: 416.110735

Percentage Composition: C 60.58%; H 4.84%; O 34.58%

Biological Source: Constit. of *Rheum pulmatum*

Melting Point: Mp 232-234°

UV: [neutral] λ_{max} 223 (ε 5300); 258 (ε 3640); 430 () (MeOH) (Berdy)

>>Derivative: 8-O-β-D-Glucopyranoside

Synonym(s): **Chrysophanein**. Chrysophanol 8-glucoside

CAS Registry Number: 13241-28-6

Molecular Formula: C₂₁H₂₀O₉

Molecular Weight: 416.384

Accurate Mass: 416.110735

Percentage Composition: C 60.58%; H 4.84%; O 34.58%

Biological Source: Isol. from *Rheum*, *Rhamnus*, *Rumex* spp. and other plant spp.

Physical Description: Fine yellow needles (EtOH)

Melting Point: Mp 248-249° (245-246°)

UV: [neutral] λ_{max} 223 (ε 3840); 258 (ε 4070); 277 (); 429 () (MeOH) (Berdy)

Other Data: Kubo (1992) confirmed Chrysophanein as the 8-glucoside