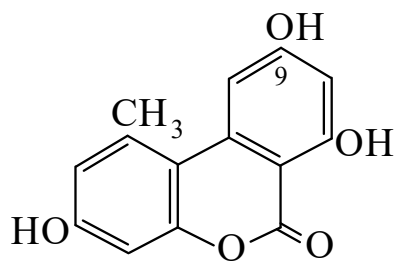




>>Entry Name: Alternariol

ENTRY UNDER REVIEW

Synonym(s): 3,7,9-Trihydroxy-1-methyl-6*H*-dibenzo[*b,d*]pyran-6-one, 9Cl. 3,4',5-Trihydroxy-6'-methyldibenzo- α -pyrone



CAS Registry Number: 641-38-3

Molecular Formula: C₁₄H₁₀O₅

Molecular Weight: 258.23

Accurate Mass: 258.052825

Percentage Composition: C 65.12%; H 3.90%; O 30.98%

Biological Source: Occurs in mycelium of *Alternaria tenuis* responsible for alternaria cone disorder in hops and fruit spot on papaya (*Carica papaya*) and *Passiflora* spp.

Use/Importance: Phytotoxic, DNA-intercalating mycotoxin

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 350 dec.°

Solubility: BERDY SOL: Sol. MeOH, bases, Et₂O; poorly sol. C₆H₆, hexane, H₂O

UV: [neutral] $\lambda_{\max}$ 213 (ϵ 21900); 258 (ϵ 41700); 290 (ϵ 10500); 303 (ϵ 11200); 336 (ϵ 11500) (MeOH) (Derep) [neutral] $\lambda_{\max}$ 255 (); 288 (); 298 (); 337 () (MeOH) (Berdy)

Other Data: Sublimes at 250° *in vacuo*

Hazard & Toxicity: Exp. reprod. and teratogenic effects

Sigma: A1312

>>Derivative: Tri-Ac

Molecular Formula: C₂₀H₁₆O₈

Molecular Weight: 384.342

Accurate Mass: 384.08452

Percentage Composition: C 62.50%; H 4.20%; O 33.30%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 167-169°

>>Derivative: 9-Me ether

Synonym(s): 3,7-Dihydroxy-9-methoxy-1-methyl-6*H*-dibenzo[*b,d*]pyran-6-one. **Djalonensone**

CAS Registry Number: 26894-49-5

Molecular Formula: C₁₅H₁₂O₅

Molecular Weight: 272.257

Accurate Mass: 272.068475

Percentage Composition: C 66.17%; H 4.44%; O 29.38%

Biological Source: Metab. of *Alternaria* spp. Also from *Anthocleista djalonensis*

Physical Description: Needles (EtOH or dioxan)

Melting Point: Mp 266-268 dec.°

Sigma: A3171

>>Derivative: Di-Me ether

Molecular Formula: C₁₆H₁₄O₅

Molecular Weight: 286.284

Accurate Mass: 286.084125

Percentage Composition: C 67.13%; H 4.93%; O 27.94%

Melting Point: Mp 292°

References: