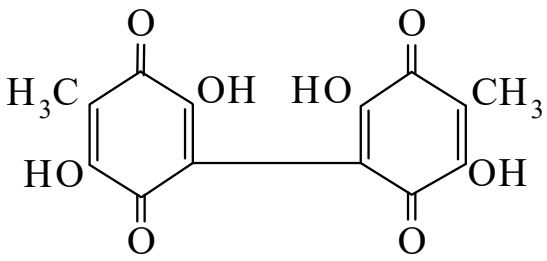
>>**Entry Name: Oosporein**

**Synonym(s):** 2,2',5,5'-Tetrahydroxy-4,4'-dimethyl[bi-1,4-cyclohexadien-1-yl]-3,3',6,6'-tetrone, 9CI. 3,3',6,6'-Tetrahydroxy-4,4'-dimethylbinaphthoquinone. Chaetomidin. Isoosporein



**CAS Registry Number:** 475-54-7

**Molecular Formula:** $C_{14}H_{10}O_8$
**Molecular Weight:** 306.228
**Accurate Mass:** 306.03757
**Percentage Composition:** C 54.91%; H 3.29%; O 41.80%
**Biological Source:** Metab. of *Oospora colorans, Chaetomium aureum, Chaetomium trilaterale* and *Beauveria* spp. Also from *Phlebia* spp. and *Acremonium* sp.
**Use/Importance:** Toxic potential contaminant of animal feeds, plant growth inhibitor
**Physical Description:** Red-bronze cryst. ($Me_2CO$/petrol)
**Melting Point:** Mp 260-275 dec.°
**Solubility:** BERDY SOL: Sol. MeOH, $Et_2O$; poorly sol. $H_2O$, hexane
**UV:** [base] $\lambda_{max}$ (solvent not reported) (Derep) [neutral] $\lambda_{max}$ 216 (ε 3240); 290 (ε 39800); 372 (sh) (ε 871); 435 (ε 794) (EtOH) (Derep) [neutral] $\lambda_{max}$ 290 (ε 40000); 425 (ε 710) (MeOH) (Berdy) [neutral] $\lambda_{max}$ 216 (ε 3240); 287 (ε 46800); 372 (ε 870); 415 (ε 617) (EtOH) (Berdy)
**Hazard & Toxicity:** $LD_{50}$ (ckn, orl) approx 6 mg/kg

**Sigma:** O2006

>>**Derivative:** Tetra-Ac

**Physical Description:** Yellow cryst. (EtOAc/petrol)
**Melting Point:** Mp 191°

**References:**


Divekar, P.V. *et al.*, *Can. J. Chem.*, 1959, **37**, 2097, *(isol)*
Birch, A.J. *et al.*, *Aust. J. Chem.*, 1967, **22**, 1319, *(biosynth)*
Brewer, D. *et al.*, *Can. J. Bot.*, 1968, **46**, 441, *(isol)*
Kalamar, J. *et al.*, *Helv. Chim. Acta*, 1974, **57**, 2368, *(synth)*
Steiner, E. *et al.*, *Helv. Chim. Acta*, 1974, **57**, 2377, *(biosynth)*
Cole, R.J. *et al.*, *J. Agric. Food Chem.*, 1974, **22**, 517, *(isol, tox)*
Cole, R.J. *et al.*, *Handbook of Toxic Fungal Metabolites*, Academic Press, New York, 1981, 830