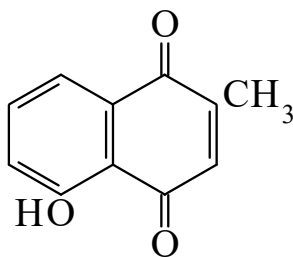




>>Entry Name: 5-Hydroxy-2-methyl-1,4-naphthoquinone

Synonym(s): 5-Hydroxy-2-methyl-1,4-naphthalenedione, 9Cl. **Plumbagin**. Ophioxylin



CAS Registry Number: 481-42-5

Molecular Formula: C₁₁H₈O₃

Molecular Weight: 188.182

Accurate Mass: 188.047345

Percentage Composition: C 70.21%; H 4.28%; O 25.51%

Biological Source: Constit. of various *Plumbago* spp., *Dyerophyton africanum*, *Drosera congolana*, many *Diospyros* spp., roots of *Dioncophyllum thollonii*, *Nepenthes rafflesiana*, *Aristea ecklonii* and other *Aristea* spp., *Sisyrinchium californicum* and *Sparaxis tricolor*

Use/Importance: Exhibits bactericidal, fungicidal and tuberculostatic activity. Antifeedant against African army worms

Physical Description: Orange-yellow needles (EtOH aq.)

Melting Point: Mp 78-79°

Calculated Log P Data: Log P 2.04 (calc)

Hazard & Toxicity: LD₅₀ (rat, oral) 65 mg/kg. Exp. reprod. effects

Aldrich: 19064-0

Sigma: P7262

>>Derivative: Dioxime

Molecular Formula: C₁₁H₁₀N₂O₃

Molecular Weight: 218.212

Accurate Mass: 218.069143

Percentage Composition: C 60.55%; H 4.62%; N 12.84%; O 22.00%

Physical Description: Yellow needles (EtOH)

Melting Point: Mp 220°

>>Derivative: Benzoyl

Molecular Formula: C₁₈H₁₂O₄

Molecular Weight: 292.29

Accurate Mass: 292.07356

Percentage Composition: C 73.97%; H 4.14%; O 21.90%

Physical Description: Yellow prisms (EtOH aq.)

Melting Point: Mp 147°

>>Derivative: Me ether

Synonym(s): 5-Methoxy-2-methyl-1,4-naphthoquinone. **Plumbagin methyl ether**

CAS Registry Number: 22266-99-5

Molecular Formula: C₁₂H₁₀O₃

Molecular Weight: 202.209

Accurate Mass: 202.062995

Percentage Composition: C 71.28%; H 4.98%; O 23.74%

Biological Source: Isol. from heartwood of *Diospyros melanoxylon*

Physical Description: Yellow needles

Melting Point: Mp 94°