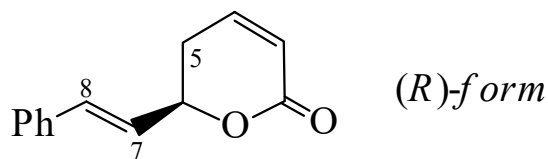




>>Entry Name: **Goniothalamine**

Synonym(s): 5,6-Dihydro-6-(2-phenylethenyl)-2*H*-pyran-2-one, 9Cl. 5,6-Dihydro-6-styryl-2-pyranone. 5-Hydroxy-7-phenyl-2,6-heptadienoic acid lactone



Related CAS Registry Numbers(s): 110044-45-6

Molecular Formula: C₁₃H₁₂O₂

Molecular Weight: 200.237

Accurate Mass: 200.08373

Percentage Composition: C 77.98%; H 6.04%; O 15.98%

>>Variant: *(R)*-form

CAS Registry Number: 17303-67-2

Molecular Formula: C₁₃H₁₂O₂

Molecular Weight: 200.237

Accurate Mass: 200.08373

Percentage Composition: C 77.98%; H 6.04%; O 15.98%

Biological Source: Constit. of bark of *Cryptocarya caloneura*, *Goniothalamus andersonii* and other *Goniothalamus* spp.

Physical Description: Cryst. (petrol)

Melting Point: Mp 85°

Optical Rotation: [α]_D +170.3 (c, 1.38 in CHCl₃)

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

UV: [neutral] $\lambda_{\max}$ 252 (ϵ 20000); 283 (ϵ 1700); 292 (ϵ 1100) (EtOH) (Derep) [neutral] $\lambda_{\max}$ 207 (ϵ 30900); 253 (ϵ 19500); 284 (ϵ 1620) (MeOH) (Berdy)

Hazard & Toxicity: BERDY HAZD : LD₅₀ (mus, ivn) 34 mg/kg

>>Derivative: 7*R*,8*R*-Epoxide

Synonym(s): **Goniothalamine oxide.** Goniothalamine epoxide

CAS Registry Number: 158850-39-6

Extra CAS Registry Numbers(s): 110011-51-3

Molecular Formula: C₁₃H₁₂O₃

Molecular Weight: 216.236

Accurate Mass: 216.078645

Percentage Composition: C 72.21%; H 5.59%; O 22.20%

Biological Source: Constit. of *Goniothalamus dolichocarpus* and *Goniothalamus macrophyllus*

Biological Use/Importance: Embryotoxic agent

Physical Description: Cryst.

Melting Point: Mp 90-94°

Optical Rotation: [α]_D +100.7 (c, 0.70 in CHCl₃)

>>Derivative: 7*S*,8*S*-Epoxide

Synonym(s): **Isogoniothalamine oxide.** Isogoniothalamine epoxide

CAS Registry Number: 122046-63-3

Molecular Formula: C₁₃H₁₂O₃

Molecular Weight: 216.236

Accurate Mass: 216.078645

Percentage Composition: C 72.21%; H 5.59%; O 22.20%

Biological Source: Constit. of *Goniothalamus sesquipedalis*