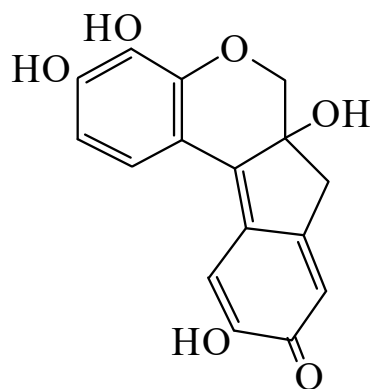




>>Entry Name: Haematein

Synonym(s): 6*a*,7-Dihydro-3,4,6*a*,10-tetrahydroxybenz[*b*]indeno[1,2-*d*]pyran-9(6*H*)-one, 9Cl. Hydroxybrazilein. Hematein



CAS Registry Number: 475-25-2

Molecular Formula: C₁₆H₁₂O₆

Molecular Weight: 300.267

Accurate Mass: 300.06339

Percentage Composition: C 64.00%; H 4.03%; O 31.97%

Source/Synthesis: Isol. from logwood under alkaline oxidn. conds.

Use/Importance: Used as 0.03% soln. in aq. MeOH for photometric detn. of B ($\lambda_{\max}$ 505 nm, ϵ 23000), Hf ($\lambda_{\max}$ 520 nm, ϵ 58000), Ga, Sn. Acid-base indicator (colour change: yellow $\rightarrow$ red $\rightarrow$ purple); biological stain

Physical Description: Brownish-red needles (EtOH)

Melting Point: Mp 250 dec. $^{\circ}$

Fluka: 51230

Sigma: H1625

>>Derivative: Tetra-Me ether

Physical Description: Amber prisms (EtOAc or EtOH)

Melting Point: Mp 210 $^{\circ}$

References:

Hummel, J.J. *et al.*, *Ber.*, 1882, **15**, 2337

Bollina, E. *et al.*, *Ber.*, 1902, **35**, 1678

Engels, P. *et al.*, *J.C.S.*, 1908, **93**, 1121, (*synth*)

Cooke, R.G. *et al.*, *Aust. J. Chem.*, 1955, **8**, 109, (*uv*)

Bassoli, A. *et al.*, *Gazz. Chim. Ital.*, 1996, **126**, 761-763, (*cmr, struct*)