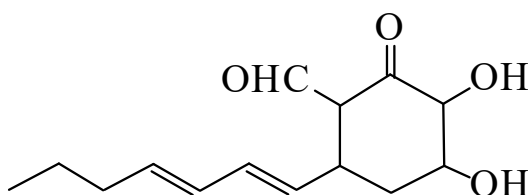




>>Entry Name: Frequentin

Synonym(s): 6-(1,3-Heptadienyl)-3,4-dihydroxy-2-oxocyclohexanecarboxaldehyde, 9CI



CAS Registry Number: 29119-03-7

Molecular Formula: $C_{14}H_{20}O_4$

Molecular Weight: 252.31

Accurate Mass: 252.13616

Percentage Composition: C 66.65%; H 7.99%; O 25.36%

General Statement: Exists in hydroxymethylene form in soln.

Biological Source: Metab. of *Penicillium frequentans*

Use/Importance: Active against fungi

Physical Description: Needles (C_6H_6)

Melting Point: Mp 134° (128°)

Optical Rotation: $[\alpha]_D^{26} +68$ (c, 0.5 in $CHCl_3$)

Solubility: BERDY SOL: Sol. MeOH, C_6H_6 ; poorly sol. H_2O , CCl_4 , hexane

UV: [neutral] λ_{max} 232 (ϵ 33100); 290 (ϵ 5500) (dioxan) (Derep) [neutral] λ_{max} 232 (ϵ 33100); 290 (ϵ 5500) (MeOH) (Berdy)

References:

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Bowden, K. *et al.*, *J.C.S.*, 1959, 1662, (*struct*)

Grove, J.F. *et al.*, *Chem. Ind. (London)*, 1963, 412, (*struct*)

Sigg, H.P., *Helv. Chim. Acta*, 1963, **46**, 1061, (*tautom*)

Grove, J.F. *et al.*, *J.C.S.*, 1964, 3497, (*abs config*)

Unson, C.G., *Diss. Abstr. Int.*, B, 1978, **39**, 1296, (*synth*)