



>>Entry Name: **4,4'-Dihydroxybenzoin**

Synonym(s): 2-Hydroxy-1,2-bis(4-hydroxyphenyl)ethanone, 9Cl

CAS Registry Number: 7424-55-7

Structure by analogy with 2,2'-Dihydroxybenzoin, [MMJ31-I](#)

Molecular Formula: C₁₄H₁₂O₄

Molecular Weight: 244.246

Accurate Mass: 244.07356

Percentage Composition: C 68.85%; H 4.95%; O 26.20%

>>Variant: (±)-form

Molecular Formula: C₁₄H₁₂O₄

Molecular Weight: 244.246

Accurate Mass: 244.07356

Percentage Composition: C 68.85%; H 4.95%; O 26.20%

>>Derivative: 4,4'-Di-Me ether

Synonym(s): 2-Hydroxy-1,2-bis(4-methoxyphenyl)ethanone, 9Cl. *p*-Anisoin, 8Cl. *p,p'*-Dimethoxybenzoin

CAS Registry Number: 119-52-8

Molecular Formula: C₁₆H₁₆O₄

Molecular Weight: 272.3

Accurate Mass: 272.10486

Percentage Composition: C 70.58%; H 5.92%; O 23.50%

Physical Description: Prisms (EtOH)

Melting Point: Mp 113°

Aldrich: A8840-9

Fluka: 10510

>>Derivative: 4,4'-Di-Me ether, semicarbazone

Physical Description: Prisms (EtOH aq.)

Melting Point: Mp 185 dec.°

>>Derivative: 4,4'-Di-Me ether, Ac

CAS Registry Number: 1678-44-0

Molecular Formula: C₁₈H₁₈O₅

Molecular Weight: 314.337

Accurate Mass: 314.115425

Percentage Composition: C 68.78%; H 5.77%; O 25.45%

Melting Point: Mp 93.5°

>>Derivative: Tri-Me ether

Synonym(s): 2-Methoxy-1,2-bis(4-methoxyphenyl)ethanone

CAS Registry Number: 65564-55-8

Molecular Formula: C₁₇H₁₈O₄

Molecular Weight: 286.327

Accurate Mass: 286.12051

Percentage Composition: C 71.31%; H 6.34%; O 22.35%

Physical Description: Yellow prisms (CCl₄)

Melting Point: Mp 52-53°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 39A, (*ir*)

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 855B, (*nmr*)

McKenzie, A. *et al.*, *Ber.*, 1936, **69**, 861, (*synth, deriv*)

Kreiser, W., *Annalen*, 1971, **745**, 164, (*synth, deriv*)

Kashino, S. *et al.*, *Acta Cryst. C*, 1985, **41**, 1066, (*cryst struct, deriv*)

Kulkarni, G.C. *et al.*, *Tetrahedron*, 1988, **44**, 5189, (*synth, derivs*)

Harris, A.R. *et al.*, *Synth. Commun.*, 1989, **19**, 529, (*synth, deriv*)

Liao, J. *et al.*, *Synth. Commun.*, 2000, **30**, 3465-3472, (*di-Me ether*)