



>>Entry Name: 4,4'-Dihydroxybenzil

Synonym(s): Bis(4-hydroxyphenyl)ethanedione

CAS Registry Number: 33288-79-8

Related CAS Registry Numbers(s): 6266-37-1 6320-31-6 24719-96-8 36646-58-9 40030-79-3 57736-11-5 61754-30-1 61772-35-8 63397-13-7 77375-46-3 82470-33-5 82515-02-4 115785-07-4 123078-96-6

Structure by analogy with 2,2'-Dihydroxybenzil, [KXF51-X](#)

Molecular Formula: C₁₄H₁₀O₄

Molecular Weight: 242.231

Accurate Mass: 242.05791

Percentage Composition: C 69.42%; H 4.16%; O 26.42%

Physical Description: Yellow needles (H₂O)

Melting Point: Mp 252° (244-246°)

>>Derivative: Di-Ac

Molecular Formula: C₁₈H₁₄O₆

Molecular Weight: 326.305

Accurate Mass: 326.07904

Percentage Composition: C 66.26%; H 4.32%; O 29.42%

Physical Description: Light yellow cryst. (EtOH)

Melting Point: Mp 87°

>>Derivative: Di-Me ether

Synonym(s): Bis(4-methoxyphenyl)ethanedione, 9Cl. *p*-Anisil, 8Cl. *pp'*-Dimethoxybenzil

CAS Registry Number: 1226-42-2

Molecular Formula: C₁₆H₁₄O₄

Molecular Weight: 270.284

Accurate Mass: 270.08921

Percentage Composition: C 71.10%; H 5.22%; O 23.68%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 131-133°

Aldrich: 15961-1

Fluka: 38650

>>Derivative: Di-Me ether, 2,4-dinitrophenylhydrozone

CAS Registry Number: 13449-03-1

Physical Description: Solid

Melting Point: Mp 188°

>>Derivative: Di-Et ether

Synonym(s): Bis(4-ethoxyphenyl)ethanedione, 9Cl. 4,4'-Diethoxybenzil. *p*-Phenetil

CAS Registry Number: 2132-59-4

Molecular Formula: C₁₈H₁₈O₄

Molecular Weight: 298.338

Accurate Mass: 298.12051

Percentage Composition: C 72.47%; H 6.08%; O 21.45%

Physical Description: Prisms (EtOH)

Melting Point: Mp 149°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 878A, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 53D, (*ir*)

Leonard, N.J. *et al.*, *J.A.C.S.*, 1949, **71**, 2997, (*synth*)

v. Dyke, M. *et al.*, *J.O.C.*, 1967, **32**, 3204, (*synth*)

Brize, M. *et al.*, *J. Chem. Phys.*, 1969, **51**, 738, (*O-17 nmr*)

Horner, L. *et al.*, *Annalen*, 1970, **736**, 145, (*ir*, *uv*, *conformn*)

Ogata, Y. *et al.*, *Tetrahedron*, 1971, **27**, 2725, (*synth*)

Ho, T.L., *Chem. Ind. (London)*, 1972, 807, (*synth*)

Kricka, L.J. *et al.*, *J.C.S. Perkin 1*, 1973, 294, (*ms*)

Macaione, D.P. *et al.*, *Synthesis*, 1974, 716, (*synth*)

Khristova, N. *et al.*, *Z. Chem.*, 1980, **20**, 27, (*pmr*)

Cannon, J.R. *et al.*, *Aust. J. Chem.*, 1989, **42**, 1631, (*synth*, *di-Me ether*, *di-Et ether*, *cryst struct*, *conformn*)