



>>Entry Name: Bis(4-hydroxyphenyl) disulfide

Synonym(s): 4,4'-Dithiobisphenol, 9CI. 4,4'-Dithiodiphenol, 8CI

CAS Registry Number: 15015-57-3

Molecular Formula: C₁₂H₁₀O₂S₂

Molecular Weight: 250.342

Accurate Mass: 250.01222

Percentage Composition: C 57.57%; H 4.03%; O 12.78%; S 25.62%

Physical Description: Needles (H₂O)

Melting Point: Mp 151-152°

pKa Value: pK_{a1} 10.08; pK_{a2} 10.68 (25°, 0.001M 50% EtOH aq.)

Rare Chemicals Library: S60055-5

>>Derivative: Di-Ac

Molecular Formula: C₁₆H₁₄O₄S₂

Molecular Weight: 334.416

Accurate Mass: 334.03335

Percentage Composition: C 57.47%; H 4.22%; O 19.14%; S 19.18%

Physical Description: Leaflets (EtOH)

Melting Point: Mp 88-89°

>>Derivative: Dibenzoyl

Molecular Formula: C₂₆H₁₈O₄S₂

Molecular Weight: 458.558

Accurate Mass: 458.06465

Percentage Composition: C 68.10%; H 3.96%; O 13.96%; S 13.99%

Physical Description: Cryst. (C₆H₆/EtOH)

Melting Point: Mp 167°

>>Derivative: Di-Me ether

Synonym(s): Bis(4-methoxyphenyl) disulfide, 9CI. 4,4'-Dithiodianisole, 8CI

CAS Registry Number: 5335-87-5

Molecular Formula: C₁₄H₁₄O₂S₂

Molecular Weight: 278.395

Accurate Mass: 278.04352

Percentage Composition: C 60.40%; H 5.07%; O 11.49%; S 23.04%

Physical Description: Needles (EtOH)

Melting Point: Mp 44-45°

References:

Gatterman, L., *Ber.*, 1899, **32**, 1136, (*di-Me ether synth*)

Ariyan, Z.S. *et al.*, *J.C.S.*, 1962, 3876, (*synth*)

Oae, S. *et al.*, *Bull. Chem. Soc. Jpn.*, 1968, **41**, 2082, (*synth, uv, pmr*)

Stout, E.I. *et al.*, *J.O.C.*, 1974, **39**, 562, (*synth*)

Hartley, R.C. *et al.*, *J.C.S. Perkin I*, 1996, 359, (*di-Me ether, synth, ir, pmr, cmr, ms*)