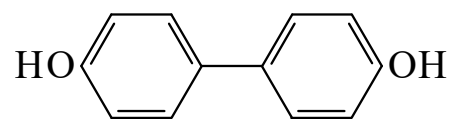




>>Entry Name: 4,4'-Biphenyldiol

Synonym(s): [1,1'-Biphenyl]-4,4'-diol, 9CI. 4,4'-Dihydroxybiphenyl. *p,p'*-Diphenol. DOD



CAS Registry Number: 92-88-6

Extra CAS Registry Numbers(s): 26983-52-8

Molecular Formula: C₁₂H₁₀O₂

Molecular Weight: 186.21

Accurate Mass: 186.06808

Percentage Composition: C 77.40%; H 5.41%; O 17.18%

Use/Importance: Polymer intermediate. Comonomer used in the synth. of liq. cryst. polyethers and polyesters, e.g. Xydar. Used for photometric detn. of Br^m (λ_{max} 339 nm)

Physical Description: Needles or plates (EtOH)

Melting Point: Mp 286° (274-275°)

Solubility: Sl. sol. H₂O

pKa Value: pK_{a1} 10.4; pK_{a2} 11.7 (20°, 50% MeOH aq.)

Hazard & Toxicity: LD₅₀ (rat, orl) 9850 mg/kg; LD₅₀ (rbt, skn) 1780 mg/kg

Aldrich: 16873-4

Fluka: 37625

Sigma: B6634

>>Derivative: Di-Ac

CAS Registry Number: 32604-29-8

Molecular Formula: C₁₆H₁₄O₄

Molecular Weight: 270.284

Accurate Mass: 270.08921

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

Use/Importance: Comonomer used in the synth. of liq. cryst. polyesters. Commercially available

Physical Description: Needles (Me₂CO)

Melting Point: Mp 160-161°

>>Derivative: Mono-Me ether

Synonym(s): 4-Hydroxy-4'-methoxybiphenyl. 4'-Methoxy-[1,1'-biphenyl]-4-ol

CAS Registry Number: 16881-71-3

Molecular Formula: C₁₃H₁₂O₂

Molecular Weight: 200.237

Accurate Mass: 200.08373

Percentage Composition: C 77.98%; H 6.04%; O 15.98%

Use/Importance: Used for synth. of liq. cryst. polymers

Physical Description: Cryst. (MeOH or EtOH)

Melting Point: Mp 183°

>>Derivative: Di-Me ether

Synonym(s): 4,4'-Dimethoxybiphenyl. *p,p'*-Dianisole

CAS Registry Number: 2132-80-1

Molecular Formula: C₁₄H₁₄O₂

Molecular Weight: 214.263

Accurate Mass: 214.09938

Percentage Composition: C 78.48%; H 6.59%; O 14.93%

Physical Description: Leaflets

Melting Point: Mp 176-177° (173°)

Aldrich: 14853-9