



>>Entry Name: 4,4'-Biphenyldicarboxaldehyde

Synonym(s): 4,4'-Diformylbiphenyl

CAS Registry Number: 66-98-8

Related CAS Registry Numbers(s): 41568-38-1

Molecular Formula: C₁₄H₁₀O₂

Molecular Weight: 210.232

Accurate Mass: 210.06808

Percentage Composition: C 79.99%; H 4.79%; O 15.22%

Use/Importance: Intermed. for liquid crystal polymers

Physical Description: Cryst.

Melting Point: Mp 145°

Solubility: Insol. Et₂O

Other Data: Readily oxid. to corresp. mono- and diacids in air

>>Derivative: Dioxime

Molecular Formula: C₁₄H₁₂N₂O₂

Molecular Weight: 240.261

Accurate Mass: 240.089878

Percentage Composition: C 69.99%; H 5.03%; N 11.66%; O 13.32%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 204°

>>Derivative: Bisphenylhydrazone

Physical Description: Needles (EtOH)

Melting Point: Mp 278°

Solubility: Insol. Et₂O or petrol

>>Derivative: Bis(2,4-dinitrophenylhydrazone)

Melting Point: Mp 345 dec.°

References:

Ullmann, F. *et al.*, *Annalen*, 1904, **332**, 38, (*dioxime*)

Weygand, F. *et al.*, *Chem. Ber.*, 1955, **88**, 301, (*synth*)

Thulin, B. *et al.*, *Acta Chem. Scand., Ser. B*, 1977, **31**, 135, (*synth*)

Colon, I. *et al.*, *J.O.C.*, 1986, **51**, 2627, (*synth*)

Morgan, P.W. *et al.*, *Macromolecules*, 1987, **20**, 729, (*use*)

Lourak, M. *et al.*, *J.O.C.*, 1989, **54**, 4840, (*synth*)

Helms, A. *et al.*, *J.A.C.S.*, 1992, **114**, 6227, (*synth, pmr*)