



>>Entry Name: 1,4-Diphenyl-1,4-butanedione, 9CI

Synonym(s): Diphenacyl. 1,2-Dibenzoylthane. Succinophenone. Biphenacyl. 2,2"-Biacetophenone

CAS Registry Number: 495-71-6

PhCOCH₂CH₂COPh

Molecular Formula: C₁₆H₁₄O₂

Molecular Weight: 238.285

Accurate Mass: 238.09938

Percentage Composition: C 80.65%; H 5.92%; O 13.43%

Physical Description: Pale-yellow needles (EtOH)

Melting Point: Mp 145°

Rare Chemicals Library: S87641-0

>>Derivative: Dioxime

CAS Registry Number: 21772-01-0

Molecular Formula: C₁₆H₁₆N₂O₂

Molecular Weight: 268.315

Accurate Mass: 268.121178

Percentage Composition: C 71.62%; H 6.01%; N 10.44%; O 11.93%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 203-204°

>>Derivative: Bis-2,4-dinitrophenylhydrazone

Physical Description: Cryst.

Melting Point: Mp 265 dec.°

References:

- Shirafugi, T. *et al.*, *Tet. Lett.*, 1969, 4097-4098, (*synth*)
Ongania, K.H. *et al.*, *Monatsh. Chem.*, 1976, **107**, 481-484, (*dioxime*)
Kobayashi, Y. *et al.*, *Tet. Lett.*, 1977, 3741-3742, (*synth*)
Uff, B.C. *et al.*, *J. Het. Chem.*, 1989, **26**, 571-576, (*synth*)
Leung, W.-Y. *et al.*, *Synth. Commun.*, 1989, **19**, 787-792, (*synth*)
Yasuda, M. *et al.*, *J.C.S. Perkin 1*, 1993, 859-865, (*synth*, *ir*, *pmr*, *cmr*)
Wagner, P.J. *et al.*, *Can. J. Chem.*, 1995, **73**, 2047-2061, (*synth*, *ir*, *pmr*, *cmr*)
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