



>>Entry Name: 1,3-Diphenyl-1-propanone, 9CI

Synonym(s): ω-Benzylacetophenone. Phenethyl phenyl ketone. Dihydrochalcone. Hydrocinnamophenone. Hydrochalcone

CAS Registry Number: 1083-30-3

Type of Compound Code(s): VG0035 VK6200

PhCOCH₂CH₂Ph

Molecular Formula: C₁₅H₁₄O

Molecular Weight: 210.275

Accurate Mass: 210.104465

Percentage Composition: C 85.68%; H 6.71%; O 7.61%

Biological Source: Isol. from *Phallus impudicus*. Also from *Pteraster militaris*

Physical Description: Leaflets (EtOH)

Melting Point: Mp 72-73°

Boiling Point: Bp 360°

Rare Chemicals Library: S82419-4

>>Derivative: Oxime

CAS Registry Number: 5371-55-1

Molecular Formula: C₁₅H₁₅NO

Molecular Weight: 225.29

Accurate Mass: 225.115364

Percentage Composition: C 79.97%; H 6.71%; N 6.22%; O 7.10%

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 87°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 5371-54-0

Melting Point: Mp 143-145°

>>Derivative: Semicarbazone

CAS Registry Number: 33745-39-0

Physical Description: Cryst. (EtOH)

Melting Point: Mp 148-148.5°

>>Derivative: Di-Et acetal

Synonym(s): 1,1-Diethoxy-1,3-diphenylpropane

Molecular Formula: C₁₉H₂₄O₂

Molecular Weight: 284.397

Accurate Mass: 284.17763

Percentage Composition: C 80.24%; H 8.51%; O 11.25%

Physical Description: Liq.

Boiling Point: Bp₁₈ 189°

Density: d₄²² 1.043

References:

- Org. Synth., Coll. Vol., 4*, 1963, 101, (*synth*)
Freunel, B. *et al.*, *Planta Med.*, 1968, 123; *CA*, **70**, 54869, (*isol*)
Shemyakin, M.M. *et al.*, *Tetrahedron*, 1971, **27**, 2811, (*synth*)
Weber, F.G. *et al.*, *Tetrahedron*, 1973, **29**, 2479, (*synth, pmr*)
Yayli, N., *Indian J. Chem., Sect. B*, 1994, **33**, 556, (*isol*)
Juda}s, N. *et al.*, *Acta Cryst. C*, 1995, **51**, 2656, (*cryst struct*)
Pande, P.P. *et al.*, *Synth. Commun.*, 1998, **28**, 4193-4200, (*synth, ir, pmr*)
Wang, H. *et al.*, *Synth. Commun.*, 1999, **29**, 129-134, (*synth, ir, pmr*)