>>**Entry Name: 1,2-Diphenyl-1-butanone**
Synonym(s): 2-Phenylbutyrophenone. 1-Benzoyl-1-phenylpropane

CAS Registry Number: 16282-16-9
$H_3CCH_2CHPhCOPh$

Molecular Formula: $C_{16}H_{16}O$
Molecular Weight: 224.302
Accurate Mass: 224.120115
Percentage Composition: C 85.68%; H 7.19%; O 7.13%

Aldrich: 27747-9
Rare Chemicals Library: S32773-5

>>**Variant:** (+)-form

Molecular Formula: $C_{16}H_{16}O$
Molecular Weight: 224.302
Accurate Mass: 224.120115
Percentage Composition: C 85.68%; H 7.19%; O 7.13%
Physical Description: Cryst. (EtOH/pentane)
Melting Point: Mp 57-58°
Optical Rotation: $[\alpha]_D^{25}$+230.2 (c, 4.99 in C_6H_6)

>>**Variant:** (±)-form

CAS Registry Number: 77542-11-1
Molecular Formula: $C_{16}H_{16}O$
Molecular Weight: 224.302
Accurate Mass: 224.120115
Percentage Composition: C 85.68%; H 7.19%; O 7.13%
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 55-57°

>>**Derivative:** Oxime

CAS Registry Number: 127529-51-5
Molecular Formula: $C_{16}H_{17}NO$
Molecular Weight: 239.316
Accurate Mass: 239.131014
Percentage Composition: C 80.30%; H 7.16%; N 5.85%; O 6.69%
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 131-132°

References:
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 808B, *(nmr)*
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1233D, *(ir)*
Cram, D.J. *et al.*, *J.A.C.S.*, 1957, **79**, 2858-2865, *(+-form, synth)*
Bartnik, R. *et al.*, *Bull. Soc. Chim. Fr.*, 1975, 173-177, *(oxime, synth)*