



>>Entry Name: **1,3-Diphenyl-2-propanone, 9CI**

Synonym(s): 1,3-Diphenylacetone. Dibenzyl ketone. Benzyl ketone

CAS Registry Number: 102-04-5

PhCH₂COCH₂Ph

Molecular Formula: C₁₅H₁₄O

Molecular Weight: 210.275

Accurate Mass: 210.104465

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

Physical Description: Cryst. (EtOH aq., Et₂O or petrol)

Melting Point: Mp 35-36°

Boiling Point: Bp 331°. Bp_{0.1} 112-125°

Aldrich: W23970-4

Fluka: 33790

>>Derivative: Oxime

CAS Registry Number: 1788-31-4

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%

Melting Point: Mp 125°

Rare Chemicals Library: S79877-0

>>Derivative: Semicarbazone

Melting Point: Mp 123-124°. Mp 146°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 1555-81-3

Physical Description: Orange cryst. (EtOH)

Melting Point: Mp 110°

>>Derivative: Phenylhydrazone

Physical Description: Needles or leaflets

Melting Point: Mp 128-129°

>>Derivative: Tosylhydrazone

CAS Registry Number: 19816-88-7

Type of Compound Code(s): PS8400

Molecular Formula: C₂₂H₂₂N₂O₂S

Molecular Weight: 378.494

Accurate Mass: 378.140198

Percentage Composition: C 69.81%; H 5.86%; N 7.40%; O 8.45%; S 8.47%

Use/Importance: Reagent for the titrimetric detn. of organolithium compounds

Melting Point: Mp 185-186 dec.°

Aldrich: 23030-8

Fluka: 43190

References: