



>>Entry Name: 1,2-Diphenylethanone

Synonym(s): Deoxybenzoin. Desoxybenzoin. Benzyl phenyl ketone. α -Phenylacetophenone. Phenylacetophenone. 1,2-Diphenylethenol. α -Stilbenol. α -Hydroxystilbene

Related CAS Registry Numbers(s): 13892-81-4 24647-07-2 26306-06-9 57736-10-4

$\text{PhCH}_2\text{COPh} \leftrightarrow \text{PhCH}=\text{C}(\text{OH})\text{Ph}$

Molecular Formula: $\text{C}_{14}\text{H}_{12}\text{O}$

Molecular Weight: 196.248

Accurate Mass: 196.088815

Percentage Composition: C 85.68%; H 6.16%; O 8.15%

Physical Description: Plates

Melting Point: Mp 60°

Boiling Point: Bp 320°. Bp₁₂ 177°

>>Variant: Oxo-form

CAS Registry Number: 451-40-1

Molecular Formula: $\text{C}_{14}\text{H}_{12}\text{O}$

Molecular Weight: 196.248

Accurate Mass: 196.088815

Percentage Composition: C 85.68%; H 6.16%; O 8.15%

Aldrich: D436-9

Fluka: 30950

Sigma: D6150

>>Derivative: Oxime

CAS Registry Number: 952-06-7

Molecular Formula: $\text{C}_{14}\text{H}_{13}\text{NO}$

Molecular Weight: 211.263

Accurate Mass: 211.099714

Percentage Composition: C 79.59%; H 6.20%; N 6.63%; O 7.57%

Physical Description: Needles (EtOH)

Melting Point: Mp 98°

>>Derivative: Semicarbazone

Melting Point: Mp 148°. Mp 159-160.6°

>>Derivative: Phenylhydrazone

CAS Registry Number: 6121-47-7

Melting Point: Mp 116°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 5637-51-4

Melting Point: Mp 205-206°

>>Variant: Enol-form

CAS Registry Number: 4847-77-2

Molecular Formula: $\text{C}_{14}\text{H}_{12}\text{O}$

Molecular Weight: 196.248

Accurate Mass: 196.088815

Percentage Composition: C 85.68%; H 6.16%; O 8.15%

>>Derivative: Ac

Molecular Formula: $\text{C}_{16}\text{H}_{14}\text{O}_2$

Molecular Weight: 238.285

Accurate Mass: 238.09938

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

Physical Description: Pale yellow cryst.

Melting Point: Mp 101°