



>>Entry Name: 1-(4-Hydroxyphenyl)-2-phenylethanone, 9CI

Synonym(s): 4'-Hydroxy-2-phenylacetophenone. 4-Hydroxydeoxybenzoin. Benzyl *p*-hydroxyphenyl ketone

CAS Registry Number: 2491-32-9

Molecular Formula: C₁₄H₁₂O₂

Molecular Weight: 212.248

Accurate Mass: 212.08373

Percentage Composition: C 79.23%; H 5.70%; O 15.08%

Physical Description: Yellow needles (EtOH aq. or H₂O)

Melting Point: Mp 151°

Aldrich: B2307-7

>>Derivative: Oxime

Molecular Formula: C₁₄H₁₃NO₂

Molecular Weight: 227.262

Accurate Mass: 227.094629

Percentage Composition: C 73.99%; H 5.77%; N 6.16%; O 14.08%

Melting Point: Mp 85°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 2491-33-0

Physical Description: Orange plates (AcOH)

Melting Point: Mp 224°

>>Derivative: Ac

CAS Registry Number: 20736-45-2

Molecular Formula: C₁₆H₁₄O₃

Molecular Weight: 254.285

Accurate Mass: 254.094295

Percentage Composition: C 75.58%; H 5.55%; O 18.88%

Melting Point: Mp 82°

>>Derivative: Me ether

Synonym(s): 1-(4-Methoxyphenyl)-2-phenylethanone. Benzyl *p*-methoxyphenyl ketone. ω-Anisoyltoluene

CAS Registry Number: 1023-17-2

Molecular Formula: C₁₅H₁₄O₂

Molecular Weight: 226.274

Accurate Mass: 226.09938

Percentage Composition: C 79.62%; H 6.24%; O 14.14%

Physical Description: Needles (MeOH)

Melting Point: Mp 77-78°

Rare Chemicals Library: S3382-1

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 44D, (*ir*)

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 862B, (*nmr*)

Weisl, S., *Monatsh. Chem.*, 1905, **26**, 977-1002, (*synth*)

Meisenheimer, J. *et al.*, *Annalen*, 1907, **355**, 281-293, (*synth*)

Chadha, T.C. *et al.*, *J.C.S.*, 1933, 1459-1462, (*synth*)

Miyashita, A. *et al.*, *Chem. Pharm. Bull.*, 1997, **45**, 1235-1242, (*Me ether, synth, ir, pmr*)