>>**Entry Name: Acetophenone,** 8CI
Synonym(s): 1-Phenylethanone, 9CI. Methyl phenyl ketone. Hypnone. Acetylbenzene

CAS Registry Number: 98-86-2
Related CAS Registry Numbers(s): 19547-00-3 59130-82-4

$PhCOCH_3$

Molecular Formula: C_8H_8O
Molecular Weight: 120.151
Accurate Mass: 120.057515
Percentage Composition: C 79.97%; H 6.71%; O 13.32%
Biological Source: Isol. from essential oils. Obt. comly as byprod. in the Hock phenol synthesis
Use/Importance: Has soporific props. Solvent, resin intermed. Photochemical sensitiser. Used in extraction separation of Se from Te. Used in perfumery
Physical Description: Plates (freq. obt. as liq.) with penetrating sweet odour
Melting Point: Mp 20°
Boiling Point: Bp 202°. Bp_5 67°
Solubility: Sol. EtOH, Et_2O; insol. H_2O
Density: d_4^{20}1.029
pKa Value: pK_{a1} –6.4 (25°, H_2SO_4 aq.)
Refractive Index: n_D^{20} 1.5342

Hazard & Toxicity: Fl. p. 77°, autoignition temp. 570°. Skin and severe eye irritant. LD_{50} (rat, orl) 815 mg/kg

Aldrich: W20090-5
Fluka: 800
Sigma: A1890
Supelco: R52-5110

>>**Derivative:** (*E*)-Oxime
Synonym(s): *syn*-Oxime

CAS Registry Number: 10341-75-0
Extra CAS Registry Numbers(s): 613-91-2
Molecular Formula: C_8H_9NO
Molecular Weight: 135.165
Accurate Mass: 135.068414
Percentage Composition: C 71.09%; H 6.71%; N 10.36%; O 11.84%
Melting Point: Mp 59.5-60.5°
pKa Value: pK_{a1} 11.35