



>>Entry Name: Benzophenone, 8Cl

ENTRY UNDER REVIEW

Synonym(s): Diphenylmethanone, 9Cl. Diphenyl ketone. Phenyl ketone. FEMA 2134

CAS Registry Number: 119-61-9

Related CAS Registry Numbers(s): 16592-08-8

PhCOPh

Molecular Formula: C₁₃H₁₀O

Molecular Weight: 182.221

Accurate Mass: 182.073165

Percentage Composition: C 85.69%; H 5.53%; O 8.78%

Biological Source: Constit. of *Pseudomonas putida*, also occurs in Baltic Sea shale tar

Use/Importance: Fixative for heavy perfumes, esp. soaps. Used in the manuf. of antihistamines, hypnotics and insecticides

Physical Description: Rhombic prisms (stable form), monoclinic prisms (labile form)

Melting Point: Mp 48.5-49° (stable form). Mp 26° (labile form)

Boiling Point: Bp₁₀₀ 224°. Bp₁₀ 157.6°

Solubility: Insol. H₂O

Density: d₄¹⁸ 1.11

Hazard & Toxicity: LD₅₀ (mus, orl) 2895 mg/kg

Aldrich: 42755-1

Fluka: 12750

Sigma: B3634

>>Derivative: Oxime

CAS Registry Number: 574-66-3

Molecular Formula: C₁₃H₁₁NO

Molecular Weight: 197.236

Accurate Mass: 197.084064

Percentage Composition: C 79.17%; H 5.62%; N 7.10%; O 8.11%

Physical Description: Cryst. (petrol)

Solubility: Sol. Et₂O, Me₂CO; mod. sol. CHCl₃, C₆H₆; spar. sol. H₂O

pKa Value: pK_{a1} 11.18

>>Derivative: Hydrazone

CAS Registry Number: 5350-57-2

Molecular Formula: C₁₃H₁₂N₂

Molecular Weight: 196.251

Accurate Mass: 196.100048

Percentage Composition: C 79.56%; H 6.16%; N 14.27%

Melting Point: Mp 98°

Boiling Point: Bp₅₅ 225-230°

Aldrich: B960-2

Fluka: 12755

Rare Chemicals Library: S14897-0

>>Derivative: Phenylhydrazone

CAS Registry Number: 574-61-8

Physical Description: Needles

Melting Point: Mp 137°

Rare Chemicals Library: S43781-6

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 1733-62-6

Melting Point: Mp 238°

Rare Chemicals Library: S81930-1