



>>Entry Name: Phenylglyoxal, 8Cl

Synonym(s): α -Oxobenzeneacetaldehyde, 9Cl. Benzoylformaldehyde

CAS Registry Number: 1074-12-0

Related CAS Registry Numbers(s): 22668-53-7

$\text{Ph}^1\text{CO}^2\text{CHO}$

Molecular Formula: $\text{C}_8\text{H}_6\text{O}_2$

Molecular Weight: 134.134

Accurate Mass: 134.03678

Percentage Composition: C 71.64%; H 4.51%; O 23.86%

Use/Importance: Used for photometric detn. of Hg(II) and Fe(III)

Physical Description: Needles + H_2O (H_2O)

Melting Point: Mp 91° (loses H_2O)

Boiling Point: Bp₁₂₅ 142°

Solubility: Mod. sol. H_2O

Other Data: Steam-volatile

Hazard & Toxicity: Flammable, fl. p. $<23^\circ$

Fluka: 78600

Sigma: P7013

>>Derivative: 2-Oxime

Synonym(s): Isonitrosoacetophenone. Benzoylformoxime. Hydroxyiminoacetophenone

CAS Registry Number: 532-54-7

Molecular Formula: $\text{C}_8\text{H}_7\text{NO}_2$

Molecular Weight: 149.149

Accurate Mass: 149.047679

Percentage Composition: C 64.42%; H 4.73%; N 9.39%; O 21.45%

Use/Importance: Used for detn. of Co, Pb, Mn, Ni

Physical Description: Plates (CHCl_3)

Melting Point: Mp 129° (126 - 128°)

Solubility: Sol. alkalis, CHCl_3 ; sl. sol. H_2O

Hazard & Toxicity: LD₅₀ (mus, ipr) 75 mg/kg

Aldrich: I-1820-2

Fluka: 59010

>>Derivative: 2-Oxime, 1-(4-nitrophenyl)hydrazone

Synonym(s): Isonitrosoacetophenone 4-nitrophenylhydrazone

Molecular Formula: $\text{C}_{14}\text{H}_{12}\text{N}_4\text{O}_3$

Molecular Weight: 284.274

Accurate Mass: 284.090941

Percentage Composition: C 59.15%; H 4.25%; N 19.71%; O 16.88%

Use/Importance: Used for photometric detn. of Co

Physical Description: Dark orange cryst.

Melting Point: Mp 212°

>>Derivative: 2-Oxime, 1-(2,4-dinitrophenyl)hydrazone

Synonym(s): Isonitrosoacetophenone 2,4-dinitrophenylhydrazone

Molecular Formula: $\text{C}_{14}\text{H}_{11}\text{N}_5\text{O}_5$

Molecular Weight: 329.271

Accurate Mass: 329.07602

Percentage Composition: C 51.07%; H 3.37%; N 21.27%; O 24.30%

Use/Importance: Used for photometric detn. of Co

Physical Description: Red cryst.

Melting Point: Mp 233°