



>>Entry Name: Bis(4-chlorophenyl)ethanedione, 9Cl

Synonym(s): 4,4'-Dichlorobenzil, 8Cl. Di-*p*-chlorophenyl diketone



CAS Registry Number: 3457-46-3

Molecular Formula: C₁₄H₈Cl₂O₂

Molecular Weight: 279.121

Accurate Mass: 277.990134

Percentage Composition: C 60.24%; H 2.89%; Cl 25.40%; O 11.46%

Physical Description: Yellow needles

Melting Point: Mp 199°

>>Derivative: Monophenylhydrazone

Melting Point: Mp 178°. Mp 200°

>>Derivative: Dioxime

CAS Registry Number: 23766-37-2

Molecular Formula: C₁₄H₁₀Cl₂N₂O₂

Molecular Weight: 309.151

Accurate Mass: 308.011932

Percentage Composition: C 54.39%; H 3.26%; Cl 22.94%; N 9.06%; O 10.35%

Use/Importance: Used as 1mM EtOH soln. for extraction-photometric detn. of Ni ($\lambda_{\max}$ 414 nm, ϵ 14200), Co, Cu

Physical Description: Needles (MeOH aq.)

Melting Point: Mp 226 dec.°

Solubility: Sol. MeOH, EtOH

References:

Kenner, J. *et al.*, *J.C.S.*, 1910, **97**, 1967

Boulton, A.J. *et al.*, *J.C.S.(C)*, 1969, 1901

Cumper, C.W.N. *et al.*, *J.C.S. Perkin 2*, 1972, 106, (*synth, struct*)

Kuse, S. *et al.*, *Anal. Chim. Acta*, 1974, **70**, 65, (*dioxime, detn, Ni*)

Macaione, D.P. *et al.*, *Synthesis*, 1974, **10**, 716

Dillard, J.G. *et al.*, *Org. Mass Spectrom.*, 1975, **10**, 28, (*ms*)

Cremlyn, R.J. *et al.*, *J. Het. Chem.*, 1987, **24**, 117, (*synth*)

Chi, K.-W. *et al.*, *Synth. Commun.*, 1994, **24**, 2119, (*synth*)

Sibi, M.P. *et al.*, *J.O.C.*, 1995, **60**, 5016, (*synth, pmr, cmr*)