



>>Entry Name: Dichlorotriphenylphosphorane, 9Cl, 8Cl

Synonym(s): Triphenylphosphine dichloride

CAS Registry Number: 2526-64-9

Ph₃PCl₂

Molecular Formula: C₁₈H₁₅Cl₂P

Molecular Weight: 333.196

Accurate Mass: 332.028841

Percentage Composition: C 64.89%; H 4.54%; Cl 21.28%; P 9.30%

General Statement: Thought to be unionized in benzene, but ionic in solid state and in HCl(l)

Use/Importance: Useful chlorinating agent; converts esters and lactones into acyl chlorides and chlorinates αβ-unsat. ketones at the β-position

Physical Description: Solid

Melting Point: Mp 207-210°

Aldrich: 37875-5

References:

Appel, R. *et al.*, *Chem. Ber.*, 1973, **106**, 3450; 1974, **107**, 698; 1975, **108**, 1437; 1976, **109**, 58; 1977, **110**, 2382, (*synth, cmr, P-31 nmr, use*)

Burton, D.J. *et al.*, *J.O.C.*, 1975, **40**, 3026, (*synth, use*)

Dillon, K.B. *et al.*, *J.C.S. Dalton*, 1976, 1243, (*nmr, nqr, struct*)

Org. Synth., 1978, **58**, 64, (*use*)

Wilkie, C.A., *J. Magn. Reson.*, 1979, **33**, 127, (*cmr*)

Sergienko, L.M. *et al.*, *Zh. Obshch. Khim.*, 1979, **49**, 317; *J. Gen. Chem. USSR (Engl. Transl.)*, 1979, **49**, 275, (*uv*)

Timorkhin, B.V. *et al.*, *Zh. Obshch. Khim.*, 1981, **51**, 1989; *J. Gen. Chem. USSR (Engl. Transl.)*, 1981, **51**, 1711, (*P-31 nmr*)

Piers, E. *et al.*, *Can. J. Chem.*, 1982, **60**, 210, (*use*)

Timorkhin, B.V. *et al.*, *Zh. Obshch. Khim.*, 1982, **52**, 543; *J. Gen. Chem. USSR (Engl. Transl.)*, 1982, **52**, 476, (*props, P-31 nmr, reactions*)

Ylagan, L. *et al.*, *Synth. Commun.*, 1988, **18**, 285, (*use*)