



>>Entry Name: Diethyl phosphorochloridite, 9Cl, 8Cl

Synonym(s): Diethyl chlorophosphite. Chloro(diethoxo)phosphorus(III)

CAS Registry Number: 589-57-1

(EtO)₂PCl

Molecular Formula: C₄H₁₀ClO₂P

Molecular Weight: 156.548

Accurate Mass: 156.010694

Percentage Composition: C 30.69%; H 6.44%; Cl 22.65%; O 20.44%; P 19.79%

Use/Importance: Rgt. for peptide synthesis

Physical Description: Fuming pungent liq.

Boiling Point: Bp 153-155°. Bp₃₀ 63-65°. Bp₁₂ 45-50°

Density: d₀²⁰ 1.075

Refractive Index: n_D²⁰ 1.4360

Hazard & Toxicity: Reacts explosively with H₂O

Aldrich: 25550-5

Fluka: 32089

Sigma: D9894

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 1467A, (*nmr*)

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Young, R.W. *et al.*, *J.A.C.S.*, 1956, **78**, 2126, (*synth, use*)

Michalski, J. *et al.*, *J.C.S.*, 1961, 4904, (*synth*)

Fluck, E. *et al.*, *Z. Anorg. Allg. Chem.*, 1961, **307**, 113, (*P-31 nmr*)

Jones, R.A.Y. *et al.*, *Angew. Chem., Int. Ed.*, 1962, **1**, 32, (*nmr*)

Gloede, J. *et al.*, *J. Prakt. Chem.*, 1974, **316**, 703, (*synth, nmr*)

Malenko, D.M. *et al.*, *Zh. Obshch. Khim.*, 1979, **49**, 308; *J. Gen. Chem. USSR (Engl. Transl.)*, 1979, **49**, 267, (*synth, P-31 nmr*)

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