



>>Entry Name: Dimethylphosphoramidous dichloride, 9Cl

Synonym(s): Dichloro(dimethylamino)phosphine. Dichloro(dimethylamido)phosphorus(III)

CAS Registry Number: 683-85-2

Type of Compound Code(s): AC1050 AC1020

Me₂NPCl₂

Molecular Formula: C₂H₆Cl₂NP

Molecular Weight: 145.955

Accurate Mass: 144.96149

Percentage Composition: C 16.46%; H 4.14%; Cl 48.58%; N 9.60%; P 21.22%

Use/Importance: Ligand for Al, Fe, and Rh

Physical Description: Fuming liq.

Boiling Point: Bp 150°. Bp₃₇ 56°

Refractive Index: n_D²⁰ 1.5020

Hazard & Toxicity: V. reactive to oxidising agents. Reacts violently with H₂O and may inflame

Aldrich: 39163-8

References:

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Biryukov, I.P. *et al.*, *Zh. Obshch. Khim.*, 1972, **42**, 1223; *J. Gen. Chem. USSR (Engl. Transl.)*, 1972, **42**, 1217, (*nqr*)

Lappert, M.F. *et al.*, *J.C.S. Dalton*, 1975, 1207, (*pe*)

Barlos, K. *et al.*, *Z. Naturforsch., B*, 1978, **33**, 515, (*N-14 nmr*)

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Kukhar', V.P. *et al.*, *Zh. Obshch. Khim.*, 1982, **52**, 562; *J. Gen. Chem. USSR (Engl. Transl.)*, 1982, **52**, 492, (*synth, P-31 nmr*)

Katsyuba, S.A. *et al.*, *Zh. Obshch. Khim.*, 1984, **54**, 694; *J. Gen. Chem. USSR (Engl. Transl.)*, 1984, **54**, 615, (*ir, Raman*)

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Cavell, R.G. *et al.*, *J. Electron Spectrosc. Relat. Phenom.*, 1987, **43**, 215, (*pe*)

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