



>>Entry Name: Tetrabutylplumbane, 9Cl

Synonym(s): Tetrabutyllead. Lead tetrabutyl

CAS Registry Number: 1920-90-7

$\text{Pb}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3)_4$

Molecular Formula: $\text{C}_{16}\text{H}_{36}\text{Pb}$

Molecular Weight: 435.66

Accurate Mass: 436.258327

Percentage Composition: C 44.11%; H 8.33%; Pb 47.56%

Source/Synthesis: Synth. by Grignard method

Use/Importance: Substitutes α -alkoxy carbamates in presence of TiCl_4 and acid chlorides in presence of Pd catalysts; adds to aldehydes with good 1,3-asymmetric induction in presence of Lewis acids

Physical Description: Liq.

Boiling Point: Bp_{10} 156° (in CO_2). Bp_1 140°

Density: d_4^{20} 1.324

Other Data: Dec. >145°

Other: Gelest PBL6457

References:

Danzer, W., *Monatsh. Chem.*, 1926, **46**, 241, (synth)

Leeper, R.W. *et al.*, *Chem. Rev.*, 1954, **54**, 101, (rev)

Robinson, G.C., *J.O.C.*, 1963, **28**, 843, (synth)

Mengoli, G. *et al.*, *Ann. Chim. (Rome)*, 1978, **68**, 455, (synth)

Mitchell, T.N. *et al.*, *J.C.S. Dalton*, 1978, 960, (cmr, Pb-207 nmr)

De Vos, D. *et al.*, *Bull. Soc. Chim. Belg.*, 1980, **89**, 791, (cmr)

Yamada, J. *et al.*, *Chem. Comm.*, 1987, 1302, (use)

Yamamoto, Y. *et al.*, *J.A.C.S.*, 1987, **109**, 4395, (use)

Yamada, J. *et al.*, *Tet. Lett.*, 1989, **30**, 5611, (use)