



>>Entry Name: 4,4,5,5-Tetramethyl-2-phenyl-1,3,2-dioxaborolane, 12Cl, 9Cl

Synonym(s): Benzeneboronic acid cyclic tetramethylethylene ester, 8Cl. Pinacol phenylboronate

CAS Registry Number: 24388-23-6

As 2-Ethenyl-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, FJC14-C with
R = Ph

Molecular Formula: C₁₂H₁₇BO₂

Molecular Weight: 204.076

Accurate Mass: 204.13216

Percentage Composition: C 70.63%; H 8.40%; B 5.30%; O 15.68%

Use/Importance: Deriv. used in gc of pinacol

Physical Description: Cryst. (petrol or toluene)

Melting Point: Mp 28-30°

Boiling Point: Bp₂₀ 128-130°. Bp_{0.4} 60°

Other Data: Distillable *in vacuo*

References:

Kuivila, H.G. *et al.*, *J.O.C.*, 1954, **19**, 780, (*synth, props*)

Bowie, R.A. *et al.*, *J.C.S.*, 1963, 3945, (*synth, props*)

Cragg, R.H. *et al.*, *J. Inorg. Nucl. Chem.*, 1969, **31**, 2282, (*nmr*)

McKinley, I.R. *et al.*, *Chem. Comm.*, 1972, 1051, (*ms*)

Cragg, R.H. *et al.*, *J. Organomet. Chem.*, 1974, **74**, 385, (*ms*)

Poole, C.F. *et al.*, *J. Chromatogr.*, 1978, **158**, 33, (*use, synth, props*)

Matteson, D.S. *et al.*, *Organometallics*, 1982, **1**, 280; 1983, **2**, 1529, (*props*)

Ishiyama, T. *et al.*, *J.O.C.*, 1995, **60**, 7508, (*synth, pmr, cmr, B-11 nmr*)