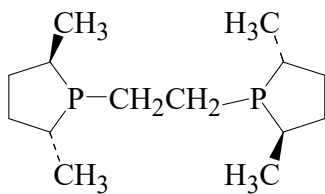




>>Entry Name: 1,2-Bis(2,5-dimethylphospholano)ethane

Synonym(s): 1,1'-(1,2-Ethanediyl)bis[2,5-dimethylphospholane], 9Cl. Methyl-BPE



CAS Registry Number: 137037-64-0

Related CAS Registry Numbers(s): 136779-26-5

Molecular Formula: C₁₄H₂₈P₂

Molecular Weight: 258.323

Accurate Mass: 258.166624

Percentage Composition: C 65.09%; H 10.92%; P 23.98%

>>Variant: (all-*R*)-form

CAS Registry Number: 129648-07-3

Molecular Formula: C₁₄H₂₈P₂

Molecular Weight: 258.323

Accurate Mass: 258.166624

Percentage Composition: C 65.09%; H 10.92%; P 23.98%

Use/Importance: Complexes with Rh to form an asymmetric hydrogenation catalyst; also of use in cycloaddn. reactions

Physical Description: Oil

Boiling Point: Bp_{0.06} 64-67°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +263$ (c, 1 in hexane)

References:

Burk, M.J. *et al.*, *Organometallics*, 1990, **9**, 2653-2655, (*synth*)

Burk, M.J. *et al.*, *Tetrahedron: Asymmetry*, 1991, **2**, 569-592, (*synth, pmr, cmr, P-31 nmr, ms, use*)

Lautens, M. *et al.*, *J.A.C.S.*, 1995, **117**, 6863-6879, (*use*)

Burk, M.J. *et al.*, *Acc. Chem. Res.*, 2000, **33**, 363-372, (*rev, use*)