



>>Entry Name: Di-*tert*-butylphenylphosphine

Synonym(s): Bis(1,1-dimethylethyl)phenylphosphine, 9CI

CAS Registry Number: 32673-25-9

Related CAS Registry Numbers(s): 85617-56-7

PhP[C(CH₃)₃]₂

Molecular Formula: C₁₄H₂₃P

Molecular Weight: 222.309

Accurate Mass: 222.153737

Percentage Composition: C 75.64%; H 10.43%; P 13.93%

Use/Importance: Ligand for Ir, Pd, Pt, Rh, and Ru

Physical Description: Liq.

Boiling Point: Bp_{0.6} 97-100°

>>Derivative: Methiodide

Synonym(s): Di-*tert*-butylmethylphosphonium iodide

Molecular Formula: C₁₅H₂₆IP

Molecular Weight: 364.249

Accurate Mass: 364.081685

Percentage Composition: C 49.46%; H 7.19%; I 34.84%; P 8.50%

Physical Description: Solid

Melting Point: Mp 231-233°

References:

Mann, B.E. *et al.*, *J.C.S.(A)*, 1971, 1104; 2976, (*synth, P-31 nmr, pmr, deriv, complexes*)

Ratovskii, G.V. *et al.*, *Zh. Obshch. Khim.*, 1978, **48**, 1520; *J. Gen. Chem. USSR (Engl. Transl.)*, 1978, **48**, 1394; 1981, **51**, 1276, (*struct, uv, cmr*)

Panov, A.M. *et al.*, *Zh. Obshch. Khim.*, 1984, **54**, 557; 1985, **55**, 2243; *J. Gen. Chem. USSR (Engl. Transl.)*, 1984, **54**, 489; 1985, **55**, 1991, (*ir, Raman, uv, cmr*)

Rithner, C.D. *et al.*, *J.A.C.S.*, 1985, **107**, 7823, (*pmr, P-31 nmr*)