



>>Entry Name: Tetrakis(triphenylphosphine)nickel(0), 10Cl, 9Cl

CAS Registry Number: 15133-82-1

Ni(PPh₃)₄ (*T_d*)

Molecular Formula: C₇₂H₆₀NiP₄

Molecular Weight: 1107.851

Accurate Mass: 1106.299894

Percentage Composition: C 78.06%; H 5.46%; Ni 5.30%; P 11.18%

Use/Importance: Commercially available. Catalyst for hydrosilylation and cross-coupling reactions

Physical Description: Red-brown solid (C₆H₆/heptane)

Melting Point: Mp 122-124°

Hazard & Toxicity: Cancer suspect agent; flammable

Aldrich: 24499-6

Fluka: 87644

References:

Inorg. Synth., 1971, **13**, 124; 1977, **17**, 120, (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1977, **6**, 570; 1979, **7**, 357; 1981, **9**, 450; 1986, **12**, 467, (*uses*)

Iyoda, M. *et al.*, *J.A.C.S.*, 1989, **111**, 3761, (*use*)

Fisher, K.J. *et al.*, *Polyhedron*, 1989, **8**, 13, (*synth*, *P-31 nmr*)