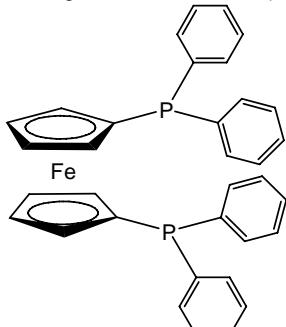


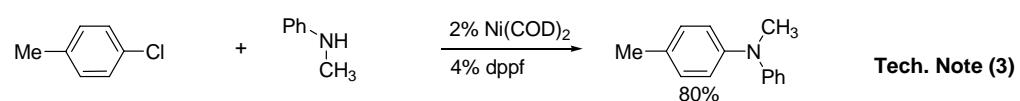
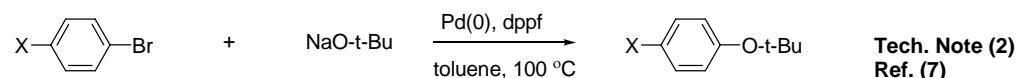
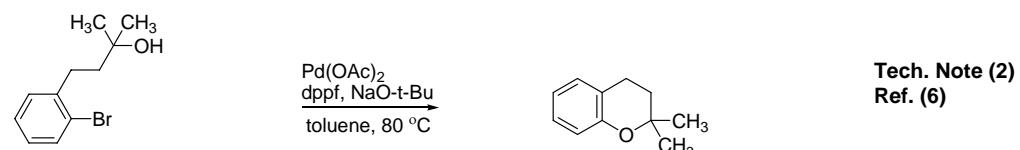
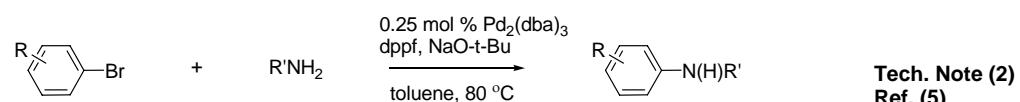
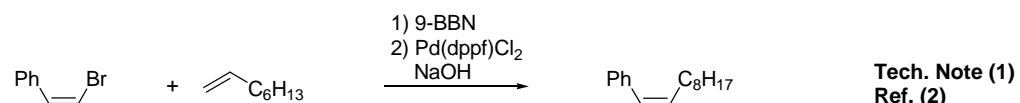
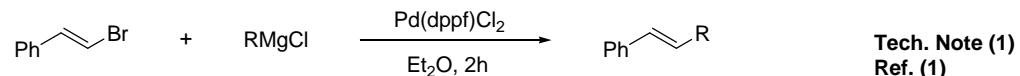
Catalog # 26-0270 1,1'-Bis(diphenylphosphino)ferrocene, min. 99%, DPPF



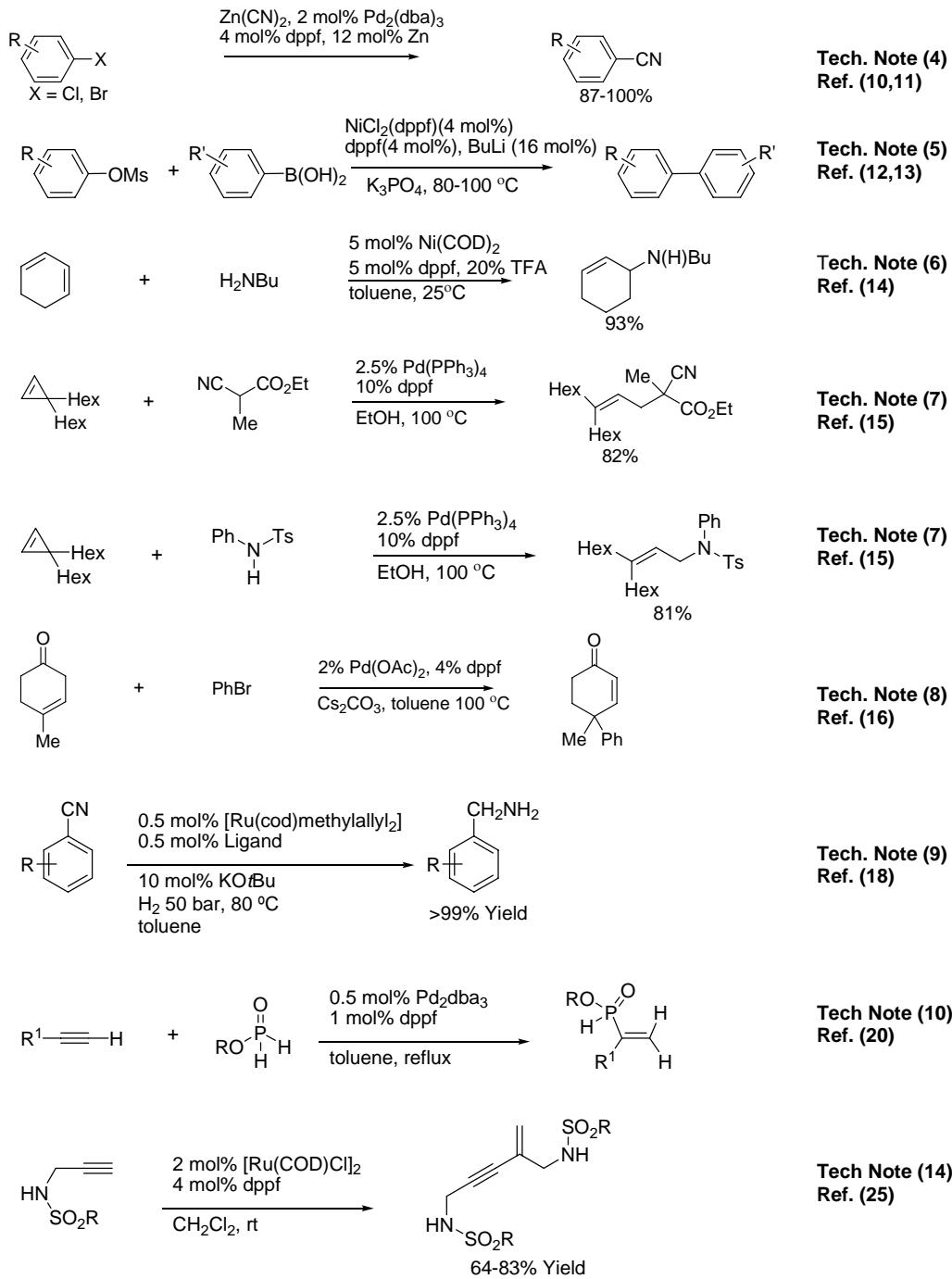
Note: Phosphine Ligand Kit component.

Technical Notes:

1. Ligand for Pd-catalyzed cross-coupling.
2. Useful ligand for Pd-catalyzed carbon-nitrogen and carbon-oxygen bond forming procedures.
3. Ligand for Ni-catalyzed amination of aryl chlorides.
4. Ligand for Pd-catalyzed conversion of aryl halides to aryl nitriles.
5. Ligand for Ni-catalyzed Suzuki reactions.
6. Ni-catalyzed hydroamination of 1,3-dienes.
7. Pd-catalyzed hydrocarbonation and hydroamination of 3,3-dihexylcyclopropene.
8. Pd-catalyzed γ -arylation of β,γ -unsaturated ketones.
9. Ligand for Ru-catalyzed reduction of nitriles to primary amines.
10. Ligand for Rh-catalyzed alkyne head-to-tail dimerization.
11. Ligand for Rh-catalyzed cross-coupling (Ref. 21).
12. Ligand for Rh-catalyzed olefin isomerization (Ref. 22).
13. Ligand for Ni or Rh-catalyzed borylation (Ref. 23, 24)
14. Ligand for regioselective Pd-catalyzed hydrophosphinylation of terminal alkynes to form branched alkenes.



Ref. (9)



References:

1. *Pure Appl. Chem.*, **1980**, 52, 669.
2. *J. Am. Chem. Soc.*, **1989**, 111, 314.
3. *Palladium Reagents in Organic Synthesis (R.F. Heck)*, **1985**, Chapter 6.
4. *Comprehensive Organic Synthesis*, **1991**, Vol. 3, Chapter 2.
5. *Acc. Chem. Res.*, **1998**, 31, 852. (review)
6. *J. Am. Chem. Soc.*, **1996**, 118, 10333.
7. *J. Am. Chem. Soc.*, **1996**, 118, 13109.
8. *Encyclopedia of Reagents for Organic Synthesis*, **1995**, Vol. 1, 518.
9. *J. Am. Chem. Soc.*, **1997**, 119, 6054.
10. *Tetrahedron Lett.*, **2000**, 41, 3271. (for ArCl)
11. *Tetrahedron Lett.*, **1999**, 40, 8193. (for ArBr)
12. *Tetrahedron Lett.*, **1998**, 54, 13079.
13. *J. Org. Chem.*, **1995**, 60, 1060.
14. *J. Am. Chem. Soc.*, **2002**, 124, 3669.
15. *J. Org. Chem.*, **2003**, 68, 2297.
16. *Angew. Chem. Int. Ed.*, **2008**, 47, 177.
17. *Coordination Chem. Rev.*, **2007**, 251, 2017. (review)
18. *Chem. Eur. J.*, **2008**, 14, 9491.
19. *Dalton T.*, **2009**, 36, 4926.
20. *Anv. Synth. Catal.*, **2009**, 9, 1371.
21. *J. Org. Chem.*, **2009**, 74, 2794.
22. *J. Am. Chem. Soc.*, **2009**, 131, 10822.
23. *J. Am. Chem. Soc.*, **2012**, 134, 115.
24. *J. Am. Chem. Soc.*, **2010**, 132, 1800.
25. *J. Organomet. Chem.*, **2011**, 1, 106.