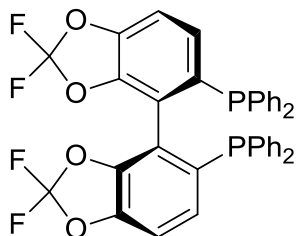


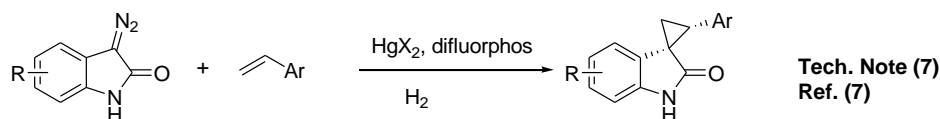
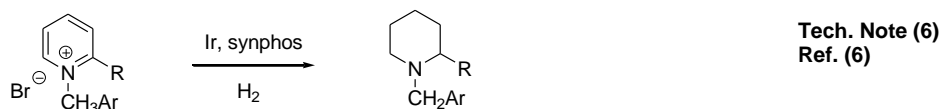
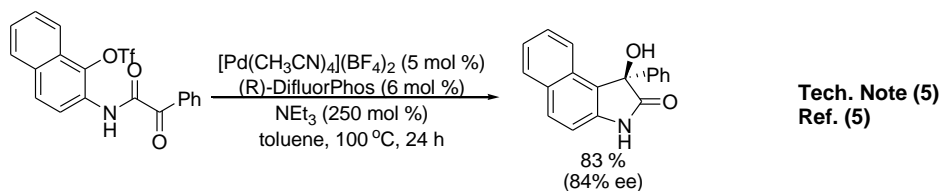
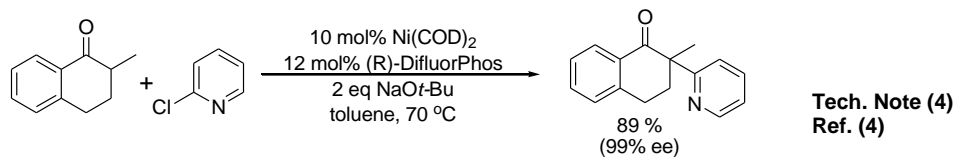
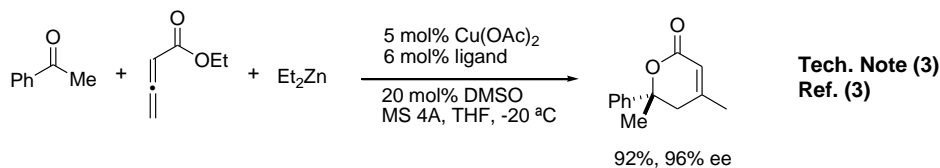
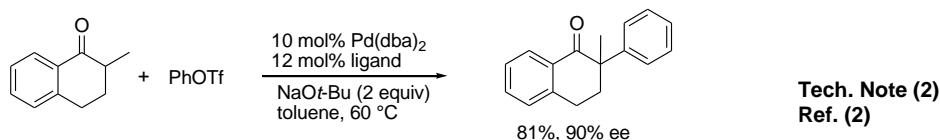
Catalog # 15-0486 R-(-)-5,5'-Bis(diphenylphosphino)-2,2,2',2'-tetrafluoro-4,4'-bi-1,3-benzodioxole, dichloromethane adduct, min. 97% (R)-DIFLUORPHOS

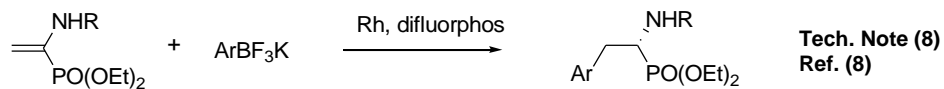


Optical purity: 99.5+%

Technical Notes:

1. Ligand used for the enantioselective hydrogenation of olefins, and especially electron-poor ketones.
2. Ligand used for the enantioselective α -arylation of ketones.
3. Ligand used for enantioselective alkylative aldol reactions.
4. Nickel-catalyzed asymmetric α -heteroarylation of ketones with chloroarenes.
5. Palladium-catalyzed asymmetric intramolecular arylation of α -keto amides.
6. Ligand for Iridium-catalyzed asymmetric hydrogenation of pyridinium salts.
7. Ligand for Hg(II)-Catalyzed Cyclopropanation of Diazooxindoles and Alkenes.
8. Ligand for Rhodium-Catalyzed Asymmetric 1,4-Addition Reactions.





References:

1. *Angew. Chem. Int. Ed.*, **2004**, 43, 320.
2. *J. Am. Chem. Soc.*, **2008**, 130, 195.
3. *J. Am. Chem. Soc.*, **2007**, 129, 7439.
4. *J. Am. Chem. Soc.*, **2011**, 133, 16330.
5. *Angew. Chem. Int. Ed.*, **2011**, 50, 7620.
6. *Angew. Chem. Int. Ed.*, **2012**, 51, 10181.
7. *Organic Letters*, **2013**, 15, 42.
8. *Organic Letters*, **2013**, 15, 4274.