

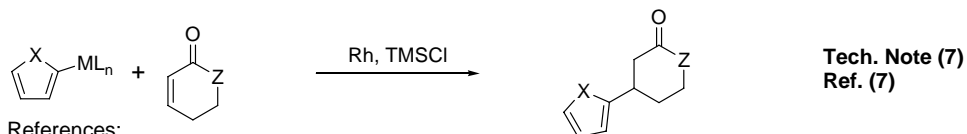
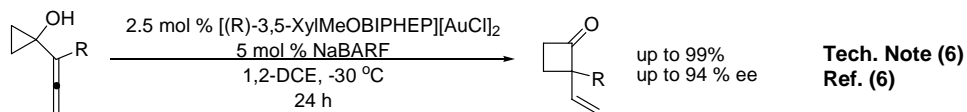
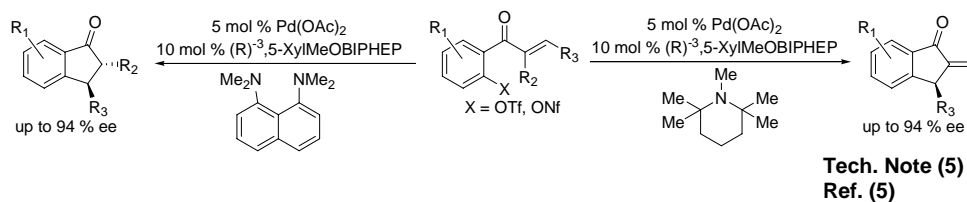
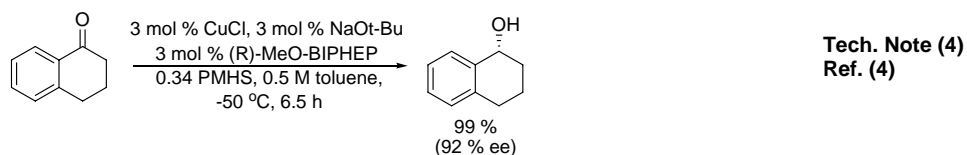
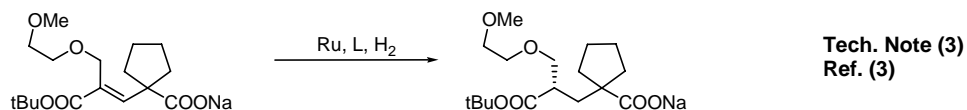
Catalog # 15-0489 (S)-(-)-2,2'-Bis[di(3,5-xylyl)phosphino]-6,6'-dimethoxy-1,1'-biphenyl, min. 97%

Note: Sold in collaboration with Solvias for research purposes only. Solvias (S)-MeO-BIPHEP Ligand Kit component.

#### Technical Notes:

In many respects the catalytic profile of the MeOBIPHEP ligands is similar to that of other atropisomeric diphosphines such as binap and its many analogs. The nature of the  $PR_2$  group strongly influences the catalytic performance of the metal complexes. The rhodium and ruthenium MeO-BIPHEP catalysts are highly effective for the hydrogenation of various C=O, C=C and C=N bonds and several synthetically useful C-C coupling reactions.

1. See [15-0042](#).
2. Ru and Ir catalyzed dynamic kinetic resolution for the synthesis of hydroxy, amino acid derivatives.
3. Ru-catalyzed asymmetric hydrogenation of ketones and alkenes.
4. Enantioselective copper-catalyzed asymmetric hydrosilylation of aryl ketones.
5. Synthesis of chiral 3-substituted indanones via an enantioselective reductive-Heck reaction.
6. Gold(I)-catalyzed enantioselective ring expansion of allenylcyclopropanols.
7. Conjugate addition using 2-heteroaryl titanates and zinc reagents.



#### References:

1. *Adv. Synth. Catal.*, **2004**, 346, 842.
2. *Org. Lett.*, **2006**, 8, 4573.
3. *Org. Process Res. Devel.*, **2001**, 5, 438.
4. *J. Am. Chem. Soc.*, **2001**, 123, 12917.
5. *J. Org. Chem.*, **2007**, 72, 9253.
6. *J. Am. Chem. Soc.*, **2009**, 131, 9178.
7. *Org. Lett.*, **2009**, 11, 4200.