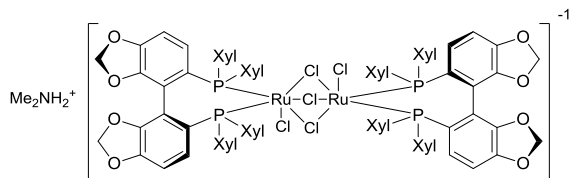


Catalog # 44-0521 Dimethylammonium dichlorotri(mu-chloro)bis((S)-(-)-5,5'-bis(di(3,5-xylyl)phosphino)-4,4'-bi-1,3-benzodioxole)diruthenate(II) $[\text{NH}_2\text{Me}_2][\{\{\text{RuCl}(\text{S-dm-segphos}^\circledast)\}_2(\mu\text{-Cl})_3\}]^{-1}$

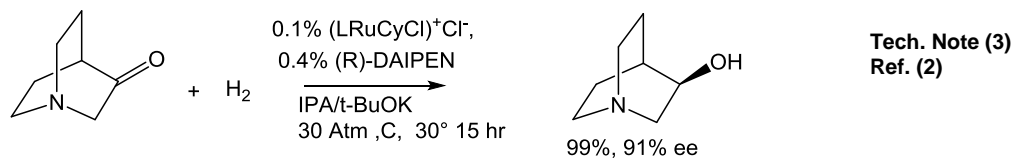
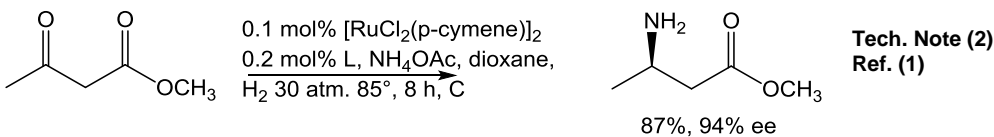


Note: Manufactured under license of Takasago patent. Takasago SEGPHOS Catalyst Kit component.

Note: Sold in collaboration with Takasago. Takasago SEGPHOS[®] Catalyst Kit component.

Technical Notes:

1. Biaryl bisphosphine ligand with narrow dihedral angle. The DM-SEGPHOS[®] ligand, as the ruthenium complex, gives superior enantioselectivity and diastereoselectivity in the asymmetric hydrogenation of α -substituted- β -ketoesters. See [15-0066](#).
2. Ruthenium catalyzed enantioselective synthesis of β amino acids by hydrogenation.
3. Ruthenium catalyzed asymmetric hydrogenation of 3-quinuclidinone. See [44-0098](#) for Ru catalyst.



References:

1. U.S. Pat. **7626034**.
2. U.S. Pat **7462722**.