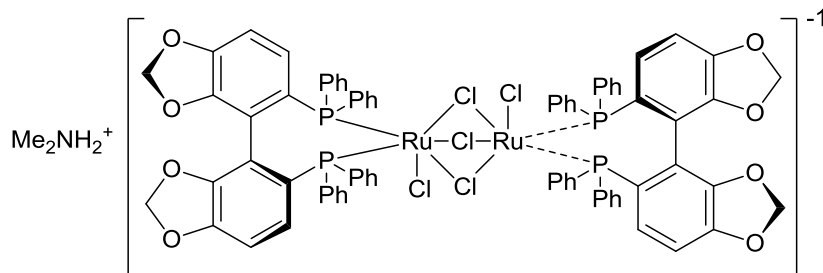


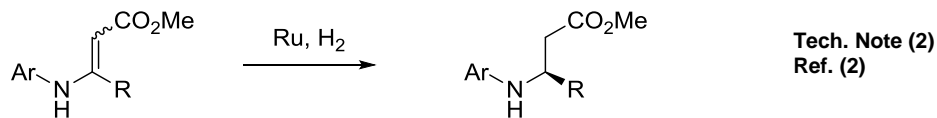
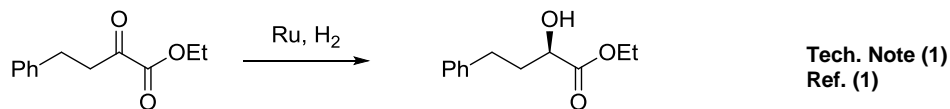
Catalog # 44-0519 Dimethylammonium dichlorotri(μ-chloro)bis[(S)-(-)-5,5'-bis(diphenylphosphino)-4,4'-bi-1,3-benzodioxole] diruthenate(II)



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

Technical Notes:

1. Highly enantioselective, highly active catalyst for hydrogenation of functionalized ketones. The chlororuthenate salts show catalytic activity at relatively low temperature. See [15-0136](#).
2. Catalyst for enantioselective hydrogenation of enamines.



References:

1. *Adv. Synth. Catal.*, **2001**, 343, 264.
2. *U.S. Pat.* 8188307.