

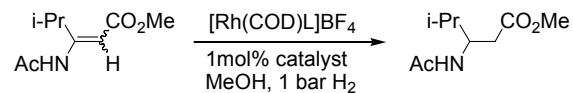
Catalog # 45-0174 (+)-2,3-Bis[(2S,5S)-2,5-dimethylphospholanyl]maleic anhydride(1,5-cyclooctadiene)rhodium(I) tetrafluoroborate, 98% [catASium® M(S)Rh]

Note: Sold in collaboration with Evonik for research purposes only. Patent WO 03084971.

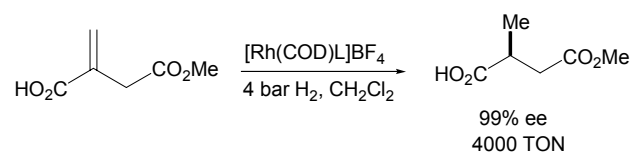
Optical purity: 96%

Technical Notes:

1. Highly enantioselective catalyst for the hydrogenation of E or Z  $\beta$ -acylamido acrylates under mild conditions and low pressure.
2. Highly enantioselective for the hydrogenation of itaconates at room temperature.



**Tech. Note (1)**  
**Ref. (1)**



**Tech. Note (2)**  
**Ref. (2)**

References:

1. *J. Org. Chem.*, **2003**, 68, 1701.
2. *Adv. Synth. Catal.*, **2004**, 346, 1263.