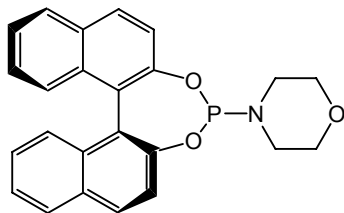


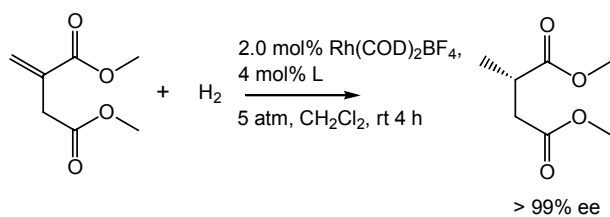
Catalog # S281989 (S)-(+)-(3,5-Dioxa-4-phospha-cyclohepta[2,1-a;3,4-a']dinaphthalen-4-yl)morpholine, min.
(S)-MorfPhos



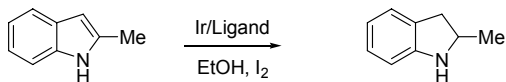
Note: Sold in collaboration with DSM for research purposes only. Patent WO 0204466. DSM's MonoPhos™ Ligand Kit component.

Technical Notes:

1. See [15-1232](#).
2. Ligand used in the enantioselective rhodium catalyzed low pressure high activity hydrogenation of α -dehydroaminoesters, enamides, and dimethylitaconate. See [15-1234](#).
3. Ligand used in iridium-catalyzed asymmetric hydrogenation of 2-methylindole.



Tech. Note (2)
Ref (1)



Tech. Note (3)
Ref. (2)

References:

1. *J. Org. Chem.*, **2005**, 70, 943.
2. *Tetrahedron Lett.*, **2014**, 55, 3613.