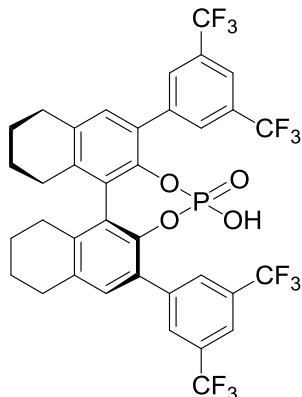
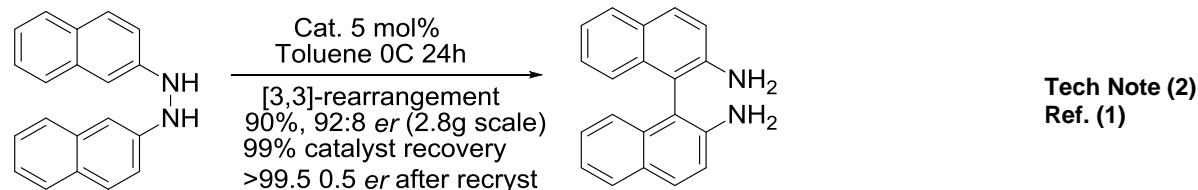


Catalog # 15-1377 (11bS)-2,6-Bis[3,5-bis(trifluoromethyl)phenyl]-8,9,10,11,12,13,14,15-octahydro-4-hydroxy-4-oxide-dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphhepin, 98%, (99% ee)



Technical Notes:

1. The preparation of binaphthol monophosphoric acid derivatives.
2. **Sigmatropic Rearrangements:** Used in the organocatalytic aryl-aryl bond-forming process for the regio- and atroposelective synthesis of 2,2'-diamino-1,1'-binaphthalenes (BINAMs). In the presence of catalytic amounts of axially chiral phosphoric acids, achiral *N,N*-binaphthyl hydrazines undergo a facile [3,3]-sigmatropic rearrangement to afford enantiomerically enriched BINAM derivatives in good to excellent yield.



References:

1. JP 4725757, EP 1038877, US 6274745, 2000-3-21.
2. *J. Am. Chem. Soc.*, **2013**, 135, 7414-7417.