Strem Chemicals, Inc

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Catalog # 07-1428 (9S)-(9"S)-9,9"-[(2,5-diphenyl-4,6-pyrimidinediyl)bis(oxy)]bis[6'-methoxycinchonan] (QD)2PYR

Technical Notes

- 1. Used in asymmetric construction of quaternary stereocenters by direct organocatalytic amination of 3-substituted oxindoles.
- 2. Catalyst for asymmetric Michael addition of unprotected 3-substituted oxindoles to 1,4-naphthoquinone.

$$R^{1} \xrightarrow{\text{iPrOOC}} N \xrightarrow{\text{iQD)}_{2}\text{PYR}} R^{1} \xrightarrow{\text{iProoc}} COO^{\text{iPr}} \xrightarrow{\text{DCM, -10°C, 3-5d}} R^{1} \xrightarrow{\text{N}} COO^{\text{iPr}}$$

Tech. Note (1); Ref. (1)

Tech. Note (2); Ref. (2)

References:

- 1. Chem. Commun., 2009, 6753.
- 2. Beilstein J. Org. Chem. 2012, 8, 1360.