Strem Chemicals, Inc

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Catalog # 08-1270 (1S,2R)-2-Phenyl-1-cyclohexanol

Technical Notes

- 1. Used for synthesis of corresponding ketone via 2-iodoxybenzenesulfonic acid catalyzed selective oxidation.
- 2. Used for the asymmetric synthesis of *H*-phosphinate esters.
- 3. Used in total synthesis of natural products e.g. pyrrolizidinones.
- 4. Reagent for synthesis of diaryl phosphinates having cyclohexyloxy chiral auxiliaries used in Ir-catalyzed C–H amidation of arylphosphoryls.
- 5. Component of the pentacarboxycyclopentadiene Brønsted acid catalyst used for an enantioselective catalytic inverse-electron-demand Diels-Alder reaction of salicylaldehyde acetal-derived oxocarbenium ions and vinyl ethers to generate 2,4-dioxychromanes is described.

Tech. Note (1); Ref. (1, 2)

Tech. Note (2); Ref. (3)

Tech. Note (3); Ref. (4)

$$\begin{array}{c|c} OH & & \\ \hline \\ P & \\ \hline \\ R^{1} \\ \hline \\ CI & \\ \end{array}$$

Tech. Note (4); Ref. (5)

OH
$$OR^{1} + OR^{2}$$

$$OR^{1} + OR^{2}$$

$$OR^{1} + OR^{2}$$

$$OR^{1} + OR^{2}$$

$$OR^{2}$$

$$OR^{2}$$

$$OR^{1} + OR^{2}$$

$$OR^{2}$$

$$OR^{2}$$

$$OR^{1}$$

$$OR^{2}$$

$$OR^{1}$$

$$OR^{2}$$

$$OR^{2}$$

$$OR^{2}$$

$$OR^{1}$$

$$OR^{2}$$

Tech. Note (5); Ref. (6)

References:

- 1. J. Am. Chem. Soc. 2009, 131, 251.
- 2. Org. Lett., 2009, 11, 1829.
- 3. Org. Biomol. Chem., 2010, 8, 5541.
- 4. J. Org. Chem. **2011**, 76, 7893.
- 5. Chem. Eur. J. 2014, 20, 12421.
- 6. J. Am. Chem. Soc. 2018, 140, 3523.