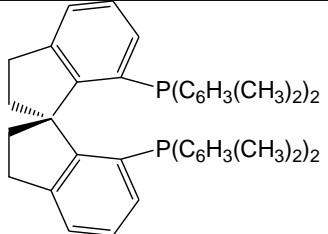
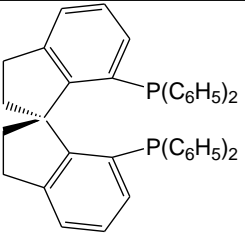
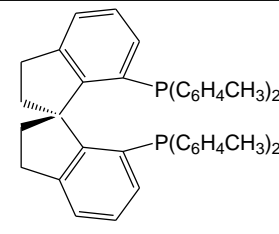


STREM Spiro Bisphosphine Ligand Kit

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 <p>15-5169 (S)-Xyl-SDP</p>	 <p>15-5175 (S)-SDP</p>	 <p>15-5181 (S)-Tol-SDP</p>
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96-0060 Spiro Bisphosphine Ligand Kit – for catalytic hydrogenations and other transformations 1 kit

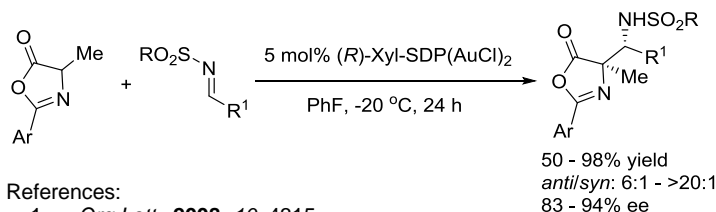
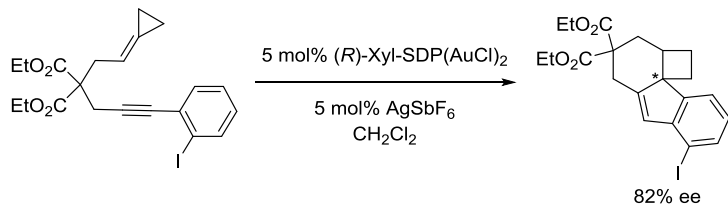
Components available for individual sale.

Contains 25mg unit of each of the items listed below:

15-5168 (R)-(+)-7,7'-Bis[di(3,5-dimethylphenyl)phosphino]-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (R)-Xyl-SDP 25mg
 [917377-75-4]
 $C_{49}H_{50}P_2$; FW: 700.87; off-white to pale yellow solid; $[\alpha]_D +87.5^\circ$ (c 0.53, CH_2Cl_2)
air sensitive 100mg

Technical Notes:

- Chiral ligands for gold-catalyzed asymmetric ring expanding cycloisomerization.
- Chiral ligands for gold-catalyzed asymmetric Mannich reactions of azlactones.



References:

- Org. Lett.*, **2008**, *10*, 4315.
- J. Am. Chem. Soc.*, **2011**, *133*, 3517.

15-5169 (S)-(-)-7,7'-Bis[di(3,5-dimethylphenyl)phosphino]-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (S)-Xyl-SDP 25mg
 [528521-89-3]
 $C_{49}H_{50}P_2$; FW: 700.87; off-white to pale yellow solid; $[\alpha]_D -83^\circ$ (c 0.53, CH_2Cl_2)
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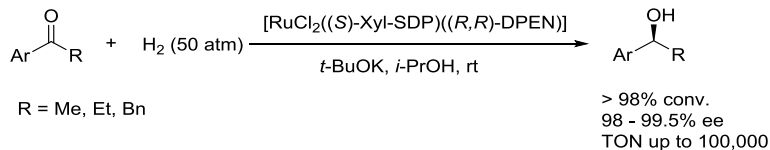
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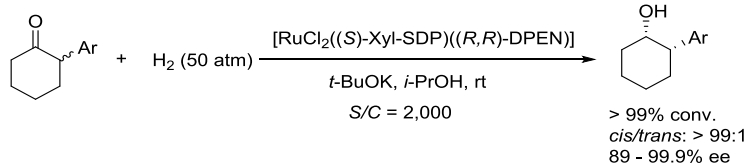
Strem Chemicals UK Ltd.
 41 Hills Road
 Cambridge
 England CB2 1NT
 Tel.: 0845 643 7263
 Fax: 0845 643 7362
 Email: enquiries@strem.co.uk

Technical Notes:

1. Chiral ligands for ruthenium-catalyzed asymmetric hydrogenation of simple ketones.
2. Chiral ligands for ruthenium-catalyzed asymmetric hydrogenation of racemic α -aryl cyclic ketones via dynamic kinetic resolution.



Tech. Note (1)
Ref. (1)



Tech. Note (2)
Ref. (2)

References:

1. *J. Am. Chem. Soc.*, **2003**, *125*, 4404.
2. *J. Org. Chem.*, **2005**, *125*, 2967.

15-5180 (R)-(+)-7,7'-Bis[di(4-methylphenyl)phosphino]-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (R)-Tol-SDP 25mg
 [528521-87-1] 100mg
 C₄₅H₄₂P₂; FW: 644.76; white solid; [α]_D +212° (c 0.53, CH₂Cl₂); m.p. 150-152°
air sensitive

Technical Note:

1. See 15-5174.

15-5181 (S)-(-)-7,7'-Bis[di(4-methylphenyl)phosphino]-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (S)-Tol-SDP 25mg
 [817176-80-0] 100mg
 C₄₅H₄₂P₂; FW: 644.76; white solid; [α]_D -221° (c 0.54, CH₂Cl₂); m.p. 150-152°
air sensitive

Technical Note:

1. See 15-5174.

15-5174 (R)-(+)-7,7'-Bis(diphenylphosphino)-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (R)-SDP [917377-74-3] 25mg
 C₄₁H₃₄P₂; FW: 588.66; white solid; [α]_D +207° (c 0.5, CH₂Cl₂); m.p. 200-202°
air sensitive 100mg

Technical Notes:

1. Ligands used for the ruthenium-catalyzed hydrogenation of simple and cyclic ketones with high activity and enantioselectivity.
2. Ligands used for palladium-catalyzed asymmetric allylic alkylations.

References:

1. *J. Am. Chem. Soc.*, **2003**, *125*, 4404.
2. *J. Org. Chem.*, **2005**, *70*, 2967.
3. *Adv. Synth. Catal.*, **2004**, *346*, 625.

15-5175 (S)-(-)-7,7'-Bis(diphenylphosphino)-2,2',3,3'-tetrahydro-1,1'-spirobiindane, min. 97% (S)-SDP [528521-86-0] 25mg
 C₄₁H₃₄P₂; FW: 588.66; white solid; [α]_D -203° (c 0.5, CH₂Cl₂); m.p. 206-208°
air sensitive 100mg

Technical Note:

1. See 15-5174.

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