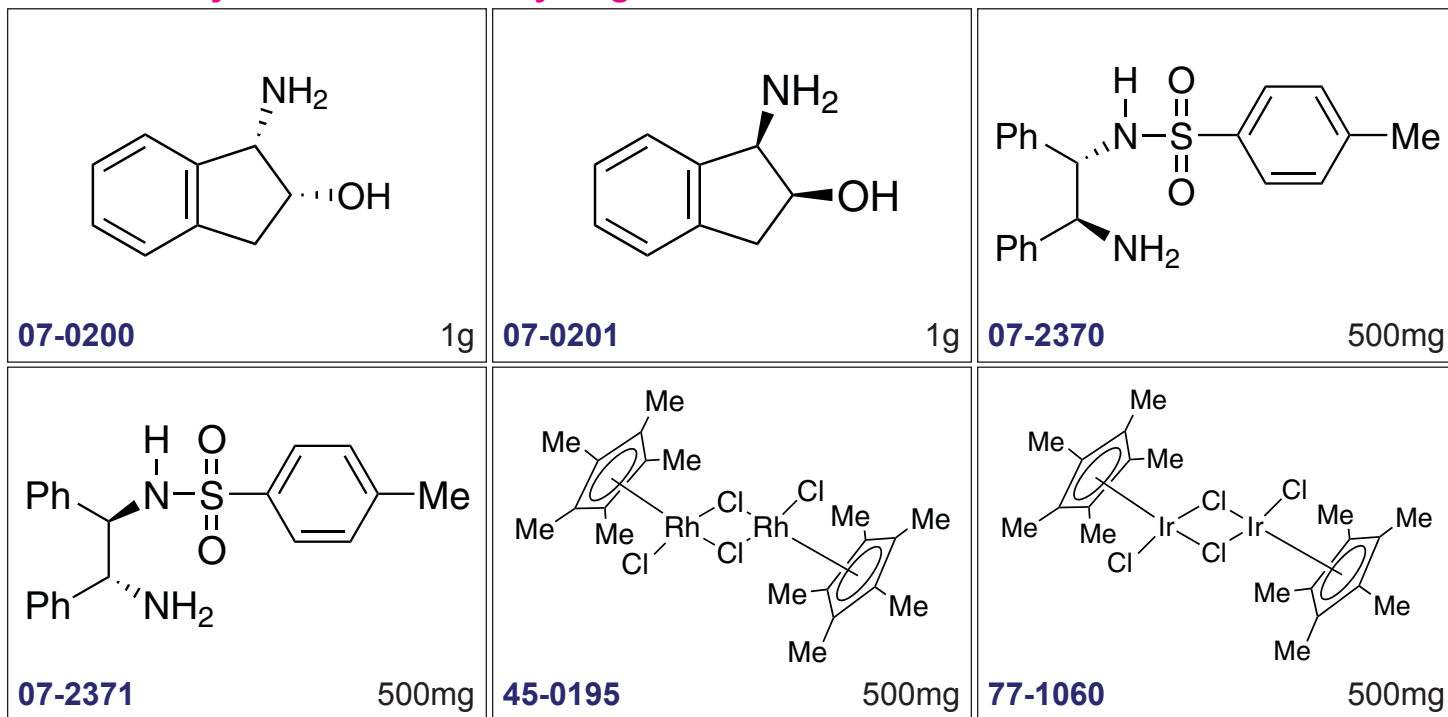


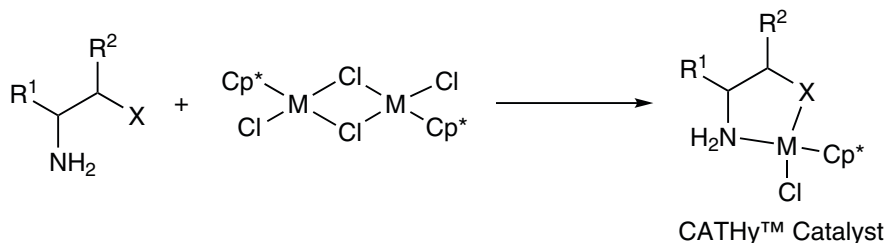
96-7650 CATHy™ Catalyst Kit for Asymmetric Transfer Hydrogenation of Ketones and Imines for asymmetric transfer hydrogenation of ketones and imines



CATHy™ catalysts are highly efficient for the asymmetric transfer hydrogenation of a broad range of ketones and imines to chiral alcohols and amines. The catalysts are prepared in-situ by combining a chiral bidentate nitrogen ligand with a Rh(III) or Ir(III) metal complex containing a substituted cyclopentadienyl ligand.

07-0200	(1S,2R)-(-)-cis-1-Aminoindan-2-ol, 98% (126456-43-7)	1g
07-0201	(1R,2S)-(+)-cis-1-Aminoindan-2-ol, 98% (136030-00-7)	1g
07-2370	(1S,2S)-(+)-N-(4-toluenesulfonyl)-1,2-diphenylethylenediamine, 98% (S,S)-TsDPEN (167316-27-0)	500mg
07-2371	(1R,2R)-(-)-N-(4-toluenesulfonyl)-1,2-diphenylethylenediamine, 98% (R,R)-TsDPEN (144222-34-4)	500mg
45-0195	Dichloro(pentamethylcyclopentadienyl)rhodium(III) dimer, 99% (12354-85-7)	500mg
77-1060	Dichloro(pentamethylcyclopentadienyl)iridium(III) dimer, 98% (12354-84-6)	500mg

Catalyst Preparation



Visit www.strem.com for new product information and a searchable catalog.

Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950
U.S.A.
Tel: 978.499.1600
Fax: 978.465.3104
Email: info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome
Zone Industrielle
67800 BISCHHEIM France
Tel: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
Email: info.europe@strem.com

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL
Germany
Tel: 0 78 51/ 7 58 79
Email: info.europe@strem.com

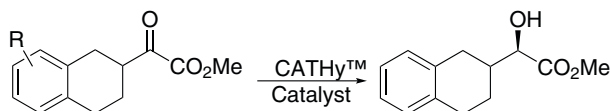
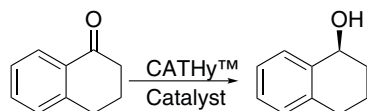
Strem Chemicals UK Ltd.
An Independent Distributor of Strem Chemicals Products
Newton Hall, Town Street
Newton, Cambridge
England CB22 7ZE
Tel: 0845 643 7263
Fax: 0845 643 7362
Email: enquiries@strem.co.uk

Key benefits of this technology include:

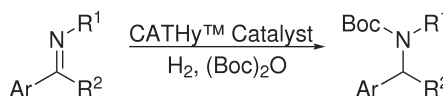
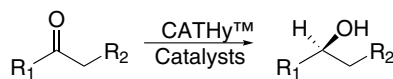
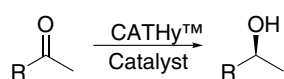
- solvent as the hydrogen source, avoiding high pressures associated with standard asymmetric hydrogenations
- simpler synthesis and modular metal precursor-chiral bidentate ligand match to tailor catalyst to application
- safer handling procedures
- robust stability to air and moisture
- functional group tolerance
- proven at large scale

Technical Notes:

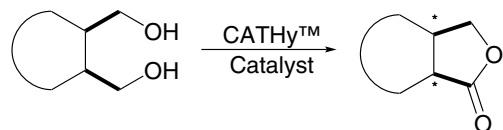
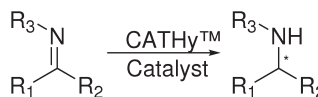
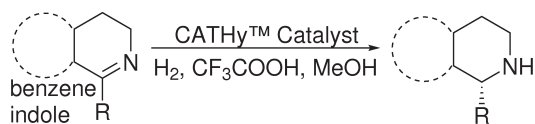
1. Catalyst for asymmetric ketone reduction in organic and aqueous media
2. Catalyst for asymmetric imine reduction in organic and aqueous media
3. Catalyst for asymmetric oxidative lactonizations of meso-diols
4. Catalyst for asymmetric transfer hydrogenation of quinolines



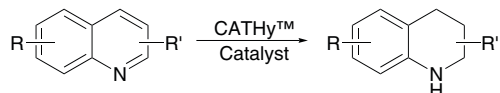
Tech. Note (1)
Ref. (1-7)



Tech. Note (2)
Ref. (1, 8-10)



Tech. Note (3)
Ref. (11)



Tech. Note (4)
Ref. (12-13)

References:

1. Blacker A.J., Mellor B.J. WO9842643A1, filed 26/03/97, Avecia Ltd.; Blacker A.J. Conf. Proceedings: The Scale up of Chemical Processes. Jersey 1998 ISBN 0953399400;
2. *Tetrahedron*, **2006**, 62, 1864
3. *Org. Lett.*, **2007**, 9, 2565
4. *Chem. Eur. J.* **2008**, 14, 2209
5. *J. Org. Chem.* **2010**, 75, 2981
6. *J. Org. Chem.* **2015**, 80, 4419
7. *J. Organometal. Chem.* **2016**, 810, 12
8. *Chem. Eur. J.* **2011**, 17, 1109
9. *Org. Lett.* **2015**, 17, 2878
10. *Chem. Commun.*, **2016**, 52, 362
11. *Organometallics* **2002**, 21, 3493
12. *Org. Lett.*, **2008**, 10, 5265
13. *Angew. Chem. Int. Ed.* **2009**, 48, 6524

Visit www.strem.com for new product information and a searchable catalog.

Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950
U.S.A
Tel: 978.499.1600
Fax: 978.465.3104
Email: info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome
Zone Industrielle
67800 BISCHHEIM France
Tel: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
Email: info.europe@strem.com

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL
Germany
Tel: 0 78 51/ 7 58 79
Email: info.europe@strem.com

Strem Chemicals UK Ltd.
An Independent Distributor of Strem Chemicals Products
Newton Hall, Town Street
Newton, Cambridge
England CB22 7ZE
Tel: 0845 643 7263
Fax: 0845 643 7362
Email: enquiries@strem.co.uk