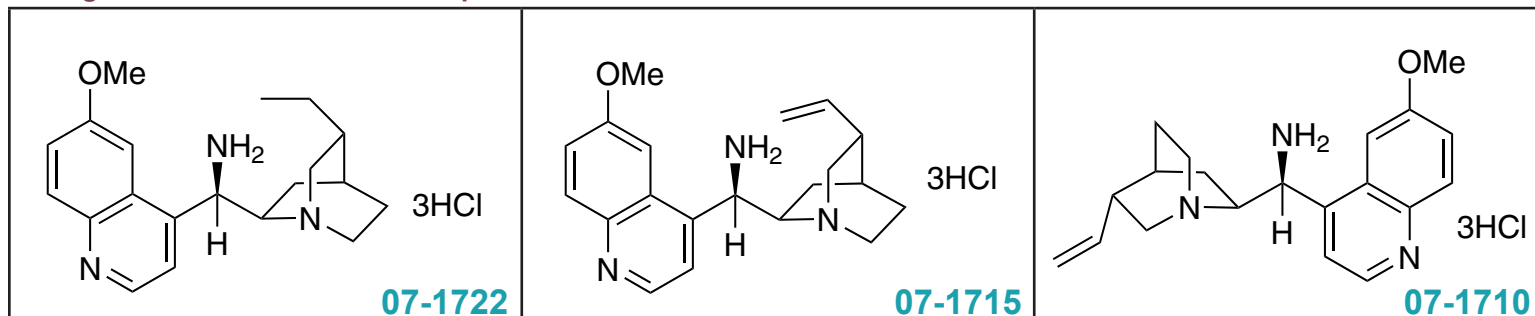


In principle, these compounds may be used with any enolizable molecule, allowing build up of molecular complexity through iminium-enamine cascade processes.



96-1575 Cinchona Alkaloid-Derived Organocatalyst Kit - (enantiopure primary amines) for Iminium-Enamine Activation 1 kit

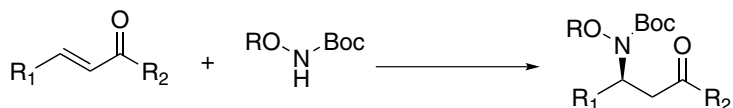
Components also available for individual sale. Contains the following:

07-1710	(8α, 9S)-6'-Methoxycinchonan-9-amine trihydrochloride, min. 90% (1231763-32-8)	100mg
07-1715	(8α, 9R)-6'-Methoxycinchonan-9-amine trihydrochloride, min. 90% (1391506-12-9)	100mg
07-1722	(9R)-10,11-Dihydro-6'-methoxycinchonan-9-amine trihydrochloride, min. 90% (931098-92-9)	100mg

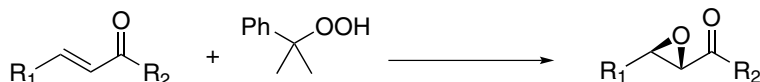
07-1722 (9R)-10,11-Dihydro-6'-methoxycinchonan-9-amine trihydrochloride, min. 90% (931098-92-9) 100mg
 500mg
 $C_{20}H_{27}N_3O \cdot 3HCl$; FW: 434.83; white to off-white powder.
(store cold)

Technical Notes:

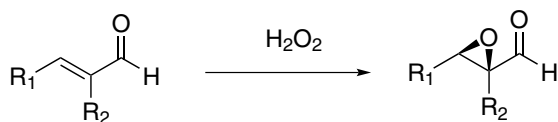
1. Aza-Michael reactions on α,β -unsaturated ketones.
2. Epoxidation of α,β -unsaturated ketones.
3. Epoxidation of α,β -unsaturated aldehydes.
4. Nitrocyclopropanation of α,β -unsaturated ketones.
5. Diels-Alder reaction.
6. Intramolecular aldolization of diketones.
7. Friedel-Crafts alkylation of indoles with α,β -unsaturated ketones.
8. Friedel-Crafts/amination cascade reactions with α -substituted α,β -unsaturated aldehydes.
9. Aziridination of acyclic α,β -unsaturated ketones.
10. Aziridination of cyclic α,β -unsaturated ketones.
11. Double Michael cascade process.
12. α -fluorination of cyclic ketones.



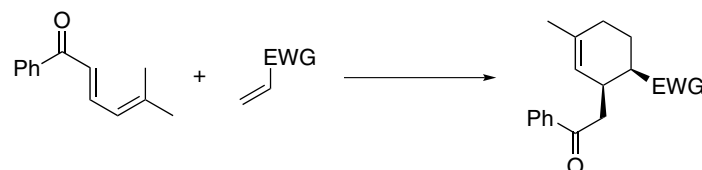
Tech. Note (1)
Ref. (1)



Tech. Note (2)
Ref. (2)



Tech. Note (3)
Ref. (3)



Tech. Note (4)
Ref. (4)

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 BIRSCHHEIM 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: +44 (0)1223 873 028
 Fax: +44 (0)1223 870207
 Email: enquiries@strem.co.uk



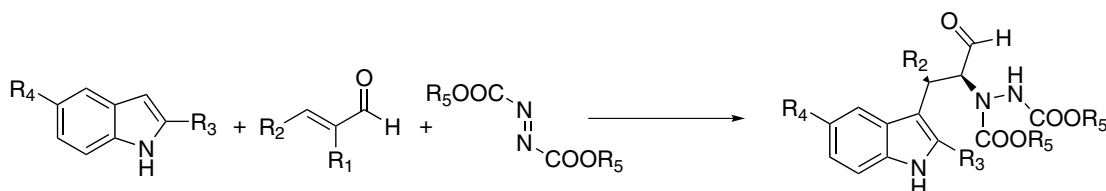
Tech. Note (5)
Ref. (5)



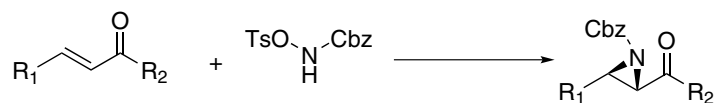
Tech. Note (6)
Ref. (6)



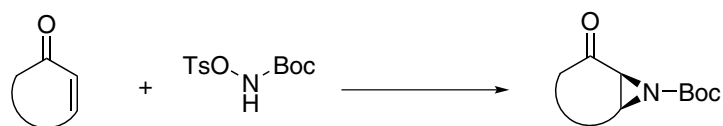
Tech. Note (7)
Ref. (7)



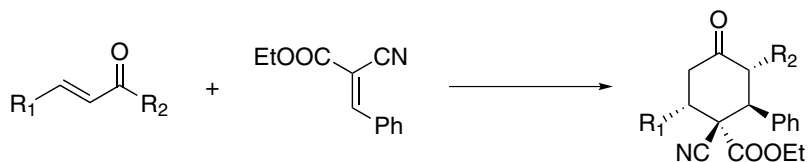
Tech. Note (8)
Ref. (8)



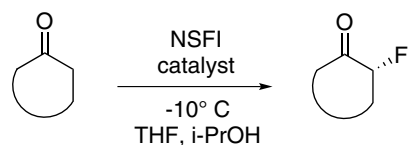
Tech. Note (9)
Ref. (9)



Tech. Note (10)
Ref. (10)



Tech. Note (11)
Ref. (11)



Tech. Note (12)
Ref. (12)

References:

1. *Angew. Chem. Int. Ed.*, **2008**, 47, 7710
2. *J. Am. Chem. Soc.*, **2008**, 130, 8134
3. *J. Am. Chem. Soc.*, **2010**, 132, 10227
4. *Chem. Eur. J.*, **2009**, 15, 972
5. *Angew. Chem. Int. Ed.*, **2012**, 51, 4401
6. *Angew. Chem. Int. Ed.*, **2008**, 47, 7656
7. *Org. Lett.*, **2007**, 9, 1403
8. *Chem. Int. Ed.*, **2009**, 48, 7892
9. *Angew. Chem. Int. Ed.*, **2008**, 47, 8703
10. *Chem. Asian J.*, **2010**, 5, 1652
11. *Angew. Chem. Int. Ed.*, **2009**, 48, 7196
12. *J. Am. Chem. Soc.*, **2011**, 133, 1738

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: +44 (0)1223 873 028
Fax: +44 (0)1223 870207
Email: enquiries@strem.co.uk

07-1715 (8 α , 9R)-6'-Methoxycinchonan-9-amine trihydrochloride, min. 90% (1391506-12-9)
 $C_{20}H_{25}N_3O \cdot 3HCl$; FW: 432.81; white to off-white powdr.
(store cold)

100mg
500mg

Technical Notes:

1. See 07-1722

07-1710 (8 α , 9S)-6'-Methoxycinchonan-9-amine trihydrochloride, min. 90% (1231763-32-8)
 $C_{20}H_{25}N_3O \cdot 3HCl$; FW: 432.81; pale yellow powdr.
(store cold)

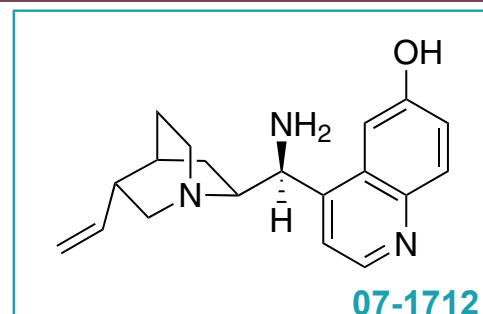
100mg
500mg

Technical Notes:

1. See 07-1722

Also available but not included in this kit:

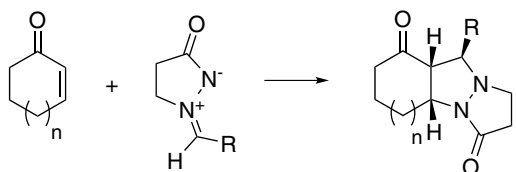
07-1712 (8 α , 9S)-(+)-9-Amino-cinchonan-6'-ol, min. 90% (960050-59-3) 50mg
 $C_{19}H_{23}N_3O$; FW: 309.41; off-white to pale brown powdr.
(store cold) 250mg



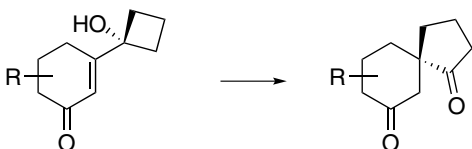
These amino-cinchonane compounds behave as pseudoenantiomers, generally granting access to both enantiomers of a given transformation.

Technical Notes:

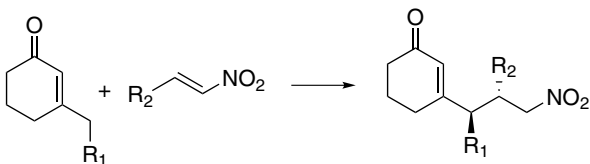
1. [2+3]-dipolar cycloaddition of cyclic enones.
2. Activation of α,β -unsaturated carbonyl compounds:
 - (a) vinylogous α -ketol rearrangement.
 - (b) vinylogous Michael addition of β -substituted α,β -unsaturated cyclohexanones.
3. Michael addition
 - (a) α -nitroacetate to α,β -unsaturated ketones.
 - (b) Diastereodivergent Michael addition to α -substituted, α,β -unsaturated ketones.
4. α -benzyloxylation of α -branched aldehydes.
5. [4+2]-cycloadditions of β -substituted α,β -unsaturated cyclohexanones with polyconjugated malonitriles.
6. Vinylogous organocascade catalysis with control of remote stereochemistry in the synthesis of spirocyclic oxindoles.



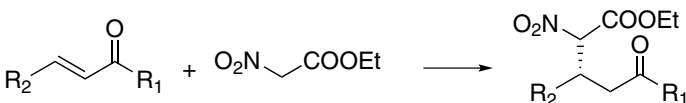
Tech. Note (1)
Ref. (1)



Tech. Note (2a)
Ref. (2)



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



Tech. Note (3a)
Ref. (4,5)

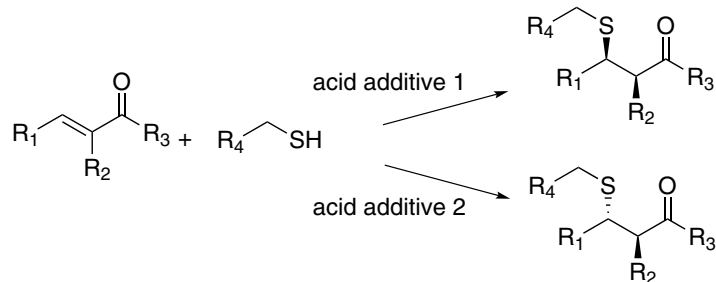
Visit www.strem.com for new product information and a searchable catalog.

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

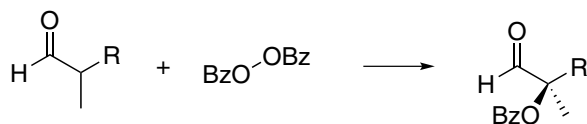
Strem Chemicals, Inc.
 15, rue de l'Atome
 Zone Industrielle
 67800 BISCHHEIM France
 Tel: (33) 03 88 62 52 60
 Fax: (33) 03 88 62 26 81
 Email: info.europe@strem.com

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

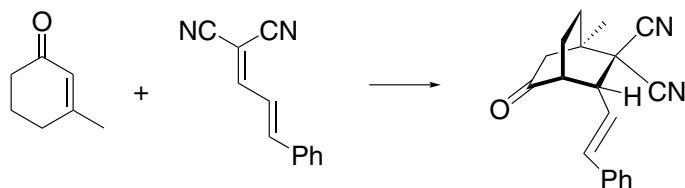
Strem Chemicals UK Ltd.
 An Independent Distributor of Strem Chemicals Products
 Newton Hall, Town Street
 Newton, Cambridge
 England CB22 7ZE
 Tel: +44 (0)1223 873 028
 Fax: +44 (0)1223 870207
 Email: enquiries@strem.co.uk



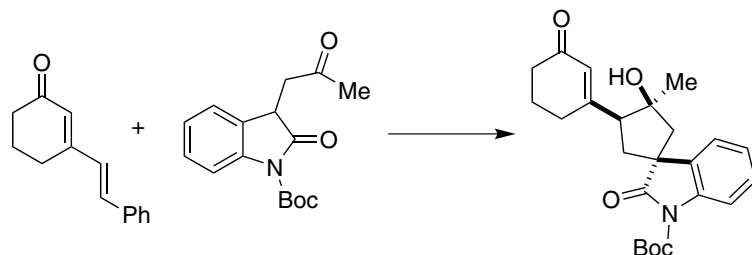
Tech. Note (3b)
Ref. (6)



Tech. Note (4)
Ref. (7)



Tech. Note (5)
Ref. (8)



Tech. Note (6)
Ref. (9)

References:

1. *Angew. Chem. Int. Ed.*, **2007**, 46, 7667
2. *J. Am. Chem. Soc.*, **2009**, 131, 14626
3. *Proc. Nat. Acad. Sci. USA*, **2010**, 107, 20642
4. *Org. Lett.*, **2010**, 12, 2278
5. *Bull. Korean Chem. Soc.*, **2011**, 32, 291
6. *J. Am. Chem. Soc.*, **2011**, 133, 17934
7. *Tetrahedron*, **2012**, 68, 7568
8. *J. Am. Chem. Soc.*, **2012**, 134, 19942
9. *Angew. Chem. Int. Ed.*, **2013**, 52, 5360

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: +44 (0)1223 873 028
Fax: +44 (0)1223 870207
Email: enquiries@strem.co.uk