

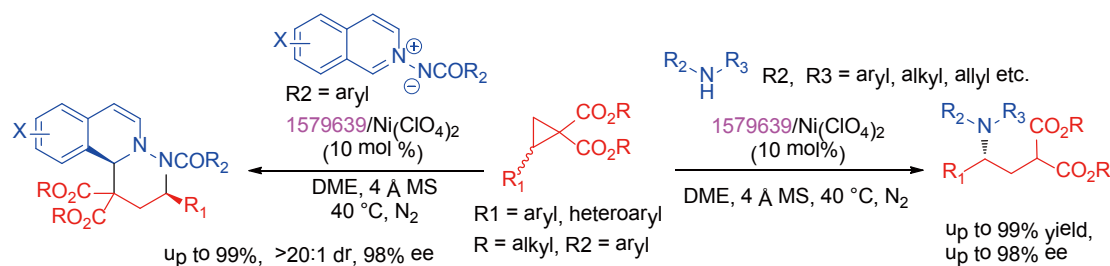
噁唑啉是含有N和O原子的五元杂环化合物，其中N原子可作为供电子原子能与Cu、Mg、Ni、Pd、Zn、Rh等多种金属离子配位。近年来，手性噁唑啉配体的应用研究是有机合成化学领域比较活跃的课题之一。

手性噁唑啉配体具有结构的多样性、手性源易得、不对称诱导性能好等优点在不对称合成中有着广泛应用，例如Diels-Alder反应、Mannich反应、Heck反应、Henry反应、酮的硅氢化反应、端基炔烃的加成、醛的烯丙基化反应、钯催化的烯丙基化反应等。

百灵威可以提供TOX & SaBOX、PyBox、Box、Phox等配体种类，品质优异，涵盖了噁唑啉配体应用的所有类别，充分满足您的实验需求。

## ■ TOX & SaBOX

环丙烷的[3+3]不对称环化反应 & 不对称开环反应

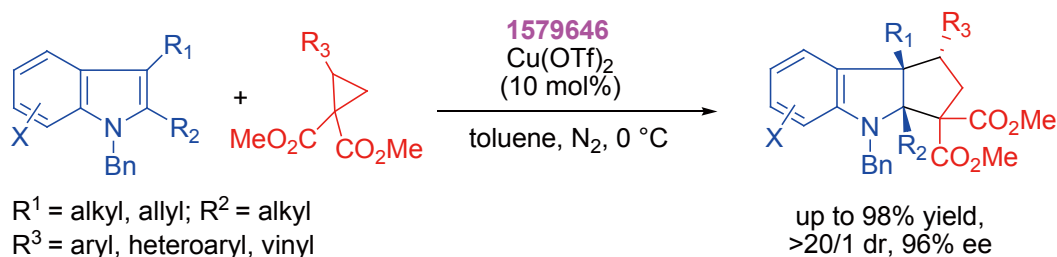


Tang, Y. et al., *Angew. Chem. Int. Ed.* **2013**, 52, 1452

Tang, Y. et al., *J. Am. Chem. Soc.* **2012**, 134, 9066

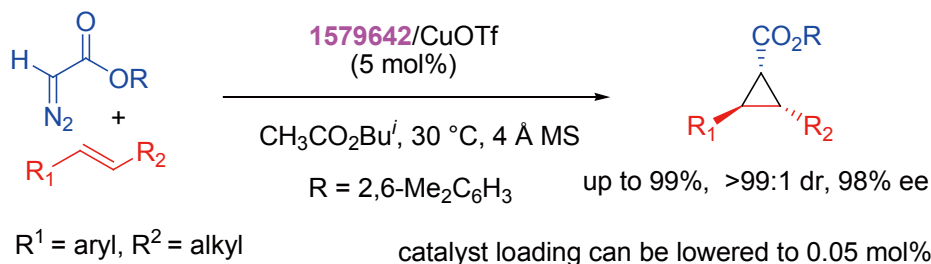
配体**1579639**的更多应用，请见下列文献

- Tang, Y. et al., *Angew. Chem. Int. Ed.* **2010**, 49, 4463
- Tang, Y. et al., *Tetrahedron.* **2012**, 68, 5042
- Jason S, et al., *Org. Lett.* **2011**, 13, 2004
- Jason S, et al., *Synthesis*, **2012**, 44, 686

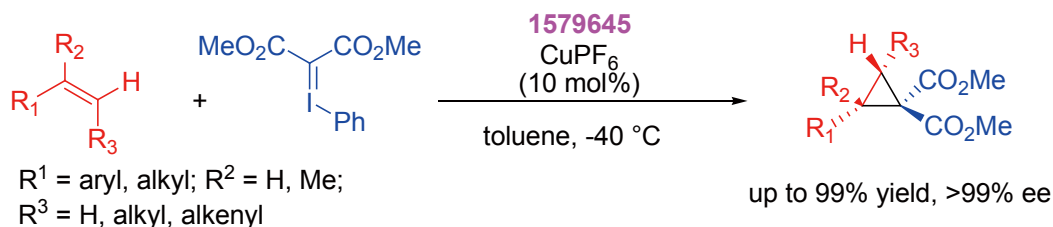


Tang, Y. et al., *J. Am. Chem. Soc.* **2013**, 135, 7851

烯烃的不对称环丙烷化反应

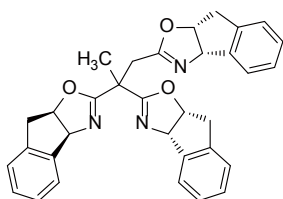


Tang, Y. et al., *Angew. Chem. Int. Ed.* **2012**, *51*, 8838

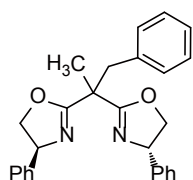


Tang, Y. et al., *Angew. Chem. Int. Ed.* **2012**, *51*, 11620

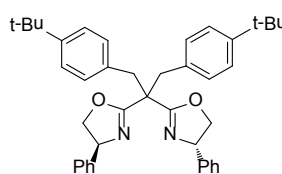
1579639



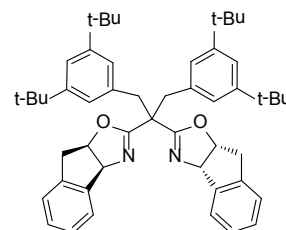
1579642



1579645



1579646



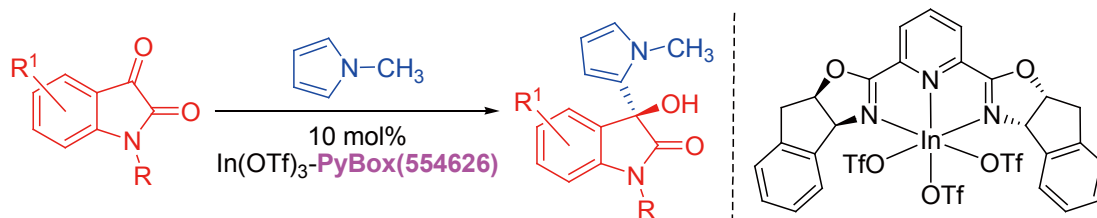
产品编号 产品名称

CAS

1579639	(3aS,3a'S,3a" S,8aR,8a'R,8a"R)-2,2',2''-(Propane-1,2,2-triyl)tris(8,8a-dihydro-3aH-indeno[1,2-d]oxazole), 99%	1239015-11-2
	(3aS,3a'S,3a" S,8aR,8a'R,8a"R)-2,2',2''-(丙烷-1,2,2-三基)三(8,8a-二氢-3aH-茚并[1,2-d]噁唑)	
1579642	(4S,4'S)-2,2'-(1-Phenylpropane-2,2-diyl)bis(4-phenyl-4,5-dihydrooxazole), 99%	1404433-37-9
	(4S,4'S)-2,2'-(1-苯丙烷-2,2-二基)双(4-苯基-4,5-二氢噁唑)	
1579645	(4S,4'S)-2,2'-(1,3-Bis(4-(tert-butyl)phenyl)propane-2,2-diyl)bis(4-phenyl-4,5-dihydrooxazole), 99%	1428328-51-1
	(4S,4'S)-2,2'-(1,3-双(4-(叔丁基)苯基)丙烷-2,2-二基)双(4-苯基-4,5-二氢噁唑)	
1579646	(3aS,3a'S,8aR,8a'R)-2,2'-(1,3-bis(3,5-di-tert-butylphenyl)propane-2,2-diyl)bis(8,8a-dihydro-3aH-indeno [1,2-d]oxazole), 99%	1435467-29-0
	(3aS,3a'S,8aR,8a'R)-2,2'-(1,3-双(3,5-二叔丁基苯基)双(8,8a-二氢-3aH-茚并[1,2-d]噁唑)	

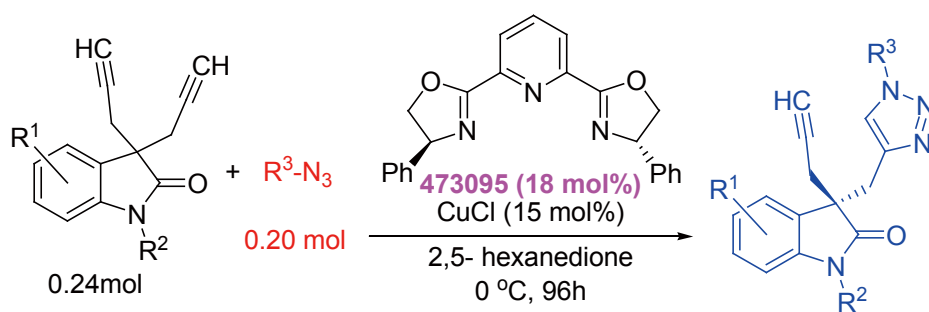
## ■ PyBOX

吡咯对靛红的加成反应



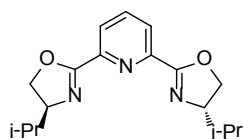
*Org. Lett.*, **2011**, 13 (21), 5754-5757

叠氮-炔烃环加成反应

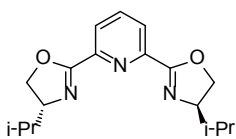


*J. Am. Chem. Soc.*, **2013**, 135 (30), 10994-10997

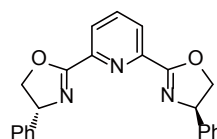
358083



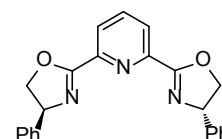
353382



1299174

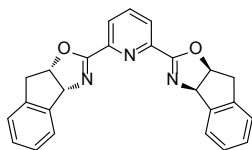


473095

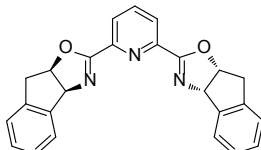


产品编号	产品名称	CAS
358083	2,6-Bis[(4S)-(-)-isopropyl-2-oxazolin-2-yl]pyridine, 99% 2,6-双[(4S)-(-)-异丙基-2-噁唑啉-2-基]吡啶	118949-61-4
353382	2,6-Bis[(4R)-(+)-isopropyl-2-oxazolin-2-yl]pyridine, 98% 2,6-双[(4R)-(+)-异丙基-2-噁唑啉-2-基]吡啶	131864-67-0
299174	2,6-Bis[(4R)-4-phenyl-2-oxazoliny]pyridine, 98% 2,6-双[(4R)-4-苯基-2-噁唑啉基]吡啶	128249-70-7
473095	2,6-Bis[(4S)-4-phenyl-2-oxazoliny]pyridine, 98% 2,6-双[(4S)-4-苯基-2-噁唑啉基]吡啶	174500-20-0

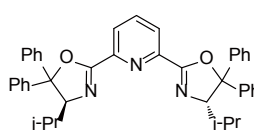
789106



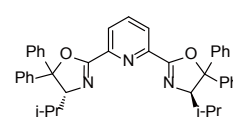
554626



976448



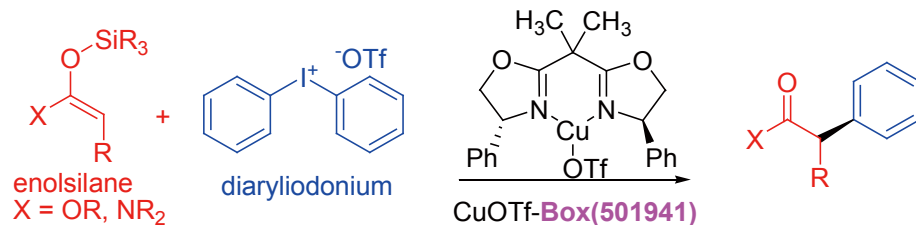
976449



产品编号	产品名称	CAS
789106	2,6-Bis[(3aR,8aS)-(+)-8H-indeno[1,2-d]oxazolin-2-yl]pyridine, 95% 2,6-双[(3aR,8aS)-(+)-8H-茛并[1,2-d]噁唑啉-2-基]吡啶	357209-32-6
554626	2,6-Bis[(3aS,8aR)-(-)-8H-indeno[1,2-d]oxazolin-2-yl]pyridine, 95% 2,6-双[(3aS,8aR)-(-)-8H-茛并[1,2-d]噁唑啉-2-基]吡啶	185346-09-2
976448	2,6-Bis[(4S)-4,5-dihydro-4-(1-methylethyl)-5,5-diphenyl-2-oxazolyl]-pyridine, 98% 2,6-双[(4S)-4,5-二氢-4-(1-异丙基)-5,5-二苯基-2-噁唑基]吡啶	162213-03-8
976449	2,6-Bis[(4R)-4,5-dihydro-4-(1-methylethyl)-5,5-diphenyl-2-oxazolyl]-pyridine, 98% 2,6-双[(4R)-4,5-二氢-4-(1-异丙基)-5,5-二苯基-2-噁唑基]吡啶	828918-24-7

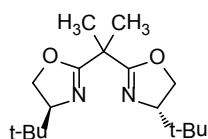
## BOX

羰基的 $\alpha$ -芳基化反应

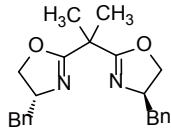


*J. Am. Chem. Soc.*, 2011, 133 (35), 13782-13785

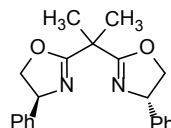
211207



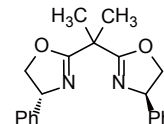
620798



593597

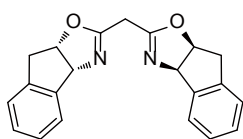


501941

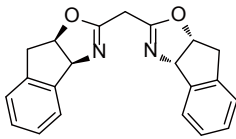


产品编号	产品名称	CAS
211207	2,2'-Isopropylidenebis[(4S)-4-tert-butyl-2-oxazoline], 98% 2,2'-异亚丙基双[(4S)-4-叔丁基-2-噁唑啉]	131833-93-7
620798	(+)-2,2'-Isopropylidenebis[(4R)-4-benzyl-2-oxazoline], 98% (+)-2,2'-异亚丙基双[(4R)-4-苄基-2-噁唑啉]	141362-77-8
593597	(-)-2,2'-Isopropylidenebis[(4S)-4-phenyl-2-oxazoline], 97% (-)-2,2'-异亚丙基双[(4S)-4-苯基-2-噁唑啉]	131457-46-0
501941	(+)-2,2'-Isopropylidenebis[(4R)-4-phenyl-2-oxazoline], 97% (+)-2,2'-异亚丙基双[(4R)-4-苯基-2-噁唑啉]	150529-93-4

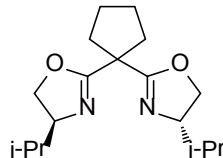
396000



613192



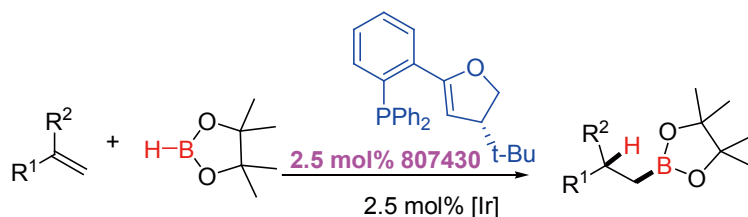
1561126



产品编号	产品名称	CAS
396000	[3aR-[2(3'aR*,8'aS*),3'aβ,8'aβ]]-(+)-2,2'-Methylenebis[3a,8a-dihydro-8H-indeno[1,2-d]oxazole], 98% [3aR-[2(3'aR*,8'aS*),3'aβ,8'aβ]]-(+)-2,2'-亚甲基双[3a,8a-二氢-8H-茚并[1,2-d]噁唑]	180186-94-1
613192	[3aS-[2(3'aR*,8'aS*),3'aα,8'aα]]-(-)-2,2'-Methylenebis[3a,8a-dihydro-8H-indeno[1,2-d]oxazole], 98% [3aS-[2(3'aR*,8'aS*),3'aα,8'aα]]-(-)-2,2'-亚甲基双[3a,8a-二氢-8H-茚并[1,2-d]噁唑]	175166-49-1
1561126	(4S,4'S)-2,2'-(Cyclopentane-1,1-diyl)-bis(4-isopropyl-4,5-dihydrooxazole), 95% (4S,4'S)-2,2'-(环戊烷-1,1-二基)-双(4-异丙基-4,5-二氢噁唑)	1379452-52-4

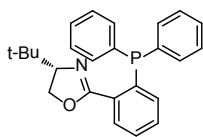
## PhOX

α- 取代的苯乙烯基衍生物的硼氢化反应

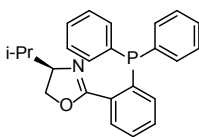


Chem. Commun., 2011, 47, 298-300

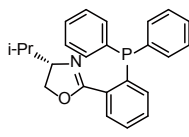
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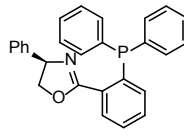
547197



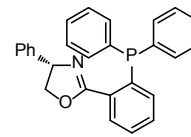
177081



618984



302583



产品编号	产品名称	CAS
807430	(S)-4-tert-Butyl-2-[2-(diphenylphosphino)phenyl]-2-oxazoline, 97% (S)-4-叔丁基-2-[2-(二苯基膦基)苯基]-2-噁唑啉	148461-16-9
547197	(R)-(+)-2-[2-(Diphenylphosphino)phenyl]-4-isopropyl-2-oxazoline, 98% (R)-(+)-2-[2-(二苯基膦)苯基]-4-异丙基-2-噁唑啉	164858-78-0
177081	(S)-(-)-2-[2-(Diphenylphosphino)phenyl]-4-isopropyl-2-oxazoline, 97% (S)-(-)-2-[2-(二苯基膦)苯基]-4-异丙基-2-噁唑啉	148461-14-7
618984	(R)-(-)-2-[2-(Diphenylphosphino)phenyl]-4-phenyl-2-oxazoline, 97% (R)-(-)-2-[2-(二苯基膦)苯基]-4-苯基-2-噁唑啉	167171-03-1
302583	(S)-(+)-2-[2-(Diphenylphosphino)phenyl]-4-phenyl-2-oxazoline, 97% (S)-(+)-2-[2-(二苯基膦)苯基]-4-苯基-2-噁唑啉	148461-15-8