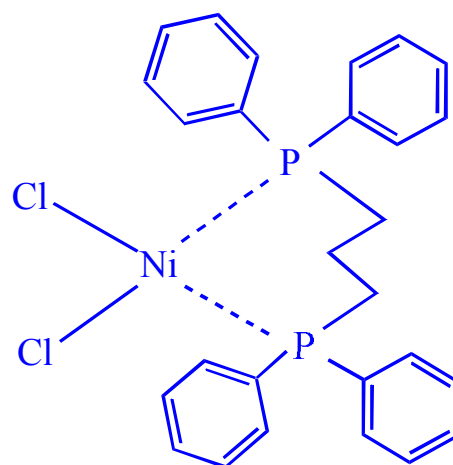
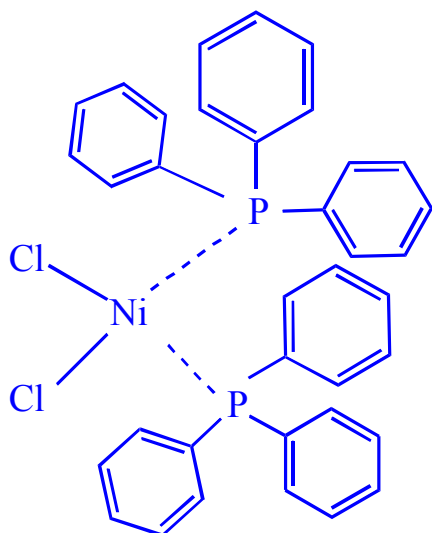


Trial product

Ni-phosphine complexes

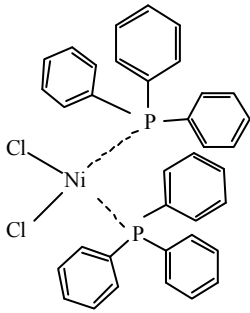
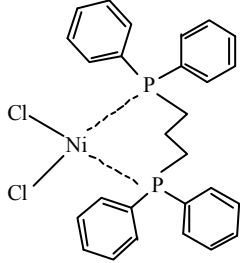
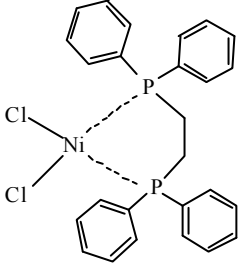
Ni-phosphine complexes



Technical data

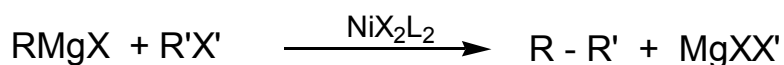
NICHIA CORPORATION

Trial product

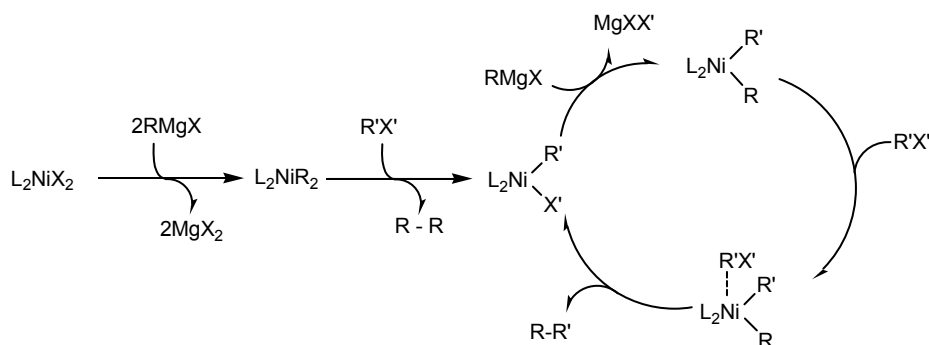
<p>Bis(triphenylphosphine) nickel dichloride</p>  <p>$\text{NiCl}_2(\text{PPH}_3)_2$ CAS# 14264-16-5</p>	<p>1,3-Bis(diphenylphosphino) propane nickel(II) dichloride</p>  <p>$\text{NiCl}_2(\text{dppp})$ CAS# 15629-92-2</p>	<p>1,2-Bis(diphenylphosphino) ethane nickel(II) dichloride</p>  <p>$\text{NiCl}_2(\text{dppe})$ CAS# 14647-23-5</p>
Dark green-dark gray crystalline powder	Yellowish red crystalline powder	Yellowish red crystalline powder
mp ; 250 °C(decomposition)	mp ; 205 °C(decomposition)	mp ; 263-265 °C
purity 98%up	purity 97%up	purity 97%up

Application in Organic Synthesis

High catalytic activity for selective cross-coupling reaction of Grignard reagents with aryl and alkenyl halides

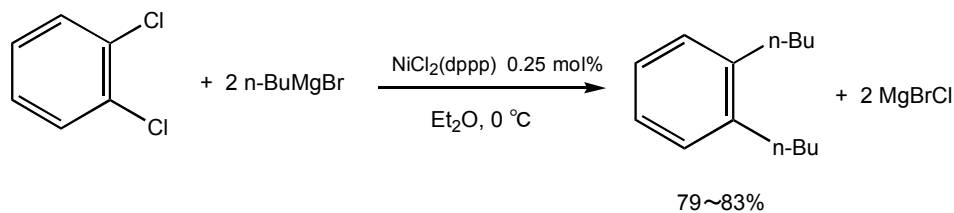


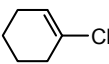
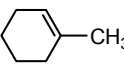
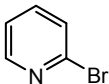
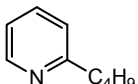
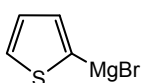
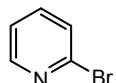
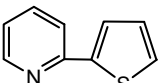
* L = phosphine ligand

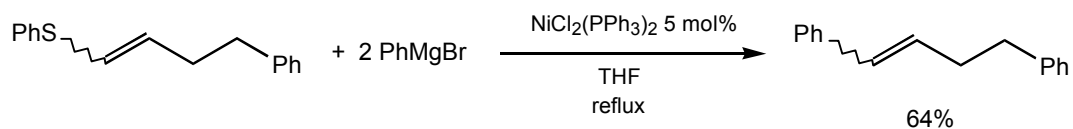


Cross-coupling of Grignard reagents

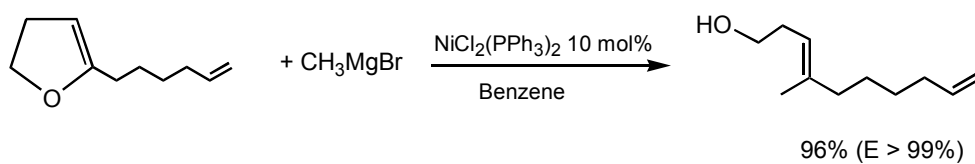
Org.Synth., 6, 407 (1988)
Org.Synth., 58, 127 (1978)



RMgX	Halides	Product (% yield)
CH ₃ MgBr		 (98)
CH ₃ (CH ₂) ₃ MgBr		 (71)
C ₆ H ₅ MgBr	ClCH=CHCl	(Z)-C ₆ H ₅ CH=CHC ₆ H ₅ (95~100)
		 (78)



Tetrahedron Lett., 43 (1979)



J.Chem.Soc., Chem.Commun., 241 (1987)

■ The contents of this brochure are updated as of March, 2010.

■ Reference

(The manufacturer & engineering department)

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