



Nickel N-heterocyclic carbene complexes in homogeneous catalysis

Berding, J.

Citation

Berding, J. (2009, October 8). *Nickel N-heterocyclic carbene complexes in homogeneous catalysis*. Retrieved from <https://hdl.handle.net/1887/14048>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/14048>

Note: To cite this publication please use the final published version (if applicable).

Table of contents

List of abbreviations	7	
1	Introduction	9
2	Another silver complex of 1,3-dibenzylimidazol-2-ylidene: structure and reactivity	43
3	Ni(NHC)₂X₂ complexes in the hydrosilylation of internal alkynes	57
4	Synthesis of novel chelating benzimidazole-based carbenes and their nickel(II) complexes; activity in the Kumada coupling reaction	75
5	N-donor functionalized N-heterocyclic carbene nickel(II) complexes in the Kumada coupling	99
6	Theoretical study on the Kumada coupling catalyzed by bisNHC nickel complexes	117
7	Nickel N-heterocyclic carbene complexes in the vinyl polymerization of norbornene	135
8	Summary, general discussion and outlook	147
App 1	Synthesis of diimidazolium salts	155
	Samenvatting	169
	List of publications	174
	Curriculum Vitae	175
	Nawoord	177