

Solid-state and Solution Studies on a β -Diketiminato Zinc Hydride Complex

Stephan Schulz^a, Tamara Eisenmann^a, Daniella Schuchmann^a, Michael Bolte^b, Michael Kirchner^a, Roland Boese^a, Jan Spielmann^a, and Sjoerd Harder^a

^a Institute of Inorganic Chemistry, University of Duisburg-Essen, 45117 Essen, Germany

^b Institute of Inorganic Chemistry, University of Frankfurt, 60438 Frankfurt, Germany

Reprint requests to Prof. Dr. Stephan Schulz. Fax: +49 0201-1834635.

E-mail: stephan.schulz@uni-due.de

Z. Naturforsch. **2009**, *64b*, 1397 – 1400; received September 4, 2009

Dedicated to Professor Hubert Schmidbaur on the occasion of his 75th birthday

[MesnacnacZn(μ -H)]₂ (**1**) was synthesized by reaction of MesnacnacZnI with either an equimolar amount of KNH(*i*Pr)BH₃ or an excess of NaH and characterized by multinuclear NMR and IR spectroscopy as well as X-ray diffraction. Two polymorphs of **1** were found and their structures determined on single crystals.

Key words: Zinc, β -Diketiminato, X-Ray Structure, Polymorphs