

Metallboranate und Boranatometallate, 25.

²⁵Mg-Kernresonanzuntersuchungen an Magnesiumboranaten [1]

Metal Tetrahydridoborates and Tetrahydridoborato Metalates, 25.

²⁵Mg Nuclear Magnetic Resonance Studies on Magnesium Tetrahydridoborates

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²⁵Mg NMR Data, Organylmagnesium Tetrahydridoborates, Cyclopentadienyl Magnesium Tetrahydridoborate, Organylxo Magnesium Tetrahydridoborates, Schlenk-Equilibria

²⁵Mg NMR spectroscopy has been used to study the solution behaviour of $\text{Mg}(\text{BH}_4)_2 \cdot 3 \text{ THF}$, $\text{RMg}(\text{BH}_4) \cdot n\text{L}$ (L = various ethers) and $\text{ROMg}(\text{BH}_4) \cdot n\text{L}$. While the solution state of $\text{Mg}(\text{BH}_4)_2 \cdot 3 \text{ THF}$ remains unchanged in THF or benzene, Schlenk type equilibria are observed for $\text{RMg}(\text{BH}_4)$ compounds. At low temperatures $\text{Mg}(\text{BH}_4)_2 \cdot n\text{L}$ and $\text{MgR}_2 \cdot n\text{L}$ are the preferred constituents in solution. In contrast, the dimeric $\text{ROMg}(\text{BH}_4)$ compounds do not disproportionate into $\text{Mg}(\text{OR})_2 \cdot n\text{L}$ and $\text{Mg}(\text{BH}_4)_2 \cdot n\text{L}$.