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Electronic Supplementary Information

Neutral versus cationic group 3 metal alkyl catalysts: performance in intramolecular hydroamination/cyclisation

Sergio Bambirra, Hayato Tsurugi, Daan van Leusen and Bart Hessen*

Figure 1. Hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with [(A)YR(THF)]⁺ in C₆D₆ at 50 °C.

Figure 2. Hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with (A)ScR₂(THF) in C₆D₆ at 50 °C till 50 % substrate consumption.

Figure 3. Hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with (A)YR₂(THF) (A)YR₂(THF)₂ and in C₆D₆ at 50 °C.

Figure 4. First-order plot for the hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with $[(iPr_2B)YR]^+$ in C_6D_6 .

Figure 5. Hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with $[(Me_2B)YR]^+$ in C_6D_6 at $50\text{ }^\circ\text{C}$.

Figure 6. Hydroamination/cyclisation of 2,2-dimethyl-4-pentenylamine with [(Me₂B)YR₂] in C₆D₆ at 50 °C.