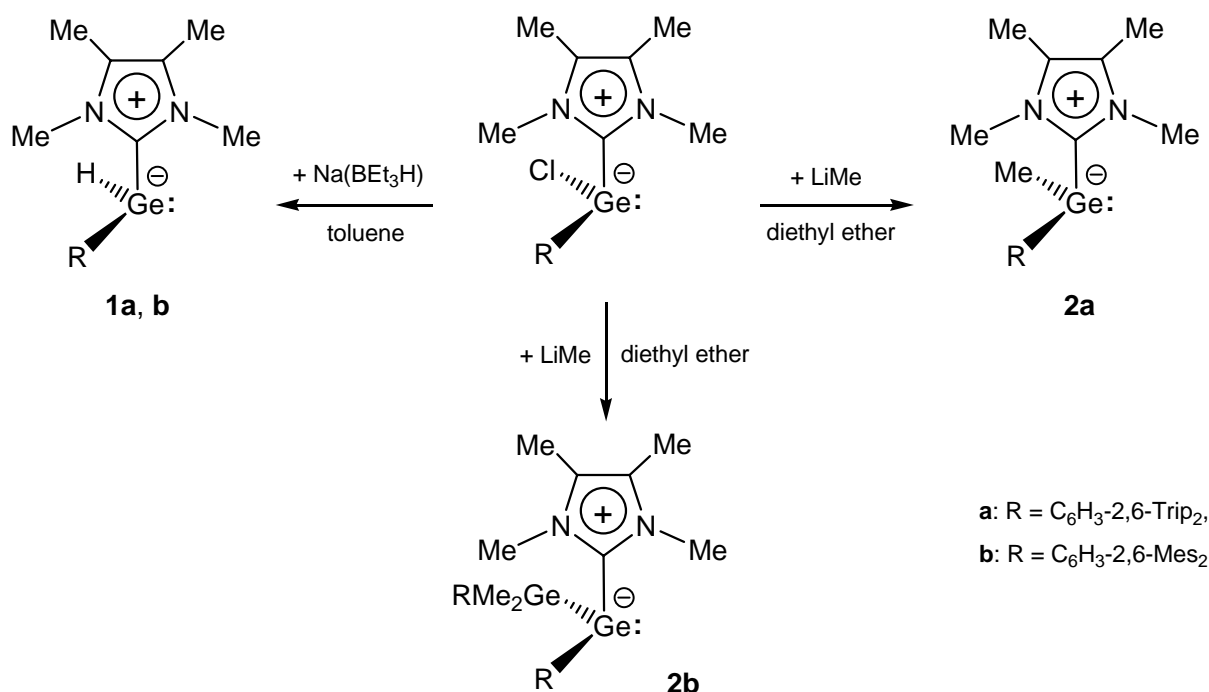


N-Heterocyclic Carbene Adducts of Arylgermanium(II) Hydrides and Aryl(methyl)germylenes

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Sterically demanding *m*-terphenyl substituents have been used in recent years to stabilize Ge^{II} hydrides and Ge^{II} organyls. The reported compounds [Ge(H)R]₂ and [Ge(Me)R]₂ (R = *m*-terphenyl) are composed of dimers featuring a Ge-Ge bond and a “*trans*-bent geometry” at the Ge centers.^[1] We report here on the syntheses and full characterization of first monomeric arylgermanium(II) hydrides (**1a**, **1b**) and aryl(methyl)germanium(II) compounds (**2a**) taking advantage of the electronic stabilization by N-heterocyclic carbenes (Scheme 1).^[2] An unprecedented mixed-valent arylgermanium compound (**2b**) was also obtained by a methyl migration reaction.



[1] a) M. Stender, L. Pu, P. P. Power, *Organometallics* **2001**, *20*, 1820; b) A. F. Richards, A. D. Phillips, M. M. Olmstead, P. P. Power, *J. Am. Chem. Soc.* **2003**, *125*, 3204.

[2] A. C. Filippou, O. Chernov, B. Blom, K. W. Stumpf, G. Schnakenburg, *Chem. Eur. J.* **2010**, *16*, 2866.