

coworkers have recently reported theoretical calculations on the 1,6- $C_2B_8H_{10}$ and predicted the apical C(1)-proton to be slightly more acidic than the equatorial C(6)-proton [7]. Indeed this was the observed behavior as Hawthorne has previously reported the formation of the C(1) lithiated product to be favored by a factor of two [2]. Our results would indicate a reversal in this selectivity for the 1,2-dicarbodecaborane with the equatorial proton being significantly more acidic. This warrants further theoretical work on this isomer of $C_2B_8H_{10}$. Furthermore, our successful metallation of this carborane should facilitate functionalization of it.

Experimental

All reactions were carried out under inert atmospheric conditions. Diethyl ether was distilled from sodium-benzophenone. 1,2-dicarbodecaborane- (10) was prepared by literature methods [4].

Proton-decoupled ^{11}B NMR spectra were obtained using the JEOL FX90Q FT spectrometer. $CDCl_3$ was used as the solvent and all shifts are relative to external $BF_3 \cdot Et_2O$.

Reaction of 1,2- $C_2B_8H_{10}$ with 2 *n*-BuLi

Freshly sublimed 1,2- $C_2B_8H_{10}$ (106 mg, 0.87 mmol) was dissolved in 10 ml of ether and chilled to $-20^\circ C$. Two equivalents of BuLi was added via syringe and the solution allowed to warm slowly to $10^\circ C$ whereupon a white precipitate formed. After cooling again to $-20^\circ C$, excess methyl iodide was added and the solution warmed to room temperature. Removal of solvent and sublimation of the

residue at $80-90^\circ C$ using a mechanical pump vacuum gave 45 mg, 0.3 mmol of white crystalline 1,2- $Me_2C_2B_8H_8$.

Reaction of 1,2- $C_2B_8H_{10}$ with *n*-BuLi

A similar procedure was used to produce the monolithiated product and methyl iodide used to give the methylated products. The mono- and dimethylated carboranes can be separated by GLC. The composition of the products was analyzed by spectral means.

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References

- 1 R. N. Grimes, 'Carboranes', Academic Press, New York 1970.
- 2 P. M. Garrett, J. C. Smart and M. F. Hawthorne, *J. Am. Chem. Soc.*, **91**, 4707 (1969).
- 3 L. I. Zakharkin, V. N. Kalinin and E. G. Rys, *J. Gen. Chem. Russ.*, **43**, 848 (1973).
- 4 B. Stibr, J. Plesek and S. Hermanek, *Coll. Czech. Chem. Commun.*, **38**, 338 (1973).
- 5 R. R. Rietz, R. Schaeffer and E. Walter, *J. Organometal. Chem.*, **63**, 1 (1973).
- 6 P. M. Garrett, J. D. Smart, G. S. Ditta and M. F. Hawthorne, *Inorg. Chem.*, **8**, 1907 (1969).
- 7 D. A. Dixon, D. A. Kleier, T. A. Halgren, J. H. Hall and W. N. Lipscomb, *J. Am. Chem. Soc.*, **99**, 6226 (1977).

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Spin Spin Interactions in Polymeric Copper(II) Complexes: $Cu(II)(Piperidylcarbamate)_2(Cu(I)X)_4$ (X = Cl, Br)

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Page L292, Figures 2(a) and 2(b) should be interchanged but the legends should remain as they are.