

Hydroboration with Pyridine Borane at Room Temperature [*J. Am. Chem. Soc.* **2005**, *127*, 5766–5767]. Julia M. Clay, Andrew G. Karatjas, and Edwin Vedejs*

Hydroboration experiments using Py·BH₂I at room temperature that were claimed to "cleanly afford the 1:1 adducts 19" have been re-examined. Trifluoroborate salts 19 are present in the solid prepared according to the procedure given in the Supporting Information, confirmed for 19a by ¹⁹F shift comparison and peak spiking experiments using commercial 19a $(\delta - 143.1 \text{ ppm}, 12\% \text{ by area})$, but the major signal $(\delta - 146.7 \text{ m})$ ppm, 66% by area) matches HF₂(-) in chemical shift, and several smaller ¹⁹F signals are present (δ –147.6 ppm, 4%; -148.0 ppm, 5%; -153.9 ppm, 4%; -155.1 ppm, 10%). Pyridinium salts are evident as major contaminants in the ¹H NMR spectrum. The yield numbers in Table 4 are not correct because the solid claimed to be 19 is a mixture. Claims regarding ESMS also could not be confirmed. In every case, 2:1 adducts were detected in addition to 1:1 adducts. Conditions that favor 1:1 adduct formation using excess Py·BH₂I will be reported elsewhere. To our knowledge, these errors do not affect the reported hydroboration results after oxidative workup.

The paper incorrectly lists the ^{11}B chemical shifts of $Py \cdot BH_2I$ and $Lut \cdot BH_2I$. The observed values are $\delta - 12.3$ ppm and -17.2 ppm, respectively. The $\delta - 20.5$ ppm shift of $Me_2S \cdot BH_2I$ is correct as originally published.

JA8046602

10.1021/ja8046602 Published on Web 07/18/2008