Amines O 0120

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One-Pot Reductive Amination of Aldehydes and Ketones with  $\alpha$ -Picoline-borane in Methanol, in Water, and in Neat Conditions. — An expeditious and environmentally friendly approach to the synthesis of a variety of amines (ca. 30 examples) by reaction of aldehydes or ketones with amines in the presence of  $\alpha$ -picoline-borane is reported. The use of commercially available  $\alpha$ -picoline-borane eliminates the problems occurring by application of other reducing agents in reductive aminations. Especially the possibility to perform this reaction in water or without solvent offers a great opportunity for green chemistry. In most cases, the presence of small amounts of AcOH improves the reaction. — (SATO, S.; SAKAMOTO, T.; MIYAZAWA, E.; KIKUGAWA\*, Y.; Tetrahedron 60 (2004) 36, 7899-7906; Fac. Pharm. Sci., Josai Univ., Sakado, Saitama 350-02, Japan; Eng.) — Klein