Reduction of Carbonyl Compounds with $NaBH_4$ under Ultrasound Irradiation and Aprotic Condition

Behzad Zeynizadeh and Saiedeh Yahyaei

Department of Chemistry, Faculty of Sciences, Urmia University, Urmia 57159-165, Iran

Reprint requests to Prof. Dr. B. Zeynizadeh. E-mail: b.zeynizadeh@mail.urmia.ac.ir

Z. Naturforsch. **59b,** 704 – 710 (2004); received January 28, 2004

A variety of carbonyl compounds are reduced to their corresponding alcohols with sodium borohydride under ultrasound irradiation and aprotic condition. Reduction reactions are performed in THF at room temperature or under reflux condition. The product alcohols were obtained in good to excellent yields. The chemoselective reduction of aldehydes over ketones was achieved successfully with this system.

Key words: Reduction, Sodium borohydride, Ultrasound, Carbonyl Compounds