

## عنوان مقاله:

Tonsil Clay as a Green Catalyst for Rapid and Efficient Reduction of Aldehydes and Ketones with  $\text{NaBH}_3\text{CN}$

## محل انتشار:

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## خلاصه مقاله:

Reduction of aldehydes and ketones to the corresponding alcohols in the presence of sodium cyanoborohdride as reductive agent and Tonsil clay as catalyst under solvent free conditions was investigated. Tonsil (catalyst) decreased the reduction time of each aldehyde and ketone to proportional alcohols in comparison with their reduction in the absence of catalyst with high degree purity of alcohols. Reduction reactions were carried out in solvent free condition in less than ۱۵ minutes at room temperature. All obtained alcohols from reduction of related carbonyl compounds were detected by FT-IR and  $^1\text{H}/^{13}\text{C}$  NMR spectra.

## کلمات کلیدی:

Sodium cyanoborohydride, Tonsil clay, reduction, Aldehyde, Ketone, Alcohols, Green chemistry

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1766177>

