

Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

H_2SO_4 -silica as an efficient and chemoselective catalyst for the synthesis of acylal from aldehydes under solvent-free conditions

Seied Ali POURMOUSAVI and Zahra ZINATI
School of Chemistry, Damghan University of Basic Sciences,
Damghan 36715364 IRAN
e-mail: pourmousavi@dubs.ac.ir

 [Keywords](#)
 [Authors](#)

Abstract: A variety of aldehydes react with acetic anhydride in the presence of a catalytic amount of H_2SO_4 -silica to afford the corresponding 1,1-diacetates (acylals) in excellent yields. Ketones are not affected under the reaction conditions. The advantages are the simplicity of the acylation procedure, and the relatively non-toxic nature of the catalyst as well as its easy availability and low cost.

Key Words: Acylals, aldehydes, catalysis, solvent-free reactions, H_2SO_4 -silica.



chem@tubitak.gov.tr

[Scientific Journals Home Page](#)

Turk. J. Chem., **33**, (2009), 385-392.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.33, iss.3.](#)