

(3) Kinetics and mechanism of dehydrochlorination of N-aryl-C-ethoxycarbonylformohydrazidoyl chlorides. Shawali, Ahmad S.; Albar, Hassan A.. Fac. Sci., King Abdulaziz Univ., Jeddah, Saudi Arabia. Canadian Journal of Chemistry (1986), 64(5), 871-5. CODEN: CJCHAG ISSN: 0008-4042. Journal written in English. CAN 105:208237 AN 1986:608237 CAPLUS (Copyright 2004 ACS on SciFinder (R))

Abstract

The Et₃N-catalyzed dehydrochlorination kinetics of EtO₂CCCl:NNHR (I; R = 3- or 4-Me, -Cl, -NO₂, 4-CO₂Et or -Ac, H), detd. in 4:1 (vol./vol.) dioxane-H₂O at 30°C, were pseudo 1st order in Et₃N. The overall 2nd order rate consts. had an LFER with $\rho = -0.533$ which is consistent with a mechanism involving a fast reversible deprotonation step, leading to the conjugate base of I, followed by rate-detg. loss of Cl⁻. The ρ - for each of these steps were estd.