

Polarographic behavior and determination of norfloxacin in tablets. Jaber, A. M. Y.; Lounici, A. King Fahd University of Petroleum and Minerals, Chemistry Department, Dhahran, Saudi Arabia. *Analytica Chimica Acta* (1994), 291(1-2), 53-64. CODEN: ACACAM ISSN: 0003-2670. Journal written in English. CAN 121:42843 AN 1994:442843 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

The d.c. and differential pulse (dp) polarog. redn. of the antibacterial drug norfloxacin (I) was studied in various base electrolytes at different pH values in the presence of DMF. Only one redn. wave in the range -0.95 to -1.05 V was obsd. in strongly acidic medium (pH <1). Using a base electrolyte of pH ≥ 7.5 , 2 well defined irreversible waves were obsd. in the ranges of -1.48 to -1.67 V (wave C) and -1.79 to -1.93 V (wave D) for I concns. of $1 \times 10^{-4} M$. These potential limits showed little shifts on both sides with I concn. At pH ≥ 10 , only wave D was obsd., but all waves disappeared completely in 0.1M NaOH. In addn., two ill-defined waves appeared in the range -0.06 to -0.42 V within the pH range 6.5-8.5 for I concns. $> 5 \times 10^{-5} M$. The single dp wave which appeared in 2M HCl and the dp wave C which appeared in the other base electrolytes showed a useful rectilinear relation between concn. and wave heights from 32 to $> 560 \mu g mL^{-1}$ I. These 2 dp waves were utilized for detn. of I in Noroxin tablets with good recoveries. The polarog. behavior of I was compared to that of nalidixic acid which was also detd. successfully in Negram tablets as the individual component and in the presence of I as an interfering substance.