

Reactivity and regio- and stereoselectivity in 1,3-dipolar cycloadditions of 3,4,5,6-tetrahydro-2H-azepine 1-oxide. Ali, S. Asrof; Wazeer, Mohammed I. M.. Chem. Dep., King Fahd Univ. Pet. Miner., Dhahran, Saudi Arabia. Journal of Chemical Research, Synopses (1992), (2), 62-3.

Abstract

The title compd. I underwent a more rapid cycloaddn. with a no. of alkenes, then its 6-membered analog to form perhydrooxazoloazepines, e.g., II (R = Ph, OEt, CH₂OH, cyano, CO₂Me, CHO) and their C2 enantiomers and III and their enantiomers. The stereo- and regiochem. of the reaction depends to a large extent on the substituents in the alkene component. The second order rate consts. of the above reaction of I and its 5- and 6-membered analogs with a no. of alkenes were detd.

