
Abstract

The stereochem. and reactivity of the cycloaddn. reactions of eight-membered cyclic nitrone (I) with several alkenes have been studied. The concd. soln. of the cyclic nitrone undergoes polyn. to give acyclic polynitrone (15). The nitrone I is found to be less reactive than its seven-membered counterpart. Barrier to nitrogen inversion in one of the cycloaddn. product, a 8/5 fused ring system, was detd. to be 55.4 kJ/mol.