

SYNTHESIS, CHARACTERIZATION, AND PRELIMINARY RELEASE STUDIES OF CLOTRIMAZOLE DRUGS FROM POLYMER DERIVATIVE FROM EUGENOL

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ABSTRACT

The aim of this work was to focus on the modification of the chemical structure of eugenol by the incorporation of a polymerizable group, e.g., carboxylic group or amid group. This approach will allow the eugenol derivative to participate in polymerization reactions rather than to inhibit them and will be more efficacious in the field of drug delivery. In this paper I report on the synthesis of three eugenol derivatives, which differ in the spacer group between two, three eugenol molecules, their homopolymerization characterization by FTIR spectroscopy. . Also the release behavior of the hydrogels was studied. The release studies showed that the basic parameter affecting the drug release behavior of the hydrogels were pH of the solution.

KEY WORDS: Eugenol, Drug Release, Clotrimazole