A Simple RP-HPLC Method for the Determination of Clotrimazole from Acrylic Nanocapsule Suspensions

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SUMMARY. A simple and fast HPLC method has been validated for the determination of clotrimazole in nanocapsule suspensions prepared from an acrylic polymer, Eudragit RS100®. Chromatographic runs were performed on a RP C18 column with a mobile phase comprising methanol and water (90:10, v/v) at a flow rate of 1.0 mL/min with UV detection at 229 nm. The method was shown to be specific, linear (r = 0.9987), precise and accurate in a concentration range of 2.0-10.0 μg/mL. The proposed method can be successfully used to quantify clotrimazole content in acrylic nanocapsule formulations, as well as to estimate drug encapsulation efficiency.

KEY WORDS: Clotrimazole, HPLC, Validation.

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