

Abstract

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Title of Thesis: The use of Turbula[®] mixer in homogenization of a mixture of drug with the AmylFarm[®] filler for the preparation of oral powders in Pharmacy

In this experimental work, the influence of container loading and homogenization time on the content uniformity of divided oral powders mixed in a Turbula[®] T2F mixer was investigated. The speed of mixer 49 rpm was constant. The powder mixtures containing 20 mg of the active substance propranolol-hydrochloride in the AmylFarm[®] filler were prepared in three volumes 37 ml, 74 ml and 111 ml, corresponding to the 100, 200 and 300 capsules, respectively. The results were compared with the conventional mixing using a mortar and pestle. The insignificant difference in homogeneity of mixtures prepared by both methods was proved. The optimum mixing time in a rotary mixer was 10 minutes for a 37 ml mixture, and 15 minutes for the larger mixture volumes 74 and 111 ml.