Abstract

Charles University in Prague, Faculty of Pharmacy in Hradec Králové

Department of Pharmaceutical Technology

Student: Jakub Šmíd

Consultant: Doc. RNDr. Milan Řehula. CSc.

Effect of acetylsalicylic acid on the parameters of compression equation

Compacting process can be expressed mathematically by compression equations. It is characterized by various parameters. The compression equation expresses the dependence of the volume, density and height on compacting pressure.

This paper evaluates the parameters of the compaction equation and study pre-loading phase, the phase of elastic deformation and the phase of plastic deformation. This thesis examines effect of acetylsalicylic acid on the parameters of compaction equation. Tablets were compressed from five mixtures. Mixtures contained acetylsalicylic acid and microcrystalline cellulose in different ratios 0:100, 25:75, 50:50, 75:25 and 0:100. The results were obtained using the three-exponential equation. Evaluation was carried out by using box plots.