Summary
The thesis studies mechanical strenght and disintegration time of tablets from two types of Microcel – Microcel® MC – 12 a Microcel® MC – 500. These characteristics were studied depending on compression force (3, 4 and 5 kN) and addition of two types of lubricants (magnesium stearate, natrium stearyl fumarate) in two concentrations – 0, 5 % and 1 % and addition of two model active substances in concentration 50 % (acetylsalicylic acid and ascorbic acid). For compression with active substance the compression force of 5 kN was used.
It was found that tablets from Microcel® MC – 12 had higher mechanical strenght than the tablets from Microcel® MC – 500. The mechanical strenght was markedly lower by the addition of lubricants in tablets using both types of Microcel. Microcel® MC – 500 was more sensitive to addition of the lubricants. Sensitivity was as higher as the concentration of lubricant was stronger. Addition of magnesium stearate made tablets of lower compactability. Also disintegration time of both types of tablets was shorter with addition of lubricant. With using Microcel® MC – 12 disintegration time was a little longer. In the case of using *Souhrn* 86

magnesium stearate as a lubricant in the concentration of 1 % the disintegration time was the shortest. Tablets from Microcel® MC – 12 and with acetylsalicylic acid possessed longer disintegration time and higher mechanical strenght.