

SUMMARY

In the work is studied mechanical strength and disintegration time of tablets prepared by direct compression of the spray dried maltose product – Advantose™ 100 and its mixture with Vivapur 102 in the ratio of 1:1 according to the compression force (6, 8, 10 kN), addition of lubricants (magnesium stearate, Pruv) and addition of model active substances (acetylsalicylic acid and ascorbic acid). Used concentration of lubricants was 1 %, of model active substance 50 %.

Tablet strength and disintegration time grew along with compression force. In case of compression forces of 6 and 8 kN in pure Advantose 100 there was no statistically significant difference in values of strength in terms of type of used lubricant and only in this case was recorded the fall of disintegration time with the growth of compression force. Compacts strength from the mixture of Advantose 100 and Vivapur 102 in the ratio of 1 : 1 was lower in case of Pruv. The strongest tablets were provided by the mixture of Advantose 100 and Vivapur 102 in the ratio of 1 : 1 without any lubricants. In the event of mixtures with lubricants the compacts were stronger in case of mixture of dry binder than in case of pure Advantose 100. Disintegration time of compacts from pure Advantose 100 and from mixture of dry binders was longer when Pruv was added. In case of presence of model active substances the higher strength and longer disintegration time was found out in the compacts with acetylsalicylic acid whereas the strength was higher in case of pure Advantose 100 and there was no statistically significant difference within the type of used lubricant, and disintegration time was longer when Pruv was added.