Abstract

The paper studies the co-processed dry binder LubriTose™ MCC from the viewpoint of energy evaluation of the compression process, strength and disintegration time of tablets. The results were compared with the identical evaluation of physical mixtures of microcrystalline cellulose with several types of lubricants. LubriTose™ MCC showed the lowest value of energy for friction, the highest value of energy accumulated by the tablet, and the highest plasticity of all tableting materials under study. There were no marked differences in the values of the energy of decompression. The tensile strength of tablets from LubriTose™ MCC was lower than in those from the mixture of Vivapur® 12 and glycerol monostearate, in the compression forces of 4 and 5 kN it was comparable with the tensile strength of tablets from Vivapur® 12 with poloxamer 407. Disintegration time of tablets from LubriTose™ MCC was shorter than that of those from Vivapur® 12 with glycerol monostearate at the compression force of 3 kN, in the case of the compression forces of 4 and 5 kN no statistically significant difference was found between the values of these tableting materials.