ABSTRACT

EFFECT OF PEG 4000 AND PEG 6000 ON PHYSICAL CHARACTERISTICS OF CO-PROCESSED EXCIPIENT LACTOSE - PRIMOGEL - PEG 4000 -PEG 6000

(Made by melt granulation method)

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Today's drug development requires new excipients, because in the process the result is that the flow properties and compressibility are not necessarily good. This causes pharmacists to use existing excipients by combining two or more excipients to obtain excipient properties that are superior to the original or commonly referred to as co-processed excipients. The purpose of this study was to determine the effect of differences in the characteristics of co-processed excipients with independent variables on PEG 4000 and PEG 6000. Melt granulation which is a technique used to make granules where the binder material is also a carrier or commonly called meltable-binder. The finished co-processed excipient granules then carried out several evaluations which included: particle size distribution, moisture content test, flow rate test, angle of repose, real and incompressible density, compressibility index and hausner ratio. Based on the results of the study that the difference between PEG 4000 and PEG 6000 on the physical characteristics of the co-processed excipients Lactose - Primogel - PEG 4000 - PEG 6000 had an effect on the angle of repose test and had no effect on the flow velocity test, compressibility index, hausner ratio. Suggestions in the next research, can be done by using different percentages on PEG 4000 and PEG 6000, the difference is for see whether there is a difference in characteristics of the co-processed excipient granules, especially the histogram curve.

Keyword: *co-processed,* PEG 4000 *and* PEG 6000, *melt granulation.*