ABSTRACT

FORMULATION AND EVALUATION CO-PROCESSED EXCIPIENT WITH COMPARISON PEG 4000 7,5% AND 15% AS MELTABLE BINDER

(*Using The Melt Granulation Method*)

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Excipients are additives that helpful in dosage formulations as transporters for active ingredients and have an impact on the quality, safety, and effectiveness. The aim of this study was to investigate the impact of variations in the properties of co-processed excipients between 7.5% and 15% of PEG 4000 as meltable binders by melt granulation method. The excipients : PEG 4000 a meltable binder; lactose a filler; and primogel a disintegrant. Melt granulation is a technique for producing solid dispersions in the form of granules using a binder that melts above room temperature. The evaluation data were then statistically analysed with the SPSS application using the independent t-test method. Based on the evaluation data, it was that the assessment data satisfied the criteria for both F1 and F2, specifically: particle size distribution, moisture content, flow velocity, angle of repose (very good), carr index (good enough), and hausner ratio (very good). The conclusions : The results of statistical tests using SPSS from all evaluations that granules made by co-processed excipients using the melt granulation method had no significant effect between PEG 4000 of 7.5% and 15% as a meltable binder on the characteristics of co-processed excipient granules. The features of the co-processed excipient granules to be made can be using a higher concentration of PEG 4000 to see if there are any variations.

Keyword : *co-processed*, PEG 4000, *melt granulation*, *independent t-test*.