ABSTRACT (LITERATURE REVIEW)

EFFECT OF VARIATION OF DIRECT PRINTING CARRIER USE ON PHYSICAL CHARACTERISTICS OF VITAMIN C TABLET FORMULA

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Tablets are one of pharmaceutical preparations mostly used in community. To get a good tablet dosage form, it is necessary to add appropriate carrier material. This study aims to determine the effect of using a variety of carrier materials to make tablet preparations by the direct printing method on physical characteristics of vitamin C tablet. From the three articles reviewed, it can be concluded that the development of a co-processed excipient that meets the requirements for hardness, friability and disintegration time of tablets according to Indonesian Pharmacopoeia III edition is a co-processed excipient article 1, namely the combination of Cassava Starch and Avicel PH 101 which is the best with a ratio of 60: 40. The best compression properties of PS-A co process are 4.97 kp hardness and 0.52% friability with disintegration time that meets pharmacopoeial requirements. In article 2 using a combination of Avicel PH 102 with anhydrous dicalcium phosphate in a ratio of 50: 50 and given pressure variations in the manufacture of tablets. For tablet friability of the three formulas that have the lowest % friability are tablets with a compression pressure of 9 kg. For the disintegration time, the three tablet formulas have met the requirements. Meanwhile, in article 3, using Microcrystalline Cellulose excipient from Nata de Tuberosum has characteristics similar to characteristics of tablets with Avicel PH 102 excipient. The results of tablet evaluation using nata de tuberosum microcrystalline cellulose, namely tablet hardness 4.8 kg, tablet friability 0.42% and disintegration time 1.26 minutes so that it is declared to meet the requirements according to the pharmacopoeia.

Keyword : co-process, exipient, avicel, hardness compression, friability, disintegration,