

ABSTRACT

EFFECT OF POLYPLASDONE XL-10 CONCENTRATION ON CHARACTERISTICS OF COPROCESSED EXCIPIENT MANNITOL-POLYPLASDONE XL-10- PVP K-30 FOR ORALLY DISINTEGRATING TABLET (Prepared Using Fluid Bed Granulation)

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The effect of Polyplasdone XL-10 as superdisintegrant on characteristics of coprocessed excipient mannitol-Polyplasdone XL-10-PVP K-30 prepared by Fluid Bed Granulation method was observed in this research. Coprocessed excipient were prepared with two different concentration of Polyplasdone XL-10 (5% and 10% by weight of the composition). The granules were evaluated physically and surface area of granules were examined using Scanning Electron Microscope (SEM). The result showed that increasing Polyplasdone XL-10 concentration increased compressibility, compactibility, dilution potential and decreased flow rate and disintegration time. Based on statistical analysis using *Independent sample t test* they were significantly different except the angle of repose. This research concluded that the addition of 10% Polyplasdone XL-10 as a superdisintegrant gave faster disintegration time and higher compactibility than 5% Polyplasdone XL-10. Characterization using SEM showed that surface of the granules were not spherical, even though there were no difference between two formulations visually.

Keyword : coprocessed excipient, Polyplasdone XL-10, mannitol,
PVP K-30, fluid bed granulator, orally disintegrating tablet