

Pemanfaatan maltodekstrin pati terigu sebagai eksipien dalam formula sediaan tablet dan niosom

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Abstrak

The Use of Maltodextrin from Wheat Starch as an Exipient in Formula Tablet and Niosom dosage form. Wheat starch normally can be used as a tablet filler only, because the flow rate and binding capacity are not good enough. The wheat starch should be treated as follows : protein and amine free Bogasari wheat flour starch were hydrolyzed by α -amylase enzyme (Liquezym EX®) at variable temperature and time incubation to produce maltodextrin with different Dextrose Equivalent (DE) value. The maltodextrin could be used as tablet binder on wet granulation, tablet filler and binder on direct compress, a proniosom carrier to prepare niosom, a tablet filler, binder and disintegrator on direct compress tablet, a sugar coated tablet material. All of the product used active compound as amodel and the quality were evaluated according to the 4thed. of Indonesian Pharmacopeae and other valid references. The result shows that maltodextrin DE 1?5 could be used as a tablet binder which was processed by wet granulation on 2-5% concentration, as a tablet binder and filler which was processed by direct compress on 30-35%; maltodextrin DE 10-15 could be used as a proniosom carrier then continued to niosom preparation with surfactant composition of 2 mmol (1 mmol for span 60 and 1 mmol for cholesterol). The surfactant and drug concentration of 100 mmol/lit and 5 mmol/lit subsequently was proved to loading the drug as much as 81.28%. Maltodextrin DE 15-20 could be used as a tablet filler, binder and disintegrator at 84%, and starch hydrolyzed of DE 35-40 as a sugar coating which was more economical than sugar.