

## Abstract

Charles University, Faculty of Pharmacy in Hradec Králové

Department of: Pharmaceutical technology

Consultant: doc. PharmDr. Zdeňka Šklubalová, Ph. D.

Student: Mgr. Pavlína Džámová

Title of Thesis: Evaluation of flow and consolidation properties of magnesium aluminometasilicate

Aluminometasilicates belong to modern excipients used in many pharmaceutical dosage forms. Recently, they have been used as the drug carriers especially for their high adsorption capacity. In this work, the bulk and consolidation properties of Neusilin US2 were evaluated. Apart from the traditional methods such as the bulk density and tapped density, the angle of repose, the flow rate through the outlet of a hopper, the helium pycnometry was used for the measurement of the true density. The flow function and the angle of internal friction was estimated by the translation Jenike shear tester. The particles of Neusilin US2 showed high porosity (more than 90 %) and low bulk density. Good to excellent bulk properties were detected.