

# **Abstract**

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**Title of Diploma Thesis:** Determination of flowable liquid retention potential of Aeroperl<sup>®</sup> for three hydrophilic solvents

Preparation of modern dosage form called liquisolid systems may lead to the increased bioavailability of poorly water-soluble drugs. The main principle of their preparation is conversion of the drug in the liquid form to a dry non-adhesive powder with properties suitable for further processing. However, each powder is able to retain only a certain amount of liquid while maintaining appropriate flow properties and compressibility. The objective of this diploma thesis was to determine the flowable liquid retention potential of Aeroperl<sup>®</sup> 300 for three non-volatile solvents (polyethylene glycol 200 and 400 and propylene glycol). The value of flowable retention potential of Aeroperl<sup>®</sup> 300 was established to 0.5, 0.44 and 0.36 for propylene glycol, polyethylene glycol 400 and polyethylene glycol 200, respectively.