

Experimental Data from Spray Granulation Experiments and Surface Roughness Measurements for "*Correlating Granule Surface Structure Morphology and Process Conditions in Fluidized Bed Layering Spray Granulation*"

***Title of Manuscript**

Correlating Granule Surface Structure Morphology and Process Conditions in Fluidized Bed Layering Spray Granulation

***Keywords**

fluidized bed spray granulation, coating, surface roughness, laser-scanning microscopy, product property correlation

***Data Description**

The Excel spreadsheet contains the experimental data from the fluidized bed spray granulation experiments. The process parameters as well as the average bed temperature measured while injecting the solution and the theoretically expected outlet air temperature after the evaporation of the water are given. Furthermore, the mean surface roughness values and standard deviation from the confocal laser-scanning microscopy measurements are given.

Instruments

ProCell® 5 LabSystem with the fluidized bed process chamber GF3 (Glatt, Germany)
3D Laser Scanning Microscope VK-X160K (Keyence, Japan)

Measurement condition

Roughness measurement at 50x magnification

Experimental condition

Initial bed mass = 2 kg
Total mass of spray solution = 1 kg
Solids concentration in solution = 30 wt%

***Contact**

Maike ORTH, M.Sc.
maike.orth@tuhh.de