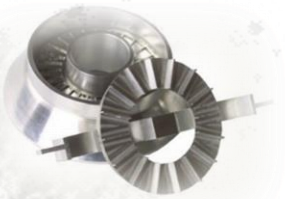


POWDER FLOW PHYSICAL PROPERTIES

Do you need help to understand the flow properties of your Active Pharmaceutical Ingredient (API), excipient or powder blend? Want to know how to apply this information to help you formulate better? Look no further, read on to find out how the scientists at Merlin Powder Characterisation can help ……..

We can measure the flow properties of your API or powder blend by:

- Using small amounts of granules to assess the flow characteristics of your material.
- Assessing how the flow of your powder could change during scale up as size of containers and hoppers change.
- We can also measure bulk and tapped density for Carr's Index.

How do we do it?

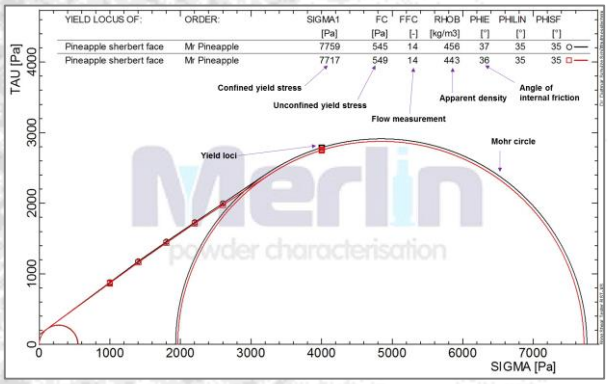
We measure powder flow by using the Schulze RST XS ring shear tester:

- as it is reliable and is a non destructive test where the materials can be reused.
- as testing can be indicative of scale up issues and linked to tablet performance.

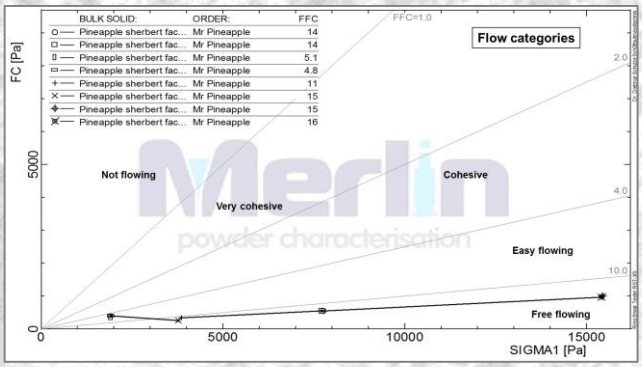
Our laboratory –flow measurement

A choice of the loading forces can be applied to mimic the powder in different sized containers i.e . Large normal load for large hopper

Determination of FFC



Flow function



Minimum Sample size:
4 g Powders (9 cm^3 cell), 10 g granules (30 cm^3 cell)

1-2 Very cohesive | 2-4 Cohesive | 4-10 Easy Flowing | >10 Free Flowing

The shear cell data is useful for understanding flow properties of materials at different stages of development.

Merlin Powder Characterisation Ltd,
Unit 8 The Wallows Industrial Estate, Fens Pool Avenue, Brierley Hill, West Midlands DY5 1QA
www.merlin-pc.com **E-mail: info@merlin-pc.com** **Phone: +44 1509 216741**