

Result 1



MORTAR GRINDER PULVERISETTE 2

downforce: 17,5 daN

mortar and pestle made of zirconium oxide (ZrO_2)

Feed quantity:

50 g

Feed Size:

< 3 mm

Grinding time:

5 min

Final fineness:

d50 < 9,3 μm

d90 < 42 μm

Comments:

After a total grinding time of 5 minutes, the sample starts to stick lightly.

This uses to happen after the majority of particles reached a fineness of < 20 μm . Interacting forces between fine ground particles will become bigger as their own g-force. Therefore, particles will stick to each other and become compressed by the used grinding balls. These clusters of particles also contain bigger particles which will not be ground any further.

For a better fineness, a grinding in suspension might be required.

Present fineness has been determined with Laser Particle Sizer ANALYSETTE 22 Compact and small volume dispersing unit. We found a d50 < 9,3 μm and d90 < 42 μm . The desired fineness has been achieved.

Because the desired fineness has been reached, the grinding trial has been aborted after 5 minutes.