

PET-tubes

Protocol number: M080297
Industry: Chemistry, Plastics / textiles
Feed Size: 130x25mm
Desired Fineness: <1mm
Recommendation: We recommend using the Universal Cutting Mill PULVERISETTE 19 for grinding the sample to <1mm (result 1).

Result 1

Universal Cutting Mill PULVERISETTE 19

Standard Rotor with V-cutting edges and fixed knives made of tool steel

+ Sieve cassette 1 mm trapezoidal perforation



Feed quantity: 38 g
Feed Size: 13,5 cm
Additive: Liquid nitrogen
Grinding time: 1 minute
Final fineness: < 1 mm
Comments: After 30 seconds of grinding, we achieved an output of 30 g. After 1 minute we got 34 g of the sample.
We dipped the PET-tube completely for 1 minute in liquid nitrogen before grinding.
Afterwards, the grinding has been done without any troubles. A grinding of higher amounts is possible.

Result 2

Cutting Mill PULVERISETTE 15

Rotor with straight cutting edges and fixed knives made of tool steel
+ Sieve insert 1 mm trapezoidal perforation



Feed quantity: 38 g
Feed Size: 13,5 cm
Additive: Liquid nitrogen
Grinding time: 1 minute
Final fineness: < 1 mm
Comments: The sample has been fed after embrittlement with liquid nitrogen.

After 1 minute we achieved an output of 17 g. The rest of sample used to remain ground inside of the grinding chamber by electrostatic charge.

We don't recommend using the PULVERISETTE 15 for grinding the preforms.

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