

# 矿石与石英、黏土的混合物

行业:	Geology / mineralogy
进料尺寸:	< 2 mm
最终精度:	< 100 µm
样品量:	1-2 g
研磨建议:	Desired Mini-Mill PULVERISETTE 23 is capable to comminute the samples. By dry grinding, only a certain level of fineness can be reached. For best grinding results, grinding in suspension is recommended.



## MINI-MILL PULVERISETTE 23

speed setting: 50 Hz

10 ml grinding bowl made of tempered steel

+ 1x grinding ball with 15 mm Ø made of tempered steel

Feed quantity:	2 g of sample 2710
Feed Size:	< 200 µm
Grinding time:	1 min
Final fineness:	d99 < 99,4 µm (d50 < 3,5 µm)
Comments:	Original sample # 2710 uses to be quite fine already. After one minute of grinding, sample is only sticking lightly to bowl and ball. We checked the dry grinding result with our Laser Particle Sizer ANALYSETTE 22 and found d50 < 3,5 µm with d99 < 99,34 µm. Only a few particles > 100 µm have been found.

Lightly longer dry grinding is still possible to improve the result somehow. As mentioned in result 1, grinding in suspension of separation and a second grinding of coarse particles can be performed as well to improve the fineness of sample.

Finest grinding results are plausible when sample will be ground in slurry (e.g. with water or proper solvents). For a grinding in suspension, we recommend using a Planetary Micro Mill PULVERISETTE 7 (with premium model, fineness down to  $d_{50} < 50$  nm are possible to reach).



Sample 2710 is also sticking after 1 minute of grinding. Sample can still be brushed out easily.