

pulverisette® 0



Vibratory Micro Mill

- For pulverizing and homogenizing small samples
- Convertible to dry or wet sieving



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CE



Made in Germany

Vibratory Micro Mill „pulverisette 0“

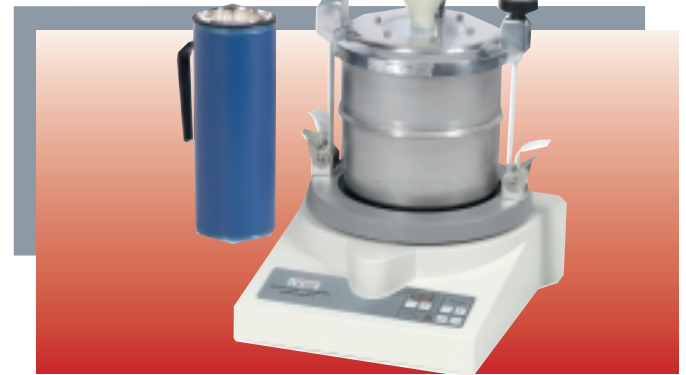
vibratory sieve shaker „analysette 3“ SPARTAN



grinding mortars and balls



„pulverisette 0“ with cryo-box



Field of application

For fine milling of dry lab samples or solids in suspension.
For homogenization of emulsions or pastes.

Method of operation

The vibratory micro mill „pulverisette 0“ achieves size reduction through the combination of impact and friction. An electromagnetically powered mortar generates vibration. These vibrations are transferred to the grinding balls via the grinding stock. The impact energy of the grinding balls can be controlled to suit the application.

Design Characteristics

- Window to observe the grinding process
- Adjustable vibration amplitude so vibration energy can be adapted to suit sample being ground
- Maintenance-free vibratory system isolated and independent of the lab bench for the avoidance of vibration transmissions
- Loss-free grinding in closed vessel guaranteed, even in suspension
- Modular system permits simple conversion to dry- or wet-sieving
- Digital timer

Advantages

- Selective milling. Reduction of size of coarse particles by impact at the beginning of grinding process. Further size reduction of ground material through friction due to tumbling motion of grinding balls.
- Size reduction in a narrow, homogeneous range of grain sizes
- Agglomeration phenomena avoided
- Ergonomically mounted membrane keyboard IP65, protected against spillage
- Plastic housing can be recycled

- Convertible for cryogenic grinding
- Safety tested (CE mark)
- 2 year guarantee

Accessories

■ Cryo-box

The milling set is placed in a cryo-box to grind soft, oily, fatty, resinous or damp materials and by adding liquid nitrogen to embrittle the grinding stock. This method is employed to reduce samples which are very difficult to grind (e.g. sliver of soft PVC) to analytical fineness. The thick insulation of the cryo-box results in low coolant costs.

■ Sound-absorption hood

■ Grinding sets

Material	Density g/cm ³	Abrasion resistance	Material to be ground
Agate* 99.9 % SiO ₂	2.65	Good	Soft to medium-hard sample
Sintered corundum* 99.7 % Al ₂ O ₃	> 3.8	Fairly good	Medium hard, fibrous sample
Zirconium oxide* 94.8 % ZrO ₂	5.7	Very good	Fibrous, abrasive sample
Stainless steel bowl: 17-19 % Cr + 8-10 % Ni ball: 12.5-14.5 % Cr + 1 % Ni	7.8	Fairly good	Medium hard, brittle sample
Tempered steel bowl: 11-12 % Cr ball: 1-1.65 % Cr	7.9	Good	Medium hard, brittle sample
Hard metal Tungsten carbide bowl: 93.5 % WC + 6 % Co ball: 93.2 % WC + 6 % Co	14.89 14.7	Very good	Hard, abrasive sample

* not suitable for cryogenic grinding

Technical data

Features	can be converted to vibratory sieve shaker „analysette 3“ SPARTAN for dry- or wet-sieving
Maximum feed size	< 5 mm
Feed quantity	0.1 to 10 ml
Final fineness	5 to 10 micron
Electrical Details	100-240 V/1~, 50-60 Hz, 50 Watt
Weight	Net 21 kg, gross 22 kg
Dimensions W x D x H	37 x 40 x 20 cm
Packing Details	Carton 50 x 43 x 30 cm

Ordering data

Vibratory Micro Mill „pulverisette 0“ incl. grinding head, without mortar and grinding ball			
Order no.	Description	Order no.	Description
00.6020.00	for 100-240 V/1~, 50-60 Hz	40.0230.27	Zirconium oxide, 50 mm Ø
	Grinding mortars	40.0180.10	Stainless steel, 50 mm Ø
40.0150.05	Agate	40.0190.09	Tempered steel, 50 mm Ø
40.0140.06	Sintered corundum (99.7 % Al ₂ O ₃)	40.0200.08	Hardmetal tungsten carbide, 50 mm Ø
40.0220.27	Zirconium oxide		Further Accessories
40.0130.10	Stainless steel	00.2000.00	cryo-box
40.0120.09	Tempered steel		(device for grinding in liquid nitrogen)
40.0110.08	Hardmetal tungsten carbide	00.0130.17	Soundabsorption hood, plexiglas
	Grinding balls		Accessories for dry- and wet-sieving
40.0170.05	Agate, 50 mm Ø, polished		Vibratory sieve shaker
40.0210.05	Agate, 70 mm Ø, polished		„analysette 3“ SPARTAN
40.0170.06	Sintered corundum (99.7 % Al ₂ O ₃), 50 mm Ø		Contact us for a detailed brochure