KM 100 MORTAR GRINDER

GRINDING, MIXING, TRITURATION

RETSCH mortar grinders are used for the fine grinding as well as the mixing and trituration of soft to hard organic and inorganic substances. The most varied materials, including fluid pastes, can be processed in batches of up to 300 ml with a max. initial grain size of up to approx. 10 mm (depending on the hardness).

These mortar grinders are particularly suitable for the even trituration of homoeopathic and pharmaceutical products.

ADVANTAGES
- high final fineness
- closed grinding chamber with window
- choice of 5 grinding set materials
- dry and wet grinding
- high degree of homogenisation
- loss-free, reproducible processing
- 0 – 60 min. timer and continuous operation
- robust, low-maintenance design to European CE safety standards
- 2-year warranty

FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Application</td>
<td>Dry and wet grinding, mixing and trituration</td>
</tr>
<tr>
<td>Feed stock</td>
<td>Soft, hard, brittle, pasty</td>
</tr>
<tr>
<td>Feed size</td>
<td>&lt; 10 mm</td>
</tr>
<tr>
<td>Final fineness</td>
<td>&lt; 36 µm</td>
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<tr>
<td>Sample volume</td>
<td>50 – 300 ml</td>
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**SELECTION OF GRINDING SETS**

The material for the grinding set is selected primarily according to the degree of hardness of the feed material and a possible influence from the ground material on the subsequent analysis, or, as the case may be, further use. For soft up to medium-hard or pasty materials sets of hard porcelain or sintered corundum are generally sufficient.

For processing without heavy metals agate or zirconia are recommended. Steel grinding sets have proven their suitability for coarser applications. In place of the standard scraper of vulcullan beechwood scrapers can be supplied, for example for the pharmaceutical sector.

<table>
<thead>
<tr>
<th>Material</th>
<th>Composition, approx.</th>
<th>Hardness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agate</td>
<td>99.9% SiO₂</td>
<td>7.0 acc. to Mohs</td>
</tr>
<tr>
<td>Hard porcelain</td>
<td>61.0% SiO₂, 34.0% Al₂O₃</td>
<td>8.0 acc. to Mohs</td>
</tr>
<tr>
<td>Sintered corundum</td>
<td>99.7% Al₂O₃</td>
<td>9.0 acc. to Mohs</td>
</tr>
<tr>
<td>Zirconia</td>
<td>97.0% ZrO₂</td>
<td>8.5 acc. to Mohs</td>
</tr>
<tr>
<td>Special steel 2</td>
<td>86.0% Fe, 11.5% Cr</td>
<td>approx. 60 HRC</td>
</tr>
</tbody>
</table>

**ORDERING DATA**

**MORTAR GRINDER TYPE KM100** (without mortar and pestle)  
**ARTICLE NO.**

- Type KM 100 for 3 x 400 V, 50 Hz: 20.453.0001
- Type KM 100 for 230 V, 50 Hz: 20.453.0002

**ACCESSORIES**  
**ARTICLE NO.**

- Mortar: Hard porcelain: 02.460.0003
- Pestle: Hard porcelain: 02.461.0003
- Mortar: Sintered corundum: 02.460.0004
- Pestle: Sintered corundum: 02.461.0004
- Mortar: Special steel: 02.460.0005
- Pestle: Special steel: 02.461.0005
- Mortar: Agate: 01.460.0059
- Pestle: Agate: 02.461.0006
- Mortar: Zirconia: 02.460.0024
- Pestle: Zirconia: 02.461.0029
- Scraper of beechwood: 05.008.0018
- Replacement scraper of vulcullan: 05.862.0008

**NOISE CHARACTERISTICS** (Noise measurement to DIN 45635-31-01 Class 3)

- Workplace-related emission value: $L_{WA} = 81$ dB (A)
- Sound power level: $L_{PA eq} = 75$ dB (A)

Feed material, size: Silica sand 0.5 - 1 mm

**DIMENSIONS AND WEIGHTS**

- W x H x D: approx. 400 x 700 x 580 mm
- Weight: approx. 98 kg (without grinding set)

RET SCH offers a comprehensive programme of equipment for sample preparation of solids. Just ask for information on our crushers, mills, sample dividers, sieves, shakers, feeders and cleaning and drying units. You will receive complete literature free of charge and without obligation.

Subject to technical modification  
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