

## Press release

## MORTAR GRINDER – The essential instrument in the processing laboratory

Reproducible, loss-free fine grinding, short grinding times, exact results



The Mortar Grinder PULVERISETTE 2 is the essential instrument in the processing laboratory. It is equally suitable for universal fine grinding of inorganic and organic samples, dry or in suspension for analysis, quality control and material testing, as well as for the production and homogenizing of pastes and crèmes in a laboratory standard.

Whenever reproducible grinding conditions, short grinding times, precise results, loss-free milling and dust-free operation are required, the PULVERISETTE 2 is the perfect mill. With a material feed size of 6 - 8 mm and a feed quantity of 30 - 150 ml, a final fineness (depending on the material) of 10 -20 µm can be achieved.

The Mortar Grinder PULVERISETTE 2 is a popular choice and frequently used in the pharmaceutical technology (Galenics). In order to prove within quality assurance that the desired quantity of medicine in a tablet has been processed, a drug analysis is done. For this, the tablet must be pulverised again. With the Mortar Grinder PULVERISETTE 2, 10-20 tablets can be ground. Due to the gentle energy input, no active ingredients are lost - the Mortar Grinder is the appropriate choice. The friction effect of the pestle causes no temperature increase during the grinding process. The active ingredient remains stable. After a grinding duration of 1-5 minutes, a homogeneous powder of approximately <100 µm particle size is obtained.



A further interesting application is the cold grinding of samples with liquid nitrogen. As an example the preparation of tomatoes is shown here. As a first step the tomato chunks are embrittled with liquid nitrogen.



Cryogenic grinding

Next, they can be gently ground with the PULVERISETTE 2. As a mortar, a stainless steel grinding set is used. It has the advantage that even during the grinding process the liquid nitrogen can be added. The result: a fine, homogenous powder.



Tomato chunks – original sample





After the grinding – a fine homogenous powder

**Summary:** We modernized the proven Mortar Grinder PULVERISETTE 2. Here the focus was set on the handling and the reproducibility of grinding tests. The mortar bowl and pestle can be easily removed without tools: Ideal for the quick sampling and easy to clean!

The contact pressure of the pestle onto the mortar bowl wall is achieved via springs, in the horizontal as well as vertical direction. The contact pressure is adjustable without tools, exactly readable and therefore absolutely reproducible.

61 lines with 40 characters Specimen copy requested

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