

*The German
spirit of quality
since 1854*



Sigmund Lindner GmbH operates worldwide as an expert in manufacturing SiLibeads® technical glass and ceramic beads. Our top priority is consistent further development of our product and product ranges. We place high value on sustainability.

SiLibeads® Ceramic Beads

For the production of active ingredients, so-called „Active Pharmaceutical Ingredients“ (API). Highly effective in cell disruption.

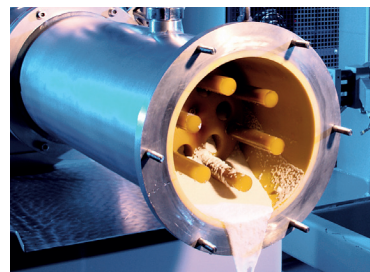
SiLibeads® for the production of active pharmaceutical ingredients (API) for new drugs and therapeutic options

For this purpose, special agitator bead mills are used in the pharmaceutical industry, which guarantee contamination-free processing of the active ingredients.

In the wet grinding process, particles are produced down to nanometer range, which only then achieve their mode of action in the body or an uptake in the body. Without the comminution process, the functionality of the active ingredient is not given.

We supply special high-performance grinding beads with the lowest possible wear in the grinding process or during the preparation of the active ingredients or cells and thus a contamination-free product. The beads are checked by measuring the surface roughness using laser microscopy and a large number of certificates of analysis and GMP-compliant tests are available. In addition, the product is available in special packaging and also as variant washed with high-pure water.

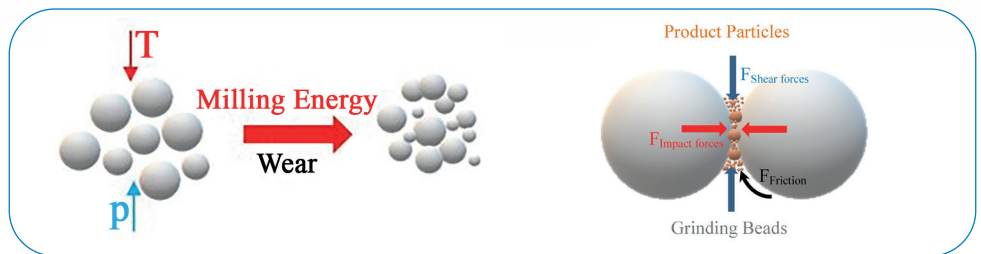
Ceramic beads are also used for cell disruption in special ampoules, e.g. to isolate certain cell components.



Application for particle size reduction (Nanocrystal Technology)

Wet grinding processes - goals

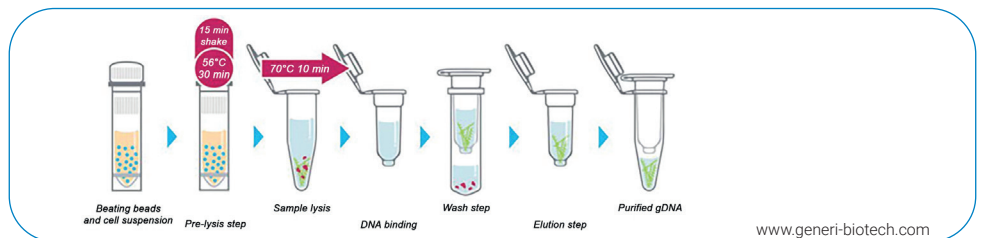
- Special agitator bead mills
- Easy entry and removal of beads
- Top down process, micro- and nanonisation
- Established from very small to very large scale
- Better bioavailability (AUC, cmax) and fast tmax with Nanocrystals
- No contamination with Zirconium and Yttrium (proven by OES, < 10 ppm) in the final suspensions



Application for cell disruption processes (“Bead Beating”)

Beads for kits in homogenizers - goals

- Special prepared and high purity beads
- Glass and ceramic (wide size ranges) and mixtures of materials
- Options:
 - Washed with high purity Water-for-Injection (WFI)
 - Use for Ready-To-Sterilize (RTS) in preparation
 - Packing and sealing as complete service



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