Mini-BeadBeater-1™

The Mini-BeadBeater-1™ violently agitates a sealed microcentrifuge vial containing cells or tissue, extraction solution and hundreds of minute glass beads. Even resistant yeast or fibrous tissues are completely homogenized in 3 to 5 minutes in 0.1 to 1.0 ml of homogenization medium. The non-foaming, non-aerosol method preserves enzymes, nucleic acids and organelles. Ideal for PAGE, polymerase applications and diagnosis using antibody or oligonucleotide probes. Recover high yields of intact DNA or RNA by simultaneous disruption and extraction in phenol, GuaninidiumSCN solutions or commercial kit reagents . Sterile techniques are easily accommodated to recover intracellular virus and bacteria from plant and animal cells. Because the beads and vials are disposable, there is Absolutely Zero cross-contamination between samples - essential for PCR techniques.

Features

- Rapid and highly efficient.
- Totally Sealed - no dangerous aerosols.
- Simple to use.
- Disposable vials and beads - no sample cross-contamination.
- Very high energy shaking - superior to lab vortexers
- Versatile - use for up to 400 mg (wet weight) of bacteria, yeast, algae, tissue culture cells and plant and animal tissue.

Specifications

- **Motor**: 115 Volt A/C, 60 Hz, 0.6 amp, 3 wire grounded plug. (European 220 Volt version available)
- **Dimensions**: 5 inches W, 10 inches D, 7 inches H, shipping wt. 10 lbs
- **Digital**: Touch pad controls speed and length of homogenization.
- **RPM**: 2500, 4200, 4600, and 4800.
- **Time Setting**: 0-5 minutes in 10 second increments.
- **Standard 2.0 ml microvials** with screw-caps containing neoprene o-rings.
- Cell or tissue **capacity** up to 400 mg (wet weight)

Ordering Information

Cat. No.	Product Description
3110BXEUR	Mini-BeadBeater-1, 220-240 Volt A/C 50 Hz version

Note: The MBB-1 uses glass or zirconia-silica beads and commonly available 2 ml screw-cap vials

Mini-BeadBeater-8™

The Mini-Bead-Beater-8™ violently agitates one to eight standard microcentrifuge tubes containing microbial cells or tissue samples and small glass. Even resistant samples like yeast, spores or fibrous tissue are completely homogenized in 3-5 minutes in 0.1 to 1 ml of extraction medium. The non-foaming, aerosol-free method preserves enzymes, nucleic acids and organelles. "Disposable" vials and beads make this method of cell disruption ideal for PAGE, PCR applications and diagnosis using antibody or oligonucleotide probes. Intact DNA or RNA is recovered in the highest possible yields by concurrent disruption and extraction in phenol, Gu-SCN or commercial kit solutions.

Specifications

- Near horizontal shaking pattern gives **maximum efficiency**
- **Capacity**: one to eight microvials (1.5 and 2.0 ml) each handling 1-400 mg (wet weight) bio-samples. Adapter for 5 ml vials also available (see below).
- **100-3200 rpm**, variable speed
- 0-Five minute **timer**, with auto reset
- 10" D X 16" W X 12" H, 27 lbs
- 1000 hour warranty*, parts and labor

*Please Note: Shaking energies of this machine are very high - a requisite for rapid cell disruption. Experience shows that the MBB-8 will wear out in about 1000 hours of "ON" time (that's about 160,000 vials later!). A replacement motor/gear assembly can be installed with simple tools.

Ordering Information

Cat. No.	Product Description
693EUR	Mini-BeadBeater-8 with safety shield, and instructions, 220-240 Volt A/C, 50 Hz, (Max. no-load speed, 2800 rpm) please order beads and vials separately
693TC5	adapter to hold five 7 ml vials in place of the usual eight 2 ml microvials

Mini-BeadBeater-16™

The Mini-BeadBeater-16 disrupts microbial cells and plant and animal tissue by violently agitating four to sixteen 2 ml screw-cap microvials containing small ceramic or steel beads and disruption buffer. Even resistant samples like yeast, spores or fibrous tissue are completely homogenized in 3-5 minutes in 0.1 to 1 ml of extraction medium. The non-foaming, aerosol-free method preserves enzymes and organelles. In the presence of nucleic acid extraction media such as phenol, Gu-SCN or a commercial kit solution, DNA or RNA is recovered in the highest possible yield. The method is ideal for PAGE, PCR applications and diagnostics using antibody or oligonucleotide probes. Because the beads and vials are disposable, there is Absolutely Zero cross-contamination between samples - essential for PCR techniques.

Specifications

- Near horizontal vial orientation, top-to-bottom shaking pattern gives proven, maximum disruption efficiency
- **Capacity:** four to sixteen screw-cap microvials (0.5, 1.5 and 2.0 ml) each handling 1 to 400 mg (wet weight) bio-samples
- **Shaking speed:** 3450 oscillations/min
- 0-5 minute timer, with auto reset
- 10' D X 16' W X 12' H, 35 lbs
- Removable vial cassette

*Important Buying Note: Unlike the earlier MiniBeadbeater-8 designed in 1993, the new Mini-Beadbeater-16 is quiet and built to last for many years. That, plus its increased capacity over the Mini-Beadbeater-8, makes it well worth the extra money. It may look like a Mini-Beadbeater-8 but "under the hood" it is a completely different machine.

Ordering Information

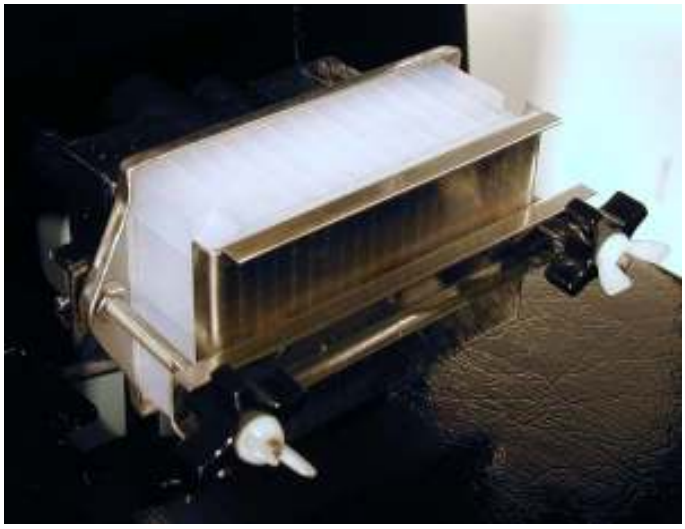
Cat. No.	Product Description
607EUR	Mini-BeadBeater-16 with safety shield, and instructions, 220-240 Volt A/C, 50 Hz, (Max. no-load speed, 2800 rpm) please order beads and vials separately

Mini-BeadBeater-96™

Designed for high-throughput analytical screening, the new MiniBeadbeater-96™, efficiently and safely disrupts up to 192 samples of spores, microorganisms, plant and animal tissue or soil samples at a time. Using the same efficient homogenization process as its predecessors, the MiniBeadbeater-1 and -8, the sample and a large number of tiny ceramic beads are violently shaken for 2-3 minutes to achieve 90+ percent cell disruption. The MBB-96 platform holds one or two deep well microplates or up to 45 standard microvials. The plates, vials and beads are disposable, thus making the method ideal for PAGE, PCR and Probe applications where cross contamination between samples cannot be tolerated. Compatible with phenol, Gu-SCN or various commercial kit solutions, RNA/DNA is quickly recovered in the highest possible yields by doing the cell disruption and nucleic acid extraction simultaneously.

Specifications:

- **Single-phase induction motor**, 1 hp, (11.2 amp @ 115VAC or 5.6 amp @ 230VAC), 18"H X 24"L X 16"W, 115 lbs net wt.
- **Shaking Speed**: 36 oscillations/second or 2100 rpm (speed reduced by 17% with 50Hz power source). Disruption efficiency comparable to that of lower capacity MBB models, thus protocols are interchangeable.
- **Shaking pattern**: Shaking top to bottom of vial or plate in a compressed figure-8 pattern, with vials held in a **horizontal orientation**. Throw: 1.25 in. (3.2 cm).
- **Timer**: 0 - 5 minutes with automatic reset.
- **Sample Capacity**: Holds up to 45 microvials (0.5, 1.5 & 2.0 ml), or one 2 ml deep-well microplate or two 1.1 ml deep-well microplate with each vial or well containing up to 400 mg (wet weight) of biomaterial.



Ordering Information

Cat. No.	Product Description
1001EUR	**MiniBeadbeater-96**. Holds microvials and microplates (see specs above). One microvial rack (part # 702VH45) is included with the MBB-96. Please order beads, microvial, microplates and mats separately, 220-240 Volt A/C 50 Hz version