

Product Catalog

Great Science Starts **Here**®



 OMNI
INTERNATIONAL

Innovative Solutions

Omni International's homogenizers have been a laboratory staple for over 60 years. Omni sets the industry standard with a commitment to outstanding design, performance and a uniquely diversified solution-based product line. We offer a complete portfolio of homogenizers and reagents for sample preparation in pharmaceutical, life science, biotechnology, agricultural, microbiology and chemical research laboratories. Our business is strictly sample preparation focused and we offer the broadest range of solutions to process any sample, including, chemical, high shear, ultrasonic, mortar and pestle, bead mill homogenizers and lab automation systems.

In response to increased activity in global infectious disease research, Omni was first in designing and developing a patented plastic disposable generator probe, the Omni Tip™, which completely eliminates cross-contamination between samples. Our multi-sample and automated homogenizers set the standard by removing the repetitive labor-intensive work of processing samples one at a time.

Customer Service

Our staff of engineers and technicians are dedicated to finding solutions that improve sample processing, reduce noise, and improve sample processing efficiency, while our support team works to assure that we routinely exceed our customers' expectations. We are confident that you will find our products and service superior to others.

[Omni International offers no-risk product evaluations for your convenience.](#)

Quality and Convenience

Omni products offer the most cost-effective choice for quality, service, and convenience to effectively and efficiently process all types of sample preparation applications, usually in 30 seconds or less. We offer the broadest choice of accessories to process the widest range of samples with user-friendly designs that are easy to clean and maintain. They are also backed by years of solution-based experience and excellent customer service.

[Discover for yourself the many benefits that an Omni system has to offer.](#)

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PAYMENT OPTIONS

Purchase Orders
Check or Money Orders
Credit Cards:



Rotor-stator Homogenizers

High shear laboratory homogenizers are designed to process tough samples quickly and efficiently without compromising the sample. Faster processing times mean less chance of heat degradation to the sample. These motors are available in hand-held or stand-mounted configurations with speeds of up to 35,000 rpm. Homogenizers are a standard piece of equipment for any lab. Not sure which configuration will work best for your application? Contact our technical support team at 1-800-776-4431.



Tissue Master

The economically priced Tissue Master is well suited for customers who are homogenizing with little variation in sample size. The Tissue Master includes a stainless steel generator probe making it a great choice for a laboratory with many applications but a limited budget. *Please note: Omni Tip™ Disposable Probes are not compatible with Tissue Master homogenizers.*

PRODUCT FEATURES: CE

- Includes choice of 5 mm, 7 mm or 10 mm stainless steel rotor stator probe
- Variable motor speed control from 5,000 to 35,000 rpm
- Most samples processed in under one minute
- Easy to disassemble and clean
- Portable and lightweight
- Hand-held or stand mountable
- Quiet operation, under 72 db
- Processing Range: 0.20 mL to 100 mL
- 1-year motor warranty

Tissue Master 125 Watt Homogenizer

Ideal for soft tissue applications and emulsions

Includes 125 watt motor, stainless steel generator probe & instruction manual



| Description | Processing Range | Order # |
|---|------------------|--------------|
| 115V Omni Tissue Master 125 with 5 mm Probe | 0.20 mL - 5 mL | TM125-115-05 |
| 115V Omni Tissue Master 125 with 7 mm Probe | 0.25 mL - 30 mL | TM125-115 |
| 115V Omni Tissue Master 125 with 10 mm Probe | 1.5 mL - 100 mL | TM125-115-10 |
| 220V Omni Tissue Master 125 with 5 mm Probe | 0.20 mL - 5 mL | TM125-220-05 |
| 220V Omni Tissue Master 125 with 7 mm Probe | 0.25 mL - 30 mL | TM125-220 |
| 220V Omni Tissue Master 125 with 10 mm Probe | 1.5 mL - 100 mL | TM125-220-10 |
| Motor Stand Assembly - includes baseplate, post & three prong clamp | | F22000 |

Tissue Master 125 Watt Homogenizer Package

Includes the Tissue Master 125 homogenizer motor and three stainless steel generator probes (5 mm, 7 mm & 10 mm)

| Description | Processing Range | Order # |
|---|------------------|------------|
| 115V Omni Tissue Master 125 Homogenizer Package | 0.20 mL - 100 mL | TMP125-115 |
| 220V Omni Tissue Master 125 Homogenizer Package | 0.20 mL - 100 mL | TMP125-220 |

Tissue Master Generator Probes

| Description | Processing Range | Order # |
|---------------------------|------------------|----------|
| 5 mm Tissue Master Probe | 0.20 mL - 5 mL | F2107-05 |
| 7 mm Tissue Master Probe | 0.25 mL - 30 mL | F2107 |
| 10 mm Tissue Master Probe | 1.5 mL - 100 mL | F2107-10 |



Shown with optional stand assy (F22000)

Tissue Homogenizer

The TH is a powerful tissue homogenizer that is designed to handle a wide range of samples from 0.20 mL to 100 mL. The TH can usually process a tissue sample in less than 30 seconds. It is compatible with a wide variety of stainless steel generator probes for flexibility in application requirements. Patented Omni Tip™ Disposable Generator Probes, in both soft tissue and hard tissue versions, are available for customers concerned with cross-contamination. Stainless steel generator probes are recommended for larger and tougher sample types.

The TH will accommodate a wide range of applications such as tissue homogenization, emulsions and suspensions, cell disruption, protein extraction and medical research. It is lightweight enough to be hand-held and can also be mounted to a motor stand for convenience.

PRODUCT FEATURES: CE

- Powerful 150 watt motor
- Lightweight ergonomic design
- Quiet operation, under 72db
- ¼ turn bayonet probe mounting system for fast release
- Variable speed control from 5,000 to 35,000 rpm with separate power switch to maintain last speed setting
- Available in convenient Omni Tip Homogenizing Kits
- 1-year motor warranty
- Processing Range: 0.20 mL to 100 mL

TH Tissue Homogenizer

Includes TH motor, tool kit, motor clamp for stand mounting, Omni Tip™ adapter and instruction manual.

Omni Tips™ and Stainless Steel Generator Probes sold separately.

| Description | Processing Range | Order # |
|---|------------------|---------|
| 115V Omni TH: Tissue Homogenizer (motor only) | 0.20 mL - 100 mL | TH115 |
| 220V Omni TH: Tissue Homogenizer (motor only) | 0.20 mL - 100 mL | TH220 |

TH Homogenizer Package

Includes TH Motor, 3 stainless steel generator probes (5 x 75 mm flat bottom, 7 x 115 mm saw tooth, 10 x 115 mm saw tooth), motor clamp, stand assembly and Omni Tip™ adapter.

| Description | Order # |
|---|---------|
| 115V Omni TH Homogenizer Package | THP115 |
| 115V Omni TH & Motor Stand Assembly (no probes) | TH115-K |
| 220V Omni TH Homogenizer Package | THP220 |
| 220V Omni TH & Motor Stand Assembly (no probes) | TH220-K |
| Stand Assembly includes baseplate and rod | S1000 |



Shown with
optional Stand
Assembly
(Order #S1000)

Stainless Steel Generator Probes

Stainless Steel Generator Probes are ideal for larger sample volume, larger initial sample size, and tougher tissue types. They are also resistant to most organic solvents commonly used during homogenization.

Unsure about which probe to order?

Call 800-776-4431 or e-mail sales@omni-inc.com

Stainless Steel Generator Probes

| Diameter | Processing Range | Recommended Vessel Size | Length | Type | Resulting Particle Size | Order # |
|----------|------------------|---|--------|---------------------------|-------------------------|-----------|
| 5 mm | 0.20 mL - 5 mL | Vessel with a minimum inner diameter of 6 mm | 75 mm | Flat bottom | Fine | G5-75 |
| | | | 75 mm | Flat bottom - Wide Window | Coarse | G5-75W |
| 7 mm | 0.25 mL - 30 mL | Vessel with a minimum inner diameter of 8 mm | 115 mm | Saw Tooth | Fine | G7-115ST |
| | | | 115 mm | Saw Tooth - Wide Window | Coarse | G7-115STW |
| 10 mm | 1.5 mL - 100 mL | Vessel with a minimum inner diameter of 12.5 mm | 115 mm | Saw Tooth | Fine | G10-115 |
| | | | 115 mm | Saw Tooth - Wide Window | Coarse | G10-115W |

Stainless Steel Homogenizer Probe Disassembly Tool Kit

For use with generator probes listed above

| Description | Order # |
|--|---------|
| Stainless Steel Generator Probe Disassembly Tool Kit | T1001 |

Homogenizing Kits

Omni Tip™ Homogenizing Kits include everything you need to homogenize. These kits can be used to process samples with a range of 0.20 mL to 100 mL. They come complete with an OmniTH motor, Omni Tip™ adapter, 12 hard or soft tissue patented OmniTip™ Disposable Generator Probes (7mmx110mm), tool kit and a convenient storage box. The perfect solution for a small laboratory, this kit is cost effective and will process a wide range of applications for multiple users.

PRODUCT FEATURES:

- Ideal for applications requiring no cross-contamination, such as RNA, DNA extractions and PCR
- Variable speed controller from 5,000 to 35,000 rpm
- Omni Tips™ are economical and can be disposed of after use or cleaned and reused multiple times.
- Kits are also available with stainless steel generator probes for more fibrous/tough samples
- Processing Range with Omni Tips: 0.25 mL - 30 mL
- Processing Range with stainless steel probes: 0.20 mL - 100 mL



Omni Tip Kit

Each Kit includes Omni Tissue Homogenizer, Omni Tip Adapter, 12 Soft Tissue and Hard Tissue Omni Tips™ (7 mm x 110 mm), storage box, motor mount, tool kit and manual.

| Description | Order # |
|--|-----------|
| 115V Omni Tip Kit with 6 Soft & 6 Hard Tissue Tips | TH115-PCR |
| 220V Omni Tip Kit with 6 Soft & 6 Hard Tissue Tips | TH220-PCR |

Soft Tissue Omni Tip Kit with 12 Omni Tip™ Probes

For processing liquids, soft tissues

| Description | Order # |
|---|--------------|
| 115V Soft Tissue Omni Tip™ Kit | TH115-PCRD |
| 115V Soft Tissue Omni Tip™ Kit with 5 x 75 mm Stainless Steel Generator Probe (G5-75) | TH115-PCR5D |
| 115V Soft Tissue Omni Tip™ Kit with 7 x 115 mm Stainless Steel Generator Probe (G7-115ST) | TH115-PCR7D |
| 115V Soft Tissue Omni Tip™ Kit with 10 x 115 mm Stainless Steel Generator Probe (G10-115) | TH115-PCR10D |
| 220V Soft Tissue Omni Tip™ Kit | TH220-PCRD |
| 220V Soft Tissue Omni Tip™ Kit with 5 x 75 mm Stainless Steel Generator Probe (G5-75) | TH220-PCR5D |
| 220V Soft Tissue Omni Tip™ Kit with 7 x 115 mm Stainless Steel Generator Probe (G7-115ST) | TH220-PCR7D |
| 220V Soft Tissue Omni Tip™ Kit with 10 x 115 mm Stainless Steel Generator Probe (G10-115) | TH220-PCR10D |



Hard Tissue Omni Tip Kit with 12 Omni Tip™ Probes

For processing hard or frozen tissue samples

| Description | Order # |
|---|--------------|
| 115V Hard Tissue Omni Tip™ Kit | TH115-PCRH |
| 115V Hard Tissue Omni Tip™ Kit with 5 x 75 mm Stainless Steel Generator Probe (G5-75) | TH115-PCR5H |
| 115V Hard Tissue Omni Tip™ Kit with 7 x 115 mm Stainless Steel Generator Probe (G7-115ST) | TH115-PCR7H |
| 115V Hard Tissue Omni Tip™ Kit with 10 x 115 mm Stainless Steel Generator Probe (G10-115) | TH115-PCR10H |
| 220V Hard Tissue Omni Tip™ Kit | TH220-PCRH |
| 220V Hard Tissue Omni Tip™ Kit with 5 x 75 mm Stainless Steel Generator Probe (G5-75) | TH220-PCR5H |
| 220V Hard Tissue Omni Tip™ Kit with 7 x 115 mm Stainless Steel Generator Probe (G7-115ST) | TH220-PCR7H |
| 220V Hard Tissue Omni Tip™ Kit with 10 x 115 mm Stainless Steel Generator Probe (G10-115) | TH220-PCR10H |



Omni Tip™ Disposable Generator Probes

Compatible with TH, TH_Q, GLH 850, Omni Prep, Prep 96 and LH 96

Patented **OmniTip™ Generator Probes** are designed to completely avoid cross-contamination between samples. They are engineered from a durable plastic and come in two different configurations for soft tissue and hard tissue. Designed for research involving critical samples at very small volumes, they prevent sample loss with a unique two-piece design and the clear stator tube. These tips are economical enough to allow for disposal after each use or they can be cleaned and autoclaved up to seven times. Omni Tips™ offer a cost effective solution for customers processing highly sensitive samples where contaminants can affect test results.



Omni Tip™ Plastic Probes
Patent #6,398,402
Patent #6,863,431

PRODUCT FEATURES:

- Eliminate cross-contamination by disposal after use
- Ideal for PCR, DNA and RNA extraction
- Reusable and autoclavable (at 250°F/121°C) *

(Note: Polycarbonate outer tube can be compromised when using harsh reagents/solvents. May limit the number of times the Omni Tip™ can be reused. Factors such as sample type, volume and reagent will determine number of uses.)

- Simple two piece construction for very easy cleaning
- Clear stator tube assures that valuable sample is not trapped or lost in probe
- 80% less protein residue after cleaning than with stainless steel generator probes
- Fraction of the cost of stainless steel generator probes
- Ideal and cost effective for processing multiple samples

- Outer tube comprised of polycarbonate and inner shaft made of Ultem *

(Note: Polycarbonate outer tube can be compromised when using harsh reagents/solvents. May limit the number of times the Omni Tip™ can be reused. Factors such as sample type, volume and reagent will determine number of uses.)

Omni Deaggregation Tips (7 mm diameter x 110 mm length)

For processing liquids, soft tissues, and samples that require gentle processing

| Description | Order # |
|-------------------------------|---------|
| 25 Omni Deaggregation Tips | 30750 |
| 50 Omni Deaggregation Tips | 32750 |
| 100 Omni Deaggregation Tips | 34750 |
| 500 Omni Deaggregation Tips | 35750 |
| 1,000 Omni Deaggregation Tips | 3M750 |

Omni Hard Tissue Tips (7 mm diameter x 110 mm length)

For processing hard or frozen tissue samples

| Description | Order # |
|-----------------------------|---------|
| 25 Omni Hard Tissue Tips | 30750H |
| 50 Omni Hard Tissue Tips | 32750H |
| 100 Omni Hard Tissue Tips | 34750H |
| 500 Omni Hard Tissue Tips | 35750H |
| 1,000 Omni Hard Tissue Tips | 3M750H |

(Note: Omni Tip Adaptor (Order #A1000SB) required to use Omni Tips with GLH, PDH and Omni Tissue Homogenizers TH 115 and 220 with black nose ring)

(Note: Omni Tip Adaptor (Order #12-120) required to use Omni Tips with Omni Tissue Homogenizers TH 115 and 220 with black nose ring with blue nose ring)

Omni Tip™ Hybrid Probes

The **Omni Tip™ Hybrid Probes** combine the convenience of disposable generator probes with the durability of traditional stainless steel probes. Hybrid probes are made up of an outer stainless steel tube with an inner Ultem™ plastic shaft. The plastic shafts can either be disposed of after use or cleaned and reused multiple times. The simple two-piece design makes these probes much easier to clean and disassemble than traditional stainless steel probes.



| Description | Processing Range | Order # |
|--------------------------------------|------------------|----------|
| 7 mm x 110 mm Hybrid Probe | 0.2 mL - 30 mL | 22-007 |
| 7 mm x 110 mm Hybrid Probes (6 pack) | 0.2 mL - 30 mL | 22-007-6 |
| Replacement Shafts (25 pack) | 0.2 mL - 30 mL | 301725HT |

Sealed Conical and Flat Bottom Tubes - Omni Tips™ not included

Polypropylene conical bottom tubes with sealed caps are compatible with Omni Tip™ disposable generator probes to reduce aerosoling during the homogenization process. Tube caps contain a hole for insertion of the Omni Tip into the tube.



| Description | Order # |
|---|------------|
| 15 mL Plastic Conical Bottom Tubes with Sealed Caps (25 pack) | 00-2015-25 |
| 50 mL Plastic Conical Bottom Tubes with Sealed Caps (25 pack) | 00-2050-25 |
| 4 mL Glass Flat Bottom Tubes with Sealed Caps (25 pack) | 00-2004-25 |
| 8 mL Glass Flat Bottom Tubes with Sealed Caps (25 pack) | 00-2008-25 |

Omni Tip™ Adaptor

Required when using Omni Tips™ with the Omni GLH and PDH Homogenizers and Omni TH with a black nose ring.

| Description | Order # |
|------------------|---------|
| Omni Tip Adaptor | A1000SB |

**Omni Tip™ Adapter
(A1000SB)**
(For TH with
Black Nose Ring)



Required when using Omni Tips™ with the Omni TH with a blue nose ring

| Description | Order # |
|------------------|---------|
| Omni Tip Adaptor | 12-120 |

**Omni Tip™ Adapter
(12-120)**
(For TH with
Blue Nose Ring)



GLH 850 General Laboratory Homogenizer

The GLH 850 is a powerful, versatile, and durable homogenizer that can handle virtually any processing application. Its high power motor can handle even the toughest tissue samples, and emulsions and dispersions are quickly and easily completed. The Omni GLH 850 is compatible with stainless steel generator probes and Omni Tip™ disposable probes when used in conjunction with the A1000SB Omni Tip™ Adaptor. It has a processing range of 200 µL to 5 liters, which makes it one of the most flexible homogenizers available. We recommend stand mounting the GLH 850.

PRODUCT FEATURES: CE

- Powerful 850 watt motor with variable motor speed control from 5,000 to 25,000 rpm
- Compatible with 5, 7, 10, 20, 30 mm diameter stainless steel generator probes & Omni Tip™ disposable probes (with an Omni Tip™ Adaptor)
- Process sample volumes of 200 µL to 5 L
- ¼ turn bayonet probe mounting system for quick connection and release of generator probes
- Ideal for longer processing cycles
- 2-year motor warranty

Omni GLH 850 General Lab Homogenizer

Includes 850 watt motor, tool kit, cross rod and stand clamp for mounting and instruction manual. *Omni Tips™ and Stainless Steel Generator Probes sold separately*

| Description | Order # |
|---|---------|
| 110V Omni GLH 850: General Lab Homogenizer (motor only) | 20-010 |
| 220V Omni GLH 850: General Lab Homogenizer (motor only) | 20-020 |

Omni GLH 850 Homogenizer Package

Includes GLH 850 Motor, 3 Stainless Steel Generator Probes (10 x 115 mm saw tooth, 20 x 195 mm saw tooth, 30 x 195mm flat bottom) and Motor Stand Assembly (Order #S1000)

| Description | Order # |
|-------------------------------|----------|
| 110V Complete GLH 850 Package | 20-010-P |
| 220V Complete GLH 850 Package | 20-020-P |

Stand Assembly

 For post-mounted operation

| Description | Order # |
|-------------------------------|---------|
| Optional Motor Stand Assembly | S1000 |



Shown with optional Stand Assembly (Order #S1000)



Stainless Steel Homogenizer Probes

All generator probes are available in Titanium and custom sizes. Call for pricing.

| Omni Homogenizer | Diameter | Processing Range | Recommended Vessel Size | Length | Type | Resulting Particle Size | Order # |
|----------------------------|----------|------------------|---|--------|---------------------------|-------------------------|------------|
| Omni TH (TH15/220) | 5 mm | 0.20 mL - 5 mL | Vessel with a minimum inner diameter of 6 mm | 75 mm | Flat bottom | Fine | G5-75 |
| | | | | | Flat bottom - Wide Window | Coarse | G5-75W |
| Omni GLH 850 (GLH-115/220) | 7 mm | 0.25 mL - 30 mL | Vessel with a minimum inner diameter of 8 mm | 115 mm | Saw Tooth | Fine | G7-115ST |
| | | | | | Saw Tooth - Wide Window | Coarse | G7-115 STW |
| Omni GLH 850 (GLH-115/220) | 10 mm | 1.5 mL - 100 mL | Vessel with a minimum inner diameter of 12.5 mm | 115 mm | Saw Tooth | Fine | G10-115 |
| | | | | | Saw Tooth - Wide Window | Coarse | G10-115W |
| Omni GLH 850 (GLH-115/220) | 20 mm | 50 mL - 2 L | Vessel with a minimum inner diameter of 22 mm | 195 mm | Saw Tooth | Fine | G20-195ST |
| | | | | | Saw Tooth - Wide Window | Coarse | G20-195STW |
| Omni GLH 850 (GLH-115/220) | 30 mm | 75 mL - 10 L | Vessel with a minimum inner diameter of 37 mm | 195 mm | Flat bottom | Fine | G-30NA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | G-30WA-195 |

Stainless Steel Homogenizer Probe Disassembly Tool Kit

For use with generator probes listed above

| Description | Order # |
|--|---------|
| Stainless Steel Homogenizer Probe Disassembly Tool Kit | T1001 |



Mixer and Macro Homogenizing Systems

Mixer and Macro Homogenizers offer the perfect mix of dependability, versatility and power. Sealed containers are available in a variety of materials (stainless steel, glass & plastic). Interchangeable blades and rotor-stator generators process a wide range of samples within the same container. Process sample volumes ranging from 0.25 mL to 30 L with speeds ranging from 500 to 20,000 rpm.

PRODUCT FEATURES: CE

- 3-year motor warranty
- Powerful 600 or 1,800 watt motor
- Variable speed control 500 to 20,000 rpm
- Quiet operation
- Accessories include interchangeable generator probe and cutting blades for sealed chambers.
- Accessories are compatible with all Omni Mixers built within the last 60 years

Omni Mixer Homogenizer

Includes motor with variable speeds, motor stand assembly, generator probe adapter, tool kit and instruction manual.

*Aerosol Sealed Chambers and Generator Probes sold separately.**

- 600 watt motor with variable speeds from 500 to 18,000 rpm
- For processing 0.25 mL-10 L



Omni Mixer

Omni Macro

| Description | Order # |
|-----------------------------|---------|
| 115V Omni Mixer Homogenizer | 17105 |
| 220V Omni Mixer Homogenizer | 17106 |

Omni Macro Homogenizer

Includes motor with variable speeds, motor stand assembly, generator probe adapter, tool kit and instruction manual. *Aerosol Sealed Chambers and Generator Probes sold separately.**

- 1,800 watt motor with variable speeds from 1,000 to 20,000 rpm
- For processing 0.25 mL-30 L

| Description | Order # |
|-----------------------------|---------|
| 115V Omni Macro Homogenizer | 17505 |
| 220V Omni Macro Homogenizer | 17506 |

Macro-ES - Programmable High Power Homogenizer

The Macro-ES Homogenizer is a programmable, 1,800 watt motor unit. It offers the perfect mix of programmability, versatility, and power. The digital speed display allows for additional reproducibility.

PRODUCT FEATURES: CE

- Compatible with all Omni Mixer Accessories
- Powerful 1,800 watt motor
- Quick Connect coupling assembly included
- Ideal for lab automation, pilot scale or small batch applications
- Speed control from 1,000 to 20,000 rpm maintains constant speed over wide operating range for accurate (+/- 0.5%) repeatability
- Store up to 12 programs with multiple speed, time and ramp functions
- 32 digit alpha numeric display
- Movable platform stand
- 3-year motor warranty

Omni Macro-ES Programmable Homogenizer

Includes 1,800 watt motor with variable speeds, motor stand assembly, Quick Connect coupling assembly, 2 Quick Connect Adapters, generator probe adapter, tool kit and instruction manual.

*Chamber Assemblies and Generator Probes sold separately.**



| Description | Order # |
|--------------------------------|---------|
| 115V Omni Macro-ES Homogenizer | MES-115 |
| 220V Omni Macro-ES Homogenizer | MES-220 |

Omni Macro-ES Homogenizer Package

Includes Macro-ES and 3 Stainless Steel Generator Probes (20 x 195 mm saw tooth, 35 x 195 mm flat bottom, 45 x 195mm flat bottom)ip

| Description | Order # |
|--------------------------------|----------|
| 115V Complete Macro-ES Package | MESP-115 |
| 220V Complete Macro-ES Package | MESP-220 |



Stainless Steel Generator Probes

Designed for Omni Mixer, Macro & Macro-ES Homogenizers

All generator probes are available in Titanium and custom sizes. Call for pricing.

| Omni Homogenizer | Diameter | Processing Range | Recommended Vessel Size | Length | Type | Resulting Particle Size | Order # |
|-----------------------------|----------|------------------|---|--------|---------------------------|-------------------------|--------------|
| Omni Mixer (17105/17106) | 10 mm | 1.5 mL - 100 mL | Vessel with a minimum inner diameter of 12.5 mm | 95 mm | Saw Tooth | Fine | 15051 |
| | | | | | Saw Tooth - Wide Window | Coarse | 15051W |
| | | | | 195 mm | Saw Tooth | Fine | 15010 |
| | | | | | Saw Tooth - Wide Window | Coarse | 15010W |
| | | | | 100 mm | Saw Tooth | Fine | 15201 |
| | 20 mm | 50 mL - 2 L | Vessel with a minimum inner diameter of 22 mm | 145 mm | Saw Tooth | Fine | 15401 |
| | | | | | Saw Tooth - Wide Window | Coarse | 15401W |
| | | | | 195 mm | Saw Tooth | Fine | 15020 |
| | | | | | Saw Tooth - Wide Window | Coarse | 15020W |
| | | | | 195 mm | Flat bottom | Fine | 150-35NA-195 |
| Omni Macro (17505/17506) | 35 mm | 75 mL - 10 L | Vessel with a minimum inner diameter of 37 mm | | Flat bottom - Wide Window | Coarse | 150-35WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-45NA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-45WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-55NA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-55WA-195 |
| | 45 mm | 200 mL - 25 L | Vessel with a minimum inner diameter of 47 mm | 195 mm | Flat bottom | Fine | 150-45NA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-45WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-55NA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-55WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-55WA-195 |
| Omni Macro-ES (MES-115/220) | 55 mm | 300 mL - 30 L | Vessel with a minimum inner diameter of 57 mm | | Flat bottom - Wide Window | Coarse | 150-55WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-55WA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-55WA-195 |
| | | | | 195 mm | Flat bottom | Fine | 150-55WA-195 |
| | | | | | Flat bottom - Wide Window | Coarse | 150-55WA-195 |



Generator Probe Accessories

| Description | Order # |
|---|---------|
| Stainless Steel Homogenizer Probe Disassembly Tool Kit | 17104 |
| Generator Probe Adapter (one adapter is included with each motor) | 15001 |

Generator Probe Selection Guide

For all Omni Rotor-Stator Homogenizers

Omni Mixer Accessories

For use with Omni Mixer, Macro & Macro-ES Homogenizers

Quick Connect (QC) Coupling Assembly for Omni Mixer, Macro, Macro ES

The Quick Connect Assembly makes the Omni Mixer homogenizers even more convenient to use. It comes standard on the Omni Macro-ES. To use, attach a Quick Connect Adapter to your chamber assembly or generator probe. Next, slide the Adapter into the Quick Connect Coupling and a retaining ring positions into place for a secure hold. To disconnect, simply slide the ring upward and the processing accessory is conveniently released.

| Description | Order # |
|---|---------|
| Quick Connect Kit (includes QC Assembly and 3 QC Adapters) | 17215 |
| Quick Connect Coupling (Requires one per motor unit) | 17210 |
| Quick Connect Adapter (Requires one per generator or accessory) | 17204 |



Aerosol Sealed Stainless Steel Chamber Assemblies

50 mL Sealed Stainless Steel Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 1-inch Cutting Blade | 13 mL - 50 mL | 17077 |
| 10 mm diameter generator probe for fine to medium particle sizes | 15 mL - 50 mL | 15050 |



400 mL Sealed Stainless Steel Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 90 mL - 400 mL | 17079 |
| 20 mm diameter generator probe for fine to medium particle sizes | 100 mL - 400 mL | 15400 |



PRODUCT FEATURES:

- Fluted to reduce circular flow and enhance processing
- Polished interior to facilitate cleaning
- Available in Titanium (Custom Order)

Custom configurations are also available. *Call for pricing.*

Note: Sealed chamber assemblies are a secondary means of protection.

Always use the appropriate safety measures when processing pathogens.

Aerosol Sealed Glass Chamber Assemblies

For use with Omni Mixer, Macro & Macro-ES Homogenizers

*Note: Sealed chamber assemblies are a secondary means of protection.
Always use the appropriate safety measures when processing pathogens.*

50 mL Sealed Glass Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 1-inch Cutting Blade | 25 mL - 50 mL | 17064 |
| 10 mm diameter generator probe for fine to medium particle sizes | 25 mL - 50 mL | 15064 |



473 mL Sealed Glass Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 175 mL - 350 mL | 17080 |
| 20 mm diameter generator probe for fine to medium particle sizes | 150 mL - 350 mL | 15080 |

946 mL Sealed Glass Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 225 mL - 700 mL | 17081 |
| 20 mm diameter generator probe for fine to medium particle sizes | 200 mL - 700 mL | 15081 |
| 20 mm diameter generator probe for medium to coarse particle sizes | 200 mL - 700 mL | 15081W |



Aerosol Sealed Plastic Chamber Assemblies

473 mL Sealed Polycarbonate Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 175 mL - 375 mL | 17065 |
| 20 mm diameter generator probe for fine to medium particle sizes | 180 mL - 375 mL | 15065 |



946 mL Sealed Polycarbonate Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 250 mL - 800 mL | 17097 |



1892 mL Sealed Polycarbonate Chamber Assembly

| Description | Processing Range | Order # |
|--|------------------|---------|
| PTFE Bearings and 2-inch Cutting Blade | 400 mL - 1350 mL | 17098 |

Other chambers are available for special order. Contact Omni for more details

Omni Prep 6-sample Homogenizer

The Omni Prep 6-Sample Homogenizer is designed to streamline the labor and time intensive homogenization process. It features a brushless motor that is virtually maintenance free, is ultra quiet during operation, and uses about 10% of the power required to process 6 samples individually.

An oscillating sample rack holds up to 6 tubes from 1.5 mL to 50 mL in size and emulates hand processing. Microprocessor control allows the user to program time (up to 10 minutes) and speed (500 - 30,000 rpm). Sample volumes of 0.25 mL to 50 mL can be homogenized using 5, 7 or 10 mm stainless steel generator probes or with Omni Tip™ disposable generator probes.

Omni Tips can be used to completely eliminate cross-contamination as well as the time consuming cleaning step associated with the use of stainless steel generator probes.



PRODUCT FEATURES: CE

- Process 6 samples per cycle and up to 250 samples per hour
- Utilizes Omni Tip™ Generator Probes
- Compatible with stainless steel generator probes from 5 to 10 mm
- Microprocessor controlled with ability to store 3 programs
- Speed Control from 500 to 30,000 rpm
- Process most samples in less than 1 minute
- Positive airflow that can be exhausted to a HEPA-filter or Fume Hood
- Sealed and open vessel processing configurations
- Oscillating (up/down) rack for efficient processing of all size samples
- Clear door allows sample viewing and prevents splashing
- Optional ice tray for frozen samples
- Compact design: 15.7in. (40cm) x 7.8 in. (20cm) x 11.8 in. (30cm)
- 1-year motor warranty

Omni Prep 6-Sample Homogenizer

Includes Omni Prep Motor Drive Unit and User Manual.

| Description | Order # |
|-----------------------|---------|
| Omni Prep Homogenizer | 06-021 |

Omni Prep Accessories

Omni Prep Processing Rack

Movable for highly efficient processing. *Required for operating the Omni Prep.*

| Description | Order # |
|-------------------------------|---------|
| Processing Rack for Omni Prep | 06-220 |



Rack Tube Holder

Tube holders are available for 1.5-2 mL, 5 mL, 15 mL and 50 mL sample tubes. Custom tube holder size are also available. Each holder holds 2 samples tubes, therefore a total of 3 tube holders must be purchased. *Required for operating the Omni Prep.*

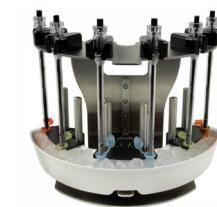
| Description | Order # |
|---------------------------------|-----------|
| Rack Tube Holder for 1.5 - 2 mL | 06-209-02 |
| Rack Tube Holder for 5 mL | 06-209-05 |
| Rack Tube Holder for 15 mL | 06-209-15 |
| Rack Tube Holder for 50 mL | 06-209-50 |



Ice Tray

Keeps frozen and sensitive samples cold during processing. *Rack sold separately.*

| Description | Order # |
|--------------------------------|---------|
| Ice Tray for 1.5 mL-2 mL Tubes | 06-207 |
| Ice Tray for 15 mL-50 mL Tubes | 06-210 |



Stainless Steel Generator Probes

| Description | Order # |
|--|-------------|
| 5mm X 75mm Stainless Steel Probe | B5-075 |
| 5mm X 75mm Stainless Steel Probes (6 Pack) | B5-075-6 |
| 7mm X 110mm Stainless Steel Probe | B7-110ST |
| 7mm X 110mm Stainless Steel Probes (6 Pack) | B7-110ST-6 |
| 10mm X 110mm Stainless Steel Probe | B10-110ST |
| 10mm X 110mm Stainless Steel Probes (6 Pack) | B10-110ST-6 |



7 mm Omni Tip™ Hybrid Generator Probes

The Omni Tip™ Hybrid Probes combine the convenience of disposable generator probes with the durability of traditional stainless steel probes.

| Description | Order # |
|--------------------------------------|----------|
| 7 mm x 110 mm Hybrid Probe | 22-007 |
| 7 mm x 110 mm Hybrid Probes (6 pack) | 22-007-6 |
| Replacement Shafts (25 pack) | 301725HT |



Omni Tips™

Omni Deaggregation Tips (7 mm diameter x 110 mm length)

For processing liquids, soft tissues, and samples that require gentle processing



| Description | Order # |
|-------------------------------|---------|
| 25 Omni Deaggregation Tips | 30750 |
| 50 Omni Deaggregation Tips | 32750 |
| 100 Omni Deaggregation Tips | 34750 |
| 500 Omni Deaggregation Tips | 35750 |
| 1,000 Omni Deaggregation Tips | 3M750 |

Omni Hard Tissue Tips (7 mm diameter x 110 mm length)

For processing hard or frozen tissue samples



| Description | Order # |
|-----------------------------|---------|
| 25 Omni Hard Tissue Tips | 30750H |
| 50 Omni Hard Tissue Tips | 32750H |
| 100 Omni Hard Tissue Tips | 34750H |
| 500 Omni Hard Tissue Tips | 35750H |
| 1,000 Omni Hard Tissue Tips | 3M750H |

Omni Prep 96

The **Omni Prep 96** is a fully automated sample prep homogenizer workstation designed to eliminate bottlenecks and increase throughput in your lab. Its modular and robust design enables walk away processing of up to 96 samples per batch.

The small footprint of the Prep 96 saves valuable bench top space, and will also fit into most standard bio safety cabinets and fume hoods. The User Interface makes it easy for you to program, save, recall or make changes to existing protocols. The latter ability allows for repeatable results while minimizing the element of human error.

PRODUCT FEATURES:

- Walk away automated homogenization
- Reduce the risk of cross contamination
- Increase throughput
- Get consistent results, every time
- Compatible with Omni Tips™, Hybrid and stainless steel generator probes
- Low noise, high repeatability
- Process 4 samples simultaneously;
- 24 to 96 samples, depending on tube size



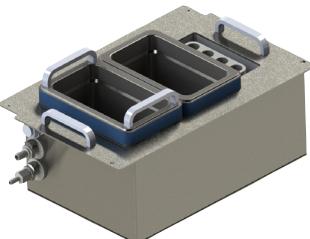
Omni Prep 96 Automated Homogenizer

Omni Prep 96 comes standard with four 40-watt brushless motors, 1 control box, PC, operating software, (1) 14/15 mL x 96 place Sample Tube Rack, and (1) 96 place Omni Tip holder rack.

| Description | Order # |
|--------------------------------------|----------|
| Omni Prep 96 Homogenizer Workstation | 51-001-1 |

Omni Prep 96 Accessories

| Description | Order # |
|-------------------------|-----------|
| Prep 96 Tip Holder Rack | 51-HWR-13 |
| Ultrasonic Bath | 51-HWR-08 |
| Sample Tube Holder Rack | 51-HWR-11 |
| 14/15 mL | |
| Sample Tube Holder Rack | 51-HWR-12 |



Omni LH 96

The Omni LH 96 combines multiple sample prep steps into one versatile, efficient and automated device. Quite literally, what used to take hours can now be completed in a matter of minutes.

This product delivers significantly improved performance in the lab, while saving valuable time and greatly reducing costs related to labor intensive processes. No other device can match the versatility and power of the LH96.

The LH 96 combines a core homogenizing platform, capable of efficiently processing a wide variety of samples, with a fully integrated liquid handling option.

The workstation is compatible with patented Omni Tip™ disposable homogenizing probes, designed to completely avoid cross-contamination between samples during homogenization.

The LH 96 can automatically dispense buffer or diluents based on user defined specifications or actual sample weight. Four independent pipette channels transfer homogenate to 96-well plates or other tube formats.

Automatic Sample Weighing is also available for the LH 96. Integrated sample cooling down to 4°C is also available for those working with frozen and/or delicate samples.

The LH 96 is an ideal instrument for any lab looking to automate processes, especially those who are performing medium to high throughput tissue homogenization.

Omni LH 96 Automated Homogenizer

Includes 8-sample homogenization platform. Customize by choosing from the following options:

Liquid Handling/Automated Sample Transfer, Automated Pipetting,

Sample Weighing and Sample Cooling (Active or Passive)



PRODUCT FEATURES:

- Replace your homogenizer, liquid handler, pipette & weighing platform, all in one automated machine
- Speed up your sample prep
- Reduce space in the lab
- Eliminate risk of cross contamination
- Get consistent results, every time
- Walkaway processing
- Fits in a fume hood

Description

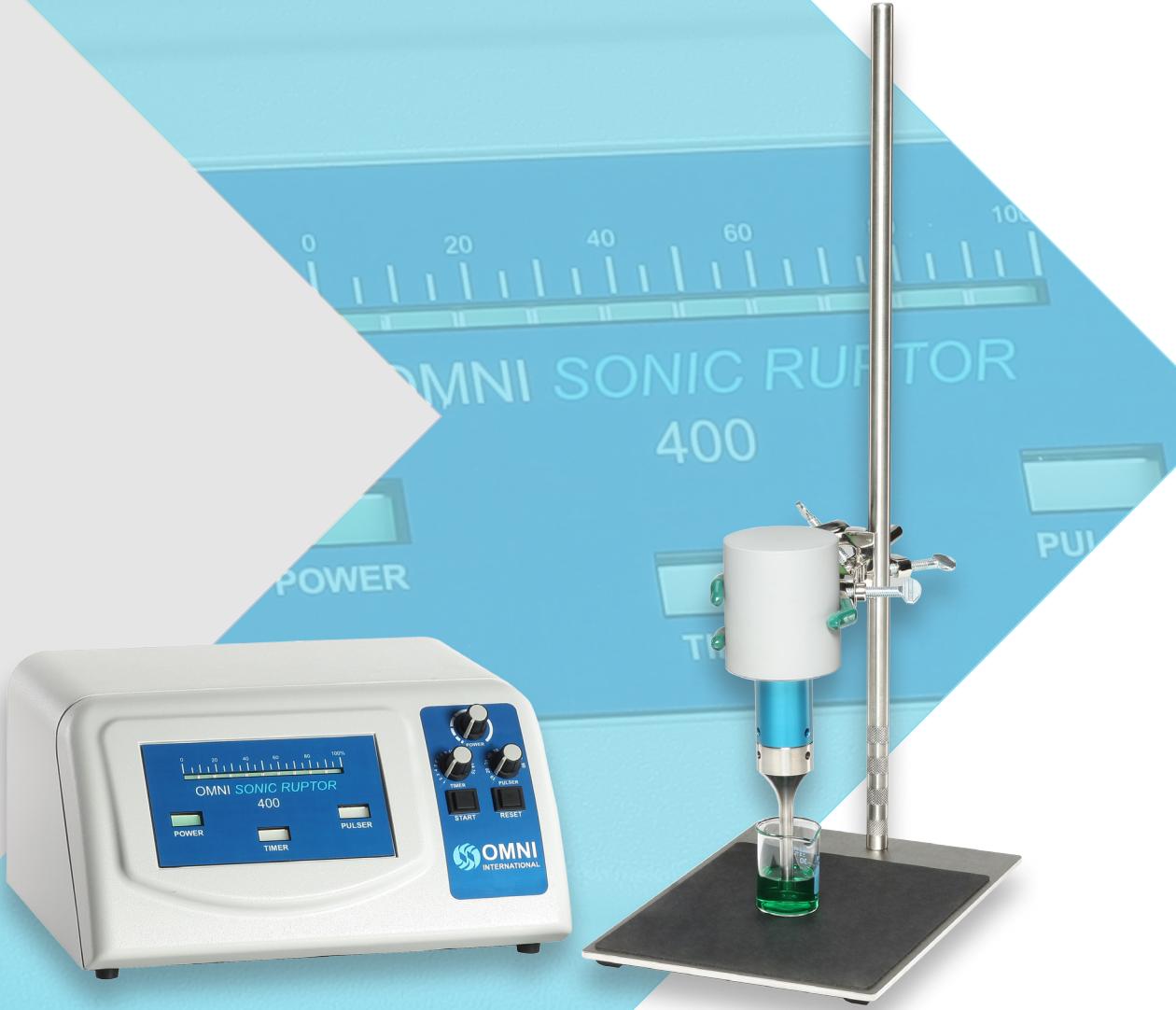
Omni LH 96 Homogenizer Workstation

Order

Call for ordering info

Ultrasonic Homogenizers

Ultrasonic Homogenizers are recommended for samples that require particle size reduction below 1 µm. Common applications include nanoparticle dispersion, creating emulsions, bacteria cell disruptions and DNA shearing. Small and large ultrasonic probes are available to allow for a variety of sample volumes to be processed. Ultrasonic probes are made of chemical resistant solid titanium.



Sonic Ruptor 400 Ultrasonic Homogenizer

The Omni Sonic Ruptor 400 Ultrasonic Homogenizer (SR 400) offers precision engineering with all the features necessary to create a total system for ultrasonic disruption. It can disintegrate most cells, bacteria, spores or tissues. The Omni Sonic Ruptor can prepare an emulsion down to 1/100 of a micron, homogenize "immiscible" liquids, accelerate enzymatic and chemical reactions, stimulate bacterial activity, disperse solids in liquids, degas liquids and shear DNA.

PRODUCT FEATURES:

- 400 Watt Max Power (20kHz System)
- Processing Range: 500 µL - 1 L
- Variable power supply
- Auto-tuning for optimal processing efficiency
- Power-emitted display for accuracy and repeatability
- 0-15 minute timer
- Tips compatible with most 20 kHz systems
- Pulse mode for sensitive samples



Sonic Ruptor 400 Ultrasonic Homogenizer

Includes 400 watt control unit and transducer with variable power output, 2-year warranty, tool kit and instruction manual. *Stand Assembly, Tips, and Accessories sold separately.**

| Description | Order # |
|---|------------|
| 115V Omni Sonic Ruptor 400 Homogenizer | 18-000-115 |
| 220V Omni Sonic Ruptor 400 Homogenizer | 18-000-220 |
| Baseplate, stainless steel support post, three prong clamp & clamp holder | 18-205 |

Sound Abatement Chamber

The Sound Abatement Chamber contains much of the cavitation sound emitted by the Omni Sonic Ruptor 400. This product is recommended for applications that require extended operation. A clear plexiglas door permits viewing of the sample while protecting the operator against accidental splashing.

| Description | Order # |
|-------------------------|---------|
| Sound Abatement Chamber | OR-A-01 |



250 mL Cup Tip

The 250 mL cup tip consists of a solid titanium tip of 2" diameter with a 250 mL cavity machined into one end. The cup tip acts as a small-batch, closed system. High intensity processing. *The Microtube Tray is required for use with the cup tip.*

| Description | Order # |
|--|------------|
| 250 mL Cup Tip | OR-C-250 |
| Microtube Tray for OR-C-250 - holds 8 microtubes | OR-C-250-T |



Sonic Ruptor 4000 Ultrasonic Homogenizer

The Omni Sonic Ruptor 4000 Ultrasonic Homogenizer (SR 4000) has an integrated Sound Control Chamber to contain much of the cavitation sound emitted during processing. It offers precision engineering with all the features necessary to create a total system for ultrasonic disruption. The Omni Sonic Ruptor can disintegrate most cells, bacteria, spore or tissue. It can also prepare an emulsion down to 1/100 of a micron, homogenize "immiscible" liquids, accelerate enzymatic and chemical reactions, stimulate bacterial activity, disperse solids in liquids and degas liquids.

PRODUCT FEATURES:

- 400 Watt Max Power (20kHz System)
- Processing Range: 500 µL - 1 L
- Integrated Sound Abating Chamber with Clear Plexiglas Door
- Auto-tuning for optimal processing efficiency
- Power-emitted display for accuracy and repeatability
- 0-15 minute timer
- Tips compatible with most 20kHz systems
- Pulse mode for sensitive samples
- Two-year control unit warranty

Sonic Ruptor 4000 Ultrasonic Homogenizer

Includes 400 watt control unit and integrated Sound Control Chamber with variable power output, 2-year warranty, tool kit and instruction manual. *Tips sold separately.**



Description

Order

| | |
|---|------------|
| 115V Omni Sonic Ruptor 4000 Homogenizer | OR4000-115 |
| 220V Omni Sonic Ruptor 4000 Homogenizer | OR4000-220 |

Solid Titanium Tips

All Solid Tips are of a single-piece design. Each includes a package of five Interface Washers.

| Product | Intensity | Tip Size | Processing Range | Order # |
|----------------------|-------------|--|------------------|-----------|
| 5/32" Processing Tip | Very High | Diameter: 5/32" (3.8 mm) Length: 10.1" (25.6 cm) | 250 µL - 10 mL | OR-T-156 |
| 3/8" Processing Tip | High | Diameter: 3/8" (9.5 mm) Length: 8.6" (21.8 cm) | 10 mL - 250 mL | OR-T-375 |
| 1/2" Processing Tip | Medium-High | Diameter: 1/2" (12.7 mm) Length: 5.38" (13.65 cm) | 10 mL - 300 mL | OR-T-500 |
| 3/4" Processing Tip | Medium | Diameter: 3/4" (19 mm) Length: 4.1" (10.5 cm) | 25 mL - 500 mL | OR-T-750 |
| 1" Processing Tip | Low | Diameter: 1" (25.4 mm) Length: 4.85" (12.3 cm) | 50 mL - 1 L | OR-T-1000 |



Bead Mill Homogenizers

Bead mills are an ideal solution for high throughput disruption of tough and fibrous samples. Bead Ruptor bead mills are designed to disrupt both soft and hard samples by shaking the sample in a tube pre-filled with beads. Sample disruption is accomplished by multiple high intensity collisions between the sample and bead matrix.

Bead mill homogenizers allow for closed vessel and multiple sample processing with no risk of cross-contamination.



Bead Ruptor 4 - Mini Bead Mill Homogenizer

Built upon the innovative design and unsurpassed quality of Omni's Bead Ruptor family, the Bead Ruptor 4 provides powerful performance in a compact design.

Using disposable sample tubes pre-filled with a variety of lysing beads, the Bead Ruptor vigorously and uniformly shakes the tubes providing efficient, consistent, high-yield and quality homogenization usually in less than 30 seconds.

The Bead Ruptor 4 is an ideal solution for releasing DNA, RNA, proteins, enzymes, etc. from very tough and small samples while still retaining molecular integrity.

PRODUCT FEATURES: CE

- Homogenizing up to 4 samples in seconds
- Reproducible extraction of proteins and nucleic acids
- Interchangeable 7 mL tube carriage
- Simultaneously processing 4 x 0.5 mL, 4 x 1.5 mL, 4 x 2 mL or 1 x 7 mL sample
- Broad performance range — gentle mixing to high force homogenization
- Small footprint — requires minimal bench space
- 1-year warranty

Omni Bead Ruptor 4 Mini Bead Mill Homogenizer

Includes Bead Ruptor 4 with integrated 0.5mL, 1.5mL and 2mL tube carriage, 7mL tube carriage, tool kit and User Manual. *Bead Ruptor disposable tubes and bead kits sold separately.*



| Description | Order # |
|---|---------|
| Omni Bead Ruptor 4 Mini Bead Mill Homogenizer | 25-010 |

Bead Ruptor 12

The Bead Ruptor 12 is the most powerful and quickest economical bead mill homogenizer available today. The Bead Ruptor 12 is designed with a unique tube carriage motion to ensure that the intra-tube bead movement reduces swirling and results in a high bead impact force. The Bead Ruptor 12 is more powerful than competing bead mills that are twice the cost making it an excellent solution for any lab working with tissues or cellular material.

The Bead Ruptor 12 eliminates the tedious task of screwing down finger plates. The patent pending snap-in tube carriage allows tubes to be "snapped in" and "snapped out" easily, thus decreasing workload and increasing safety. The Bead Ruptor 12 is an ideal bead mill for core laboratories or as a shared resource.

PRODUCT FEATURES:

- Simultaneously homogenize up to 12 x 2mL or 0.5mL and 4x7 mL tubes
- Convenient front-loading tube holder position for ease of use and optimal bead/sample interactions
- Processing range is ideal for soft tissue samples
- No cool-down required between runs = non-stop processing
- Disposable tubes ensure no threat of cross-contamination
- Small footprint to maximize bench space
- 1-year warranty



Omni Bead Ruptor 12 Bead Mill Homogenizing System

Includes Bead Ruptor 12 Drive Unit, Tube Carriage and User Manual. *Bead Ruptor bead tubes sold separately.*

| Description | Order # |
|---|---------|
| Omni Bead Ruptor 12 Bead Mill Homogenizing System | 19-050 |

Omni Bead Ruptor 12 and 24 – 4 x 1.5 mL Microtube Adaptor

1.5 mL microtube adapter fits in 7 mL tube carriage on Bead Ruptor 12 and 24. Allows 1.5 mL microtubes to be processed.

| Description | Order # |
|---|-------------|
| Bead Ruptor 12 and 24 Microtube Adaptor, 4-pack | 19-353-0150 |



Bead Ruptor 24 Elite

The Bead Ruptor 24 Elite is the most advanced and powerful bead mill homogenizer available. It is designed for grinding, lysing, and homogenizing biological samples prior to molecular extraction. Available with a wide range of accessories the Bead Ruptor 24 Elite enables processing of samples in volumes ranging from 0.5 mL to 50 mL. The optional Bead Ruptor 24 Cryo Cooling Unit is designed to prevent the increase of sample temperature during the homogenization process.

The Bead Ruptor 24 Elite unique tube carriage motion coupled with sample specific bead beating materials ensure that a thorough homogenate is achieved regardless of the sample type. The high lysing efficiency of the Bead Ruptor 24 Elite results in an increase in nucleic acid, protein and small molecules yields and increases the sensitivity of the downstream assay.

PRODUCT FEATURES:

- Wide range of accessories for any sample size -
24 x 0.5 mL, 24 x 1.5 mL, 24 x 2 mL, 12 x 7 mL, 3 x 15 mL,
6 x 30 mL, 3 x 50 mL, or 96-well strip well tubes.
- Most powerful bead mill on the market – homogenize
the most challenging samples
- No cool down required between runs: process
hundreds of samples per day



- Convenient front loading design, 99 programmable memory settings, and multilingual user interface
- Ideal homogenizer for extraction of DNA, RNA, proteins, and small molecules
- New touch screen interface
- Optimate™ Software User Interface

Omni Bead Ruptor 24 Elite Bead Mill Homogenizing System

Includes Bead Ruptor 24 motor drive and User Manual. *Bead Ruptor tube carriages and disposable tubes sold separately.*

| Description | Order # |
|---|---------|
| Omni Bead Ruptor 24 Bead Mill Homogenizing System | 19-040E |

Bead Ruptor Rack

This optional Bead Ruptor Rack is available for storage of 3 loaded 1.5 mL or 2 mL Tube Carriages before and after processing. Rack and Tube Carriages sold separately. *Note: Not compatible with the 7ml, 15 mL, 30 mL and 50 mL tube carriages or 96 strip carriage. Can be refrigerated for precooling samples.*

| Description | Order # |
|------------------|------------|
| Bead Ruptor Rack | 19-010-604 |



Bead Mill Homogenizer Accessories

For use with Bead Ruptor 24 Bead Mill

96 Strip Well Tube Carriage *Patent pending. Not compatible with Omni Bead Ruptor Cryo attachment

| Description | Volume | Order # |
|-----------------------------|-------------------|------------|
| 96 Strip Well Tube Carriage | 96 x 1.2 mL tubes | 19-010-330 |



1.5 mL Microtube Carriage Kit

| Description | Volume | Order # |
|---|-------------------|-------------|
| 1.5 mL Microtube Carriage Kit with Finger Plate | 24 x 1.5 mL tubes | 19-010-310S |
| Replacement 1.5 mL Microtube Carriage | 24 x 1.5 mL tubes | 19-309-02S |



2 mL Tube Carriage Kit

| Description | Volume | Order # |
|--|--------------------------------|--------------|
| 2 mL Tube Carriage Kit with Finger Plate | 24 x 2 mL or 24 x 0.5 mL tubes | 19-010-310 |
| Replacement 2 mL Tube Carriage | 24 x 2 mL or 24 x 0.5 mL tubes | 19-010-30902 |



7 mL Tube Carriage Kit *Patent pending.

| Description | Volume | Order # |
|---------------------------------------|-----------------|------------|
| 7 mL Tube Carriage Kit with Lock Ring | 12 x 7 mL tubes | 19-345-007 |
| Replacement 7 mL Tube Carriage | 12 x 7 mL tubes | 19-345-107 |



15 mL Tube Carriage Kit *Patent pending. Not compatible with Omni Bead Ruptor Cryo attachment

| Description | Volume | Order # |
|--|-----------------|------------|
| 15 mL Tube Carriage Kit with Lock Ring | 3 x 15 mL tubes | 19-345-015 |
| Replacement 15 mL Tube Carriage | 3 x 15 mL tubes | 19-345-115 |



30 mL Tube Carriage Kit *Patent pending. Not compatible with Omni Bead Ruptor Cryo attachment

| Description | Volume | Order # |
|--|-----------------|------------|
| 30 mL Tube Carriage Kit with Lock Ring | 6 x 30 mL tubes | 19-345-035 |
| Replacement 30 mL Tube Carriage | 6 x 30 mL tubes | 19-345-135 |



50 mL Tube Carriage Kit *Patent pending. Not compatible with Omni Bead Ruptor Cryo attachment

| Description | Volume | Order # |
|--|-----------------|------------|
| 50 mL Tube Carriage Kit with Lock Ring | 3 x 50 mL tubes | 19-345-050 |
| Replacement 50 mL Tube Carriage | 3 x 50 mL tubes | 19-345-150 |



The Bead Ruptor 24 is sold as a customizable system. At least 1 tube carriage is required to operate the Omni Bead Ruptor 24.

BR-Cryo Cooling Unit - For use with the Bead Ruptor 24

The BR-Cryo Cooling Unit is compatible with the Bead Ruptor 24 and is designed to prevent the increase of sample temperature during the homogenization process. Friction generated through the bead milling process generates heat that is imparted to the sample. In order to maintain a constant processing temperature during homogenization, the BR-Cryo passes chilled air (-100°C to -50°C) into the sample processing chamber and across the sample tubes to dissipate heat.

PRODUCT FEATURES:

- Adjustable cooling rate
- Compatible with liquid nitrogen or dry ice with ethanol
- BR-Cryo maintains sample temperatures from 4°C to ambient
- Prevent protein degradation
- Ensure RNA stability
- Prevent enzyme activation
- 1-year warranty

Bead Ruptor BR-Cryo Cooling Unit

The BR-Cryo Cooling Unit keeps samples cool before, after & during processing. Used with liquid nitrogen or dry ice, it maintains a consistent temperature for heat sensitive samples. Compressed air travels through a heat exchanger, where liquid nitrogen or dry ice cool the air prior to moving it across the sample tubes.

Please note: Compressed air and liquid nitrogen or dry ice are required to operate the Cryo Cooling Unit. Some assembly required. Not compatible with Bead Ruptor 4, Bead Ruptor 12, Bead Ruptor 24 (15 mL, 30 mL, 50 mL and 96 strip tube carriages).



| Description | Order # |
|----------------------|---------|
| BR-Cryo Cooling Unit | 19-8010 |

Pre-filled Bead Mill Tubes

| Bead Media | Tube Size | Bead Size | Description | Quantity | Order # | Bead Ruptor Compatibility | DNase/Rnase Free | Microbial DNA Free |
|------------|-----------|--|---|----------|----------|---------------------------|------------------|--------------------|
| | | | | | | BR4 | BR12 | BR 24 |
| Glass | 2 mL | 0.1 mm | Micro-Organism Lysing Mix | 50 | 19-621 | | | |
| | | 0.5 mm | Tough Micro-Organism Lysing Mix | 50 | 19-622 | | | |
| | | 0.5 mm | Tough Micro-Organism Lysing Mix | 50 | 19-622D | | | |
| Garnet | 0.5 mL | 0.15 mm | Small Volume Micro-Organism Lysing Mix | 50 | 19-623 | | | |
| | | 2 mL | 0.7 mm Hard & Fibrous Tissue Homogenizing Mix | 50 | 19-624 | | | |
| Carbide | 0.5 mL | 0.25 mm | RNA Extractions, Micro-Organism & Soil Homogenizing Mix | 50 | 19-625 | | | |
| Metal | 1.5 mL | 2.4 mm | Hard Tissue Grinding Mix | 50 | 19-610 | | | |
| | 2 mL | 2.4 mm | Hard Tissue Grinding Mix | 50 | 19-620 | | | |
| | | 2.4 mm | Hard Tissue Grinding Mix | 50 | 19-620D | | | |
| | 7 mL | 2.4 mm | Hard Tissue Grinding Mix | 50 | 19-670 | | | |
| | 30 mL | 2.4 mm | Hard Tissue Impaction Grinding Mix with 1/4" Ceramic | 50 | 19-6350Z | | | |
| Ceramic | 0.5 mL | 1.4 mm | Small Volume Soft Tissue Homogenizing Mix | 50 | 19-626 | | | |
| | 1.5 mL | 1.4 mm | Soft Tissue Homogenizing Mix | 50 | 19-617 | | | |
| | | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-618 | | | |
| | 2 mL | 1.4 mm | Soft Tissue Homogenizing Mix | 50 | 19-627 | | | |
| | 2 mL | 1.4 mm | Soft Tissue Homogenizing Mix | 50 | 19-627D | | | |
| | | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-628 | | | |
| | 7 mL | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-628D | | | |
| | | 2.8 mm | Organic Solvent Compatible Mix | 50 | 19-628S | | | |
| | 15 mL | 1.4 mm | Soft Tissue Homogenizing Mix | 50 | 19-677 | | | |
| | | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-678 | | | |
| 30 mL | 1.4 mm | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-6158 | | | |
| | 1.4 mm | Soft Tissue Homogenizing Mix | 50 | 19-6350 | | | | |
| | | Soft Tissue Impaction Homogenizing Mix with 1/4" Ceramic | 50 | 19-6357Z | | | | |
| | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-6358 | | | | |
| | 2.8 mm | Hard Tissue Impaction Homogenizing Mix with 1/4" Ceramic | 50 | 19-6358Z | | | | |
| 50 mL | 2.8 mm | Hard Tissue Homogenizing Mix | 50 | 19-6508 | | | | |

Bulk Bead Mill Tubes

Tube Selection Guide

| Tube Size | 20 µL | 100 µL | 1 mL | 5 mL | 15 mL | 30 mL | 50 mL |
|------------------|-------|-----------------|-------------|--------------|--------------|--------------|-------|
| 0.5 mL | | 20 µL - 300 µL | | | | | |
| 1.2 mL stripwell | | 20 µL - 800 µL | | | | | |
| 1.5 mL | | 20 µL - 1.5 mL | | | | | |
| 2 mL | | 100 µL - 1.8 mL | | | | | |
| 7 mL | | | 1 mL - 5 mL | | | | |
| 15 mL | | | | 5 mL - 15 mL | | | |
| 30 mL | | | | | 5 mL - 30 mL | | |
| 50 mL | | | | | | 5 mL - 50 mL | |



| Omni Bead Ruptor | Tube Size | Description | Quantity | DNase/RNase Free | Order # |
|-------------------------------|-----------|--|----------|------------------|-------------|
| | 0.5 mL | Non-reinforced Tubes with caps | 500 | | 19-650 |
| Bead Ruptor 4 (25-010) | 1.5 mL | Polypropylene microtube, RNase, DNase free | 500 | | 19-661 |
| | | | 1,000 | | 19-661-1000 |
| Bead Ruptor 12 (19-050) | 2 mL | Non-reinforced Tubes with caps | 500 | | 19-647 |
| | | Reinforced Tubes with caps | 500 | | 19-648 |
| Bead Ruptor 24 (19-040) | 7 mL | Empty Tubes with caps | 1,000 | | 19-649 |
| | 1.2 mL | Rack of 96 Strip Well Tubes | 10 racks | | 19-696 |
| Bead Ruptor 24 (19-040) | 15 mL | Empty Tubes with caps | 100 | | 19-6615 |
| | | | 500 | | 19-6615-500 |
| | 30 mL | Empty Tubes with caps | 100 | | 19-6635 |
| | | | 500 | | 19-6635-500 |
| | 50 mL | Empty Tubes with caps | 100 | | 19-6650 |

BULK BEADS For Omni Bead Mill Homogenizers, Certified RNase/DNase free

| Bead Media | Bead Size | Bead Quantity | Description | Order # |
|---------------|-----------|------------------|------------------------|---------|
| Glass | 0.1 mm | 400 g | Fills 500 x 2 mL tubes | 19-641 |
| | 0.5 mm | 400 g | Fills 500 x 2 mL tubes | 19-642 |
| Garnet | 0.15 mm | 500 g | Fills 500 x 2 mL tubes | 19-643 |
| | 0.7 mm | 500 g | Fills 500 x 2 mL tubes | 19-644 |
| Ceramic | 1.4 mm | 325 g | Fills 500 x 2 mL tubes | 19-645 |
| | 2.8 mm | 325 g | Fills 500 x 2 mL tubes | 19-646 |
| | 6.5 mm | 325 g | Fills 500 x 2 mL tubes | 19-682 |
| Metal | 2.4 mm | 500 g | Fills 500 x 2 mL tubes | 19-640 |



BULK BEADS

Bead Selection Guide

| SAMPLE TYPE | BEAD MEDIA | | | | | | | |
|--|-----------------|-----------------|-------------------|------------------|--------|-------------------|--------|-----------------|
| | Glass 0.1 mm | Glass 0.5 mm | Garnet 0.15 mm | Garnet 0.7 mm | 1.4 mm | Ceramic 2.8 mm | 6.5 mm | Metal 2.4 mm |
| Bacteria/ Cultured Cells | ■ | ■ | | | | | | |
| Spores | | | | | | | | |
| Yeast/Fungi | | | | | | | | |
| Algae/Plankton | | ■ | | | | | | |
| Soft Soil/Sediment/ Waste Water | | | ■ | | | | | |
| Clay/Faeces/ Sludge | | | | ■ | | | | |
| Soft Tissues Brain, Liver, Kidney | | | | | ■ | ■ | | |
| Hard Tissues Heart, Muscle, Skin | | | | | | ■ | | |
| Plant Material | | | | | | | | |
| Dry Grinding | | | | | | ■ | ■ | |
| Dense Biological Material Hair, Bone, Seeds | | | | | | | | |



Nucleic Acid Purification Kits - For use with the Bead Ruptor Homogenizers

DNA and RNA purification kits are designed for use with the Omni Bead Ruptor bead mill homogenizers. Omni Nucleic Acid Purification Kits contain spin-capture columns, pre-filled bead beating tubes and nontoxic reagents. The optimized reagents are designed specifically for sample dissociation through bead milling and ensure high quality DNA or RNA is extracted in high yields. Omni pre-filled bead tubes contain an optimized amount of lysing matrix and are certified DNase/RNase free to ensure purified DNA/RNA is of the highest quality. DNA and RNA purified using the Omni Bead Mill Nucleic acid Purification Kits are ready for downstream applications such as PCR, RT-PCR, southern blots, northern blots, and enzyme digestions.



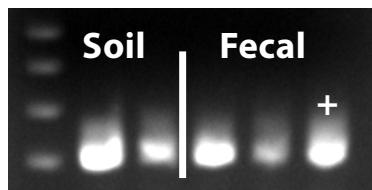
Yeast DNA Kit

PRODUCT FEATURES:

- Nucleic acid extraction kits designed specifically for bead mill homogenization
- Contains pre-filled bead tubes, spin-columns and extraction reagents
- Rapid DNA and RNA isolation
- Non-toxic reagents with no organic extractions
- Pre-filled bead tubes certified DNase/RNase Free

Removal of PCR Inhibitors from Soil and feces

Each soil and fecal DNA sample was spiked with 70 ng of pGLO plasmid DNA. Genomic DNA was extracted using the Omni soil and fecal DNA kits. DNA was then subjected to end point PCR to detect the GFP gene (714 bp). It is important to note that no inhibitors were found from either of the extractions.



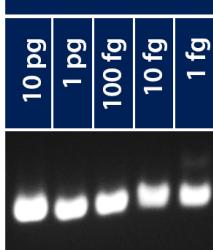
Optimized for Bead Mill Homogenization



Nucleic Acid Purification Kits - For use with the Bead Ruptor Homogenizers

PCR products obtained from DNA isolation of *S. cerevisiae*

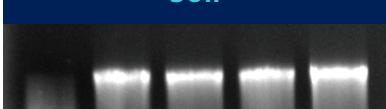
S. cerevisiae



DNA was purified from Saccharomyces cerevisiae using the Omni Bead Mill fungal DNA Purification Kit. PCR targeted a conserved 450 bp region of the 16S gene

Genomic DNA Obtained from 0.2 grams of soil

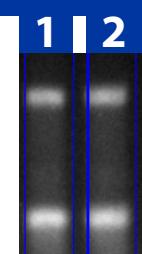
Soil



Soil was dissociated via bead beating. Inhibitors were removed and DNA was purified using the Omni Bead Mill Soil DNA kit. DNA was analyzed on a 1% agarose gel and stained with EtBr.

High quality RNA purified from *Bacillus cereus* cells

B. cereus



RNA was purified from *B. cereus* cells using the Omni Bead Mill bacterial RNA purification kit. RNA was analyzed on a 1% agarose gel and stained with EtBR.

High quality DNA obtained from bacteria and tissues

E.coli | Rat Brain | Rat Heart



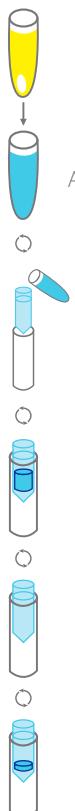
DNA was purified using the Omni Bead Mill Bacterial and Tissue DNA Purification kits. DNA was analyzed on a 1% agarose/ E+Br gel

Nucleic Acid Purification Kits - For use with the Bead Ruptor Homogenizers

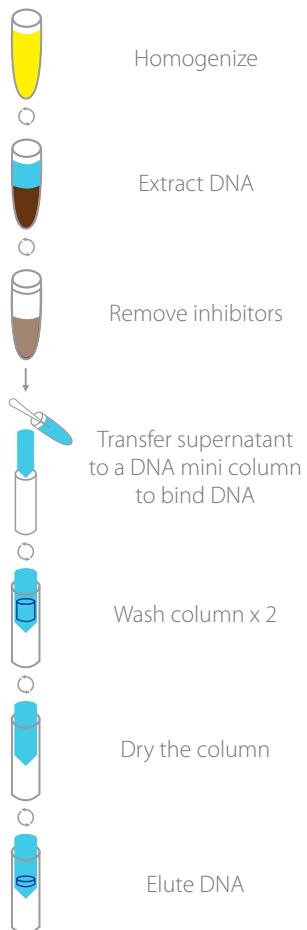
Example of DNA Protocols

1. Samples are resuspended in bead mill lysis buffer.
2. Samples are dissociated through bead mill homogenization.
3. For Soil and Fecal Kits inhibitors are removed
4. Homogenate is passed through the Omni spin column to bind DNA or RNA.
5. Column is washed to remove contaminates.
6. DNA is eluted

TISSUE AND CELLS



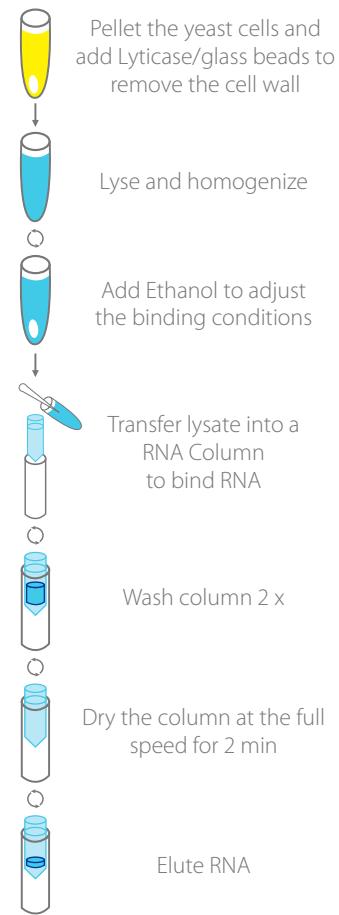
SOIL AND FECES



Example of RNA Protocol

1. Fungal cell walls are permeabilized with lyticase
2. Cell disruption through bead milling
3. RNA is bound to the spin-column matrix
4. Contaminants are removed through washing
5. High purity RNA is eluted from column

YEAST AND BACTERIA



Nucleic Acid Purification Kits - For use with the Bead Ruptor Homogenizers

Includes Pre-filled bead tubes, nucleic acid extraction reagents, nucleic acid spin capture columns, collection tubes and user manual.

| TARGET | PRODUCT | PREPS | CATALOG # | SAMPLE SIZE | PRE-FILLED BEAD TUBES |
|-------------|-----------------------------|-------|-----------|-------------------------------|--------------------------|
| Genomic DNA | Tissue DNA Kit | 50 | 26-007 | Up to 30 mg tissue | |
| Genomic DNA | Bead Mill Tissue DNA Kit | 50 | 26-007B | Up to 30 mg tissue | 2 mL with 2.8 mm ceramic |
| Genomic DNA | Bacteria DNA Kit | 50 | 26-008 | Up to 3x10 ⁷ cells | |
| Genomic DNA | Bead Mill Bacteria DNA Kit | 50 | 26-008B | Up to 3x10 ⁷ cells | 2 mL with 0.5 mm glass |
| Genomic DNA | Yeast DNA Kit | 50 | 26-009 | Up to 3x10 ⁷ cells | |
| Genomic DNA | Bead Mill Yeast DNA Kit | 50 | 26-009B | Up to 3x10 ⁷ cells | 2 mL with 0.5 mm glass |
| RNA | Tissue RNA Kit | 50 | 26-010 | Up to 30 mg tissue | |
| RNA | Bead Mill Tissue RNA Kit | 50 | 26-010B | Up to 30 mg tissue | 2 mL with 2.8 mm ceramic |
| RNA | Bacteria RNA Kit | 50 | 26-011 | Up to 3x10 ⁷ cells | |
| RNA | Bead Mill Bacteria RNA Kit | 50 | 26-011B | Up to 3x10 ⁷ cells | 2 mL with 0.5 mm glass |
| RNA | Yeast RNA Kit | 50 | 26-012 | Up to 3x10 ⁷ cells | |
| RNA | Bead Mill Yeast RNA Kit | 50 | 26-012B | Up to 3x10 ⁷ cells | 2 mL with 0.5 mm glass |
| Genomic DNA | Bead Mill Soil DNA Kit | 50 | 26-013G | Up to 0.25 g soil | 2 mL with 0.7 mm garnet |
| Genomic DNA | Bead Mill Soil Midi DNA Kit | 50 | 26-013B | Up to 1 g soil | 30 g bulk 0.5 mm glass |
| Genomic DNA | Bead Mill Fecal DNA Kit | 50 | 26-014B | Up to 0.25 g feces | 2 mL with 0.5 mm glass |

Glass Homogenizers

Dounce Tissue Grinders are often used to disrupt cells for the extraction of cell products including proteins, RNA and DNA. This grinder design is usually “stroked” a certain number of times to extract cell products or nuclei with minimal disruption. Each set contains both a tight and a loose fitting pestle.

| Size (mL) | Grinding Chamber OD x Length (mm) | Overall Length (mm) | Quantity / Case | Order # |
|-----------|-----------------------------------|---------------------|-----------------|-----------|
| 1 | 11 x 48 | 125 | 2 | 07-357538 |
| 7 | 13 x 82 | 175 | 2 | 07-357542 |
| 15 | 22 x 94 | 210 | 2 | 07-357544 |
| 40 | 32 x 140 | 285 | 2 | 07-357546 |



Tenbroeck Tissue Grinders have a hollow handle that allows packing with ice, making them suitable for liver, intestines and heart tissue. The ice reduces the stress on the cells, helping to maintain cell viability and increase viable cell count.

| Size (mL) | Grinding Chamber OD x Length (mm) | Overall Length (mm) | Quantity / Case | Order # |
|-----------|-----------------------------------|---------------------|-----------------|-----------|
| 1 | 11 x 48 | 140 | 2 | 07-357421 |
| 2 | 11 x 50 | 140 | 2 | 07-357422 |
| 7 | 16 x 82 | 190 | 2 | 07-357424 |
| 15 | 22 x 94 | 250 | 2 | 07-357426 |
| 40 | 32 x 140 | 320 | 2 | 07-357428 |



The Potter-Elvehjem Grinder with Teflon® pestle is well suited for soft tissue, such as brain and liver. The design of this grinder allows for quick homogenization of the tissue.

| Size (mL) | Grinding Chamber OD x Length (mm) | Overall Length (mm) | Quantity / Case | Order # |
|-----------|-----------------------------------|---------------------|-----------------|-----------|
| 2 | 11 x 45 | 203 | 2 | 07-358029 |
| 5 | 13 x 66 | 219 | 2 | 07-358034 |
| 10 | 16 x 74 | 219 | 2 | 07-358039 |
| 15 | 19 x 84 | 219 | 2 | 07-358044 |
| 30 | 24 x 118 | 266 | 2 | 07-358049 |
| 55 | 30 x 130 | 266 | 2 | 07-358054 |



Overhead Stirrer The Overhead Stirrer is a compact unit with solid state speed control capable of providing RPM/torque combinations for most laboratory operations such as homogenizing or mixing. *For use with the Potter-Elvehjem Tissue Grinders.*

| Description | Order # |
|------------------|-----------|
| Overhead Stirrer | 07-903475 |

Micro Tissue Grinder Kit The Micro Tissue Grinder Kit offers a selection of 7 micro tissue grinders, assuring the availability of the right style for the job. Contains: 1 mL Tenbroeck, 0.5 mL G.P.I., 1 mL Dounce, 2 mL Potter-Elvehjem, 1 mL Tapered, 0.1 mL Potter-Elvehjem, and 0.2 mL micro tissue grinders.

| Description | Order # |
|--------------------------|-----------|
| Micro Tissue Grinder Kit | 07-358204 |



Single Use Homogenizers

The BioMasher™ is an essential tool for any researcher working with nucleic acid extraction, protein extraction, and many types of cell disruption. Its proprietary design consists of a homogenizer for grinding your sample, an 80-145µm column for straining, and a collection tube to contain the final homogenate. This system can be used on a wide variety of tissues, and is an ideal preparatory step of amplification and other downstream applications. BioMashers are also autoclavable for sterile applications.

PRODUCT FEATURES:

- Ideal for nucleic acid extraction, protein extraction, and many types of cell disruption
- Consists of a homogenizer for grinding, an 80-145µm column for straining, and a collection tube to contain the final homogenate
- Tubes available in 1.5 mL or 2 mL sizes
- Available with an O-Ring for soft samples and without an O-Ring for harder tissues
- Ideal for sample preparation in conjunction with Omni Tip™ disposable probes



BioMasher Single Use Homogenizer

Sample packs are also available. Call for pricing.

| Description | Quantity | Order # |
|------------------------------|----------|------------|
| BioMasher 1.5 mL | 50 | 09-A10-050 |
| | 300 | 09-A10-300 |
| BioMasher 1.5 mL with O-Ring | 50 | 09-A11-050 |
| | 300 | 09-A11-300 |
| BioMasher 2 mL | 50 | 09-A12-050 |
| | 300 | 09-A12-300 |
| BioMasher 2 mL with O-Ring | 50 | 09-A13-050 |
| | 300 | 09-A13-300 |





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