

2013 Product Catalog





Benchmark Scientific, Inc. is pleased to present our 2013 research products catalog. Since our inception, we have been providing research laboratories with innovative, cost effective products and solutions designed to improve laboratory efficiency, safety and results.

Our emphasis on next generation technology, quality and value has served our customers and our company well. As a result of recent growth, we have expanded our facilities, our staff and our product lines to serve you better.

We welcome your questions, suggestions and comments.

Microcentrifuges Pg.1

Eight Position Mini Centrifuge Twelve Position Mini Centrifuge Twelve Position PCR Strip Centrifuge

Shakers, Mixers & Rockers . . . Pg. 4

Vortex Mixers
Tube & Bottle Rollers
Two Dimensional Rockers

Three Dimensional Rockers Orbital Shakers

Hand-Held Homogenizer (Rotor Stator Type) Bead Beating Homogenizers

Autoclaves & Sterilization Pg. 21

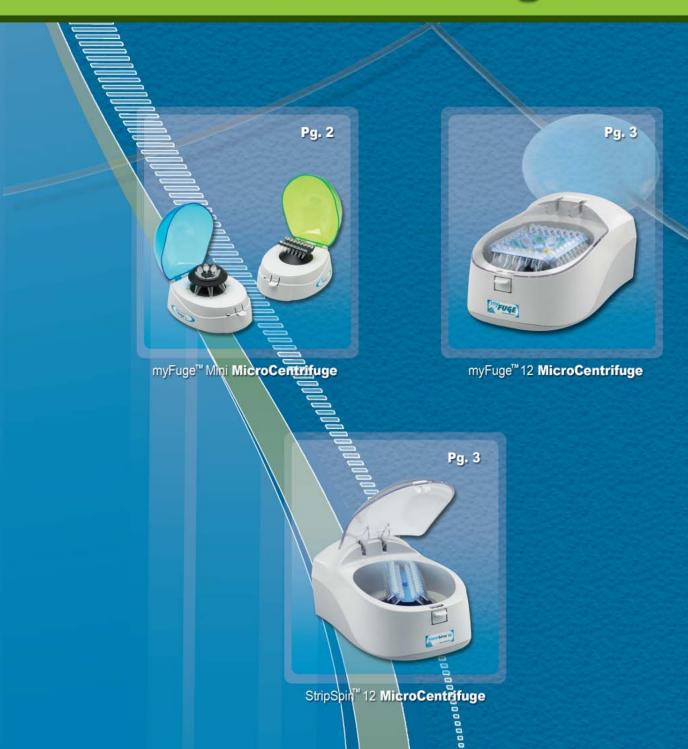
MicroSterilizers / Cinerators Bench Top Autoclaves

Hotplates and Stirrers Incubators Dry Baths (Heat Blocks) Water Baths
Shaking Incubators
Shaking Incubators with Cooling

Also Available from Benchmark......pg.35

Microtube & PCR Plate Coolers Agarose LE Powder & Agarose Tablets Media Storage Bottles (hybex™ glassware)











- Eight position microtube rotor
- Storage compartment for PCR rotor
- Near silent operation
- Starts and stops in just seconds
- Conserves valuable bench space

The MyFuge™ Mini centrifuge is a personal centrifuge that virtually fits in the palm of your hand. Ideal for quick spin downs of microtubes and PCR tubes, the MyFuge is extremely easy to use. Simply close the lid and the rotor instantly reaches 6,000 rpm. Open the lid, and the rotor quickly decelerates to a stop for removing samples.

An increased capacity, eight-position microtube rotor is included and comes installed. Also included is a second rotor for 0.2ml PCR tubes and strips which is stored (together with the rotor removal key) in a convenient compartment on the bottom of the centrifuge. When the rotor is not in use, storage in this compartment prevents loss or misplacement of the rotor.







Includes Both Rotors

Technical Data:

Speed: 6,000 rpm / 2,000 xg

8 x 1.5/2.0ml tubes
16 x 0.2ml PCR tubes
2 x PCR strips (8 x 0.2ml)

Dimensions: 4.5 x 5.9 x 4.5 in.

11.4 x 15 x 11.4cm
Weight: 2.2 lbs./1 kg

Electrical: Universal Voltage 100-240V, 50-60 Hz, 250W

Warranty: 1 Year

Ordering Information:	
Item No.	Description:
C1008-C*	MyFuge Mini Centrifuge, clear lid
C1008-B*	MyFuge Mini Centrifuge, blue lid
C1008-G*	MyFuge Mini Centrifuge, green lid
C1008-P*	MyFuge Mini Centrifuge, purple lid
C1008-R*	MyFuge Mini Centrifuge, red lid
C1008-A5-8	Replacement adapter pack, 0.5ml 8/pk.
C1008-A2-8	Replacement adapter pack, 0.2ml 8/pk.

*Includes US plug. For EU plug, please add (-E).
All models include microtube rotor, PCR rotor, 0.5ml and 0.2ml adapters.



myFuge™ 12 MicroCentrifuge





- → COMBI-Rotor™ for tubes and strips
- Twice the capacity of most mini centrifuges
- $oldsymbol{oldsymbol{\perp}}$ Near silent operation
- Starts & stops with closing/opening of the lid

CE

Unlike traditional mini centrifuges, the new MyFuge™ 12 eliminates the need to change rotors when switching between microtubes and PCR strips. The included, unique COMBI-Rotor™ is all that is required for running 12 microtubes and/or 4 PCR strips.

With a fixed speed that produces 2,000 xg, this centrifuge is perfect for quick spin downs. Simply close the lid and the unit quickly ramps up to 5500 rpm. Open the lid, and the rotor quickly decelerates for removal of samples.

At just 5.5 inches wide and less than 4.5 inches tall, the MyFuge 12 truly is a personal centrifuge with unmatched capacity and flexibility.

Ordering Information:	
Item No.	Description:
C1012*	myFuge 12 Mini Centrifuge with Combi-Rotor
C1008-A5-6	Adapter pack, 0.5ml 6/pk.
C1008-A2-6	Adapter pack, 0.2ml 6/pk.

*Includes US plug. For EU plug, please add (-E).



Unique *COMBI*-Rotor



Compact, low profile design

Technical Data:

Speed: 5,500 rpm / 2,000 xg

Capacity: 12 x 1.5/2.0ml tubes
32 x 0.2ml PCR tubes
4 x PCR strips (8 x 0.2ml)

Dimensions: 5.5 x 7.9 x 4.4 in. 14 x 20 x 11.2 cm

Weight: 2.2 lbs./1 kg

Electrical: Universal Voltage 100-240V, 50-60 Hz, 300W

Warranty: 1 Year

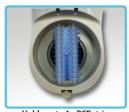


For technical data, please see model C1012 (above).

StripSpin[™] 12 **MicroCentrifuge**

Ordering Information:Item No.Description:C1248*StripSpin 12 Mini Centrifuge with 4 x 12 strip rotorC1008-ROTOptional rotor, 8 x 1.5/2.0mlC1008-A5-8Optional adapter pack, 0.5ml 8/pk.

*Includes US plug. For EU plug, please add (-E).



Holds up to 4 x PCR strips or 48 x 0.2ml tubes

Shakers, Mixers and Rockers





Mortexer™ & BenchMixer™ Vortex Mixers







- The only vortexer available with Multi-Head™
- Powerful motor for INSTANT vortexing
- Q-Drive™ dynamic balancing system
- → Variable speed from 200 to 3200 rpm





Unique Multi-Head allows for standard vortexing PLUS holds up to 8 microtubes

Available Accessories:











The Mortexer™ and BenchMixer™ set the new standard in vortex mixing. With advanced Q-Drive™ technology, these mixers provide smooth instant vortexing of even the largest sample sizes, including full 50ml tubes. The unique counter-balance system creates maximum vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation.

Other features include: "no-walk" suction feet, cold room/ incubator compatibility and spill-proof electronic controls.

Technical Data:

200 to 3200 rpm Speed Range: Touch or continuous **Operating Modes:**

3_{mm} Operating Temp. Range:

+4° C to +65°C 5 x 6.3 x 6.7 in. 13 x 16 x 17 cm 8.4 lbs (3.8kg)

Weight:

115V, 60Hz or 230V, 50Hz*, 180W

2 Years Warranty:

*230V, 60Hz available upon request

Ordering Information:		
Item No.	Description:	
BV1005*	Mortexer vortex mixer (with Multi-Head)	
BV1000*	BenchMixer vortexer (with standard cup head)	
BV1000-FLAT	Optional 3 in. flat head attachment	
BV1000-COMBO	Optional combination head for tubes and microplates (38x1.5/2.0ml & 28 x 0.5ml or one microplate)	
BV1000-H15	Optional head for 12 x 1.5/2.0ml, horizontal	
BV1000-H150	Optional head for 4 x 15ml tubes, horizontal	
BV1000-H500	Optional head for 2 x 50ml tubes, horizontal	

*115V with US plug. For 230V/50Hz with EU plug, please add (-E). For 230V/60Hz with EU plug, please add (-E2).







Orbi-Shaker ™ MP Microplate Shaker



Digital speed control up to 1500rpm 3mm orbit for thorough mixing

in microplates

Includes platform for up to four microplates

Technical Data:

Speed Range: 200 to 1500 rpm

3_{mm}

Up to 4 microplates Operating Temp. Range: +4°C to +65°C 11 x 10.7 x 4.5 in. 28 x 27 x 12 cm 1 min. to 99 hour / cont.

12 lb (5.5kg) Weight: **Universal Voltage**

100-240V, 50-60Hz, 250W

2 Years

Ordering Information:

Item No. **Description:** BT1500*

Orbi-Shaker™ MP microplate shaker, includes platform for 4 microplates

*Includes US plug. For EU plug, please add (-E).

BenchMixer[™] Multi-Tube Vortexer



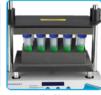
- Hands free, high capacity vortexing
- → Up to 2500rpm, a true vortex in every tube
- Wide assortment of accessories for a variety of tubes, flasks and plates

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Ordering Information:

Ordering	illoi illatioili
Item No.	Description:
BV1010*	BenchMixer Multi-Tube Vortex Mixer, 115V includes 50 x 12mm rack
BV1010-05	Tube Rack, 96 x 0.5ml (Ø8mm)
BV1010-1520	Tube Rack, 50 x 1.5/2.0ml (Ø10mm)
BV1010-12	Tube Rack, 50 x 12mm (included)
BV1010-13	Tube Rack, 50 x 13mm
BV1010-150	Tube Rack, 50 x 15ml (Ø16.5mm)
BV1010-500	Tube Rack, 15 x 50ml (Ø29mm)
BV1010-25	Tube Rack, 15 x 25mm
BV1010-50H	Tube Rack, 9 x 50ml Horizontal (QuEChERS)
BV1010-V125	Rack, 6 x 100ml Volumetric flask
BV1010-V250	Rack, 6 x 250ml Volumetric flask
BV1010-MP	Rack for up to 3 plates or 96 well microtube racks
BV1010-MP02	Carrier for above, 96 x 0.2ml tubes or strips (3pk.)







50 x 1.5/2.0ml

15 x 50ml

3 x Microplates/96 Well Tube Racks

Technical Data:

Speed Range: 500 to 2500rpm Max. Capacity: 6 x 250ml 3.6mm

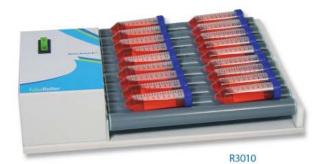
Timer: 1min. to 99hr 59min. Platform Dimensions: 12 x 7 in. / 30 x 17.8 cm Exterior Dimensions: 15 x 9.2 16.5 in. (WxDxH) 38.5 x 23.5 x 42 cm Operating Temp. Range: +4°Cto+65°C 29 lb s (13kg)

100 to 240V, 50-60Hz, 60W

2 Years

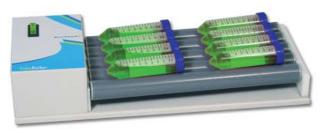
TubeRoller Tilting Tube & Bottle Roller



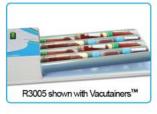


Gentle rolling motion

- Accepts tubes and bottles (diameter from 8mm to 200mm)



R3005





Benchmark TubeRollers are designed for the gentle, throrough mixing of a variety of containers, including Vacutainers™, bottles, test tubes, centrifuge tubes and roller bottles. Both models (5 roller and 10 roller) operate at a constant 38rpm, chosen as the optimum speed for the broadest range of mixing requirements.

As the roller mechanism rotates through each complete revolution, the right side of each roller is gently elevated about 0.5 in (13mm) and returns to the horizontal starting position. This additional, gentle up/down motion provides a "wave" effect and guarantees that the entire sample is subjected to complete, thorough mixing, end to end. This built in tilt feature provides a level of homogeneous mixing uniformity that can not be matched by any stationary roller apparatus.

From blood collection tubes to roller bottles, Benchmark TubeRollers are the ideal choice for research, clinical laboratories and doctors' offices.

Technical Data:

Speed: Fixed, 38 rpm (±10%)

Motion: Simultaneous roll & tilt (±5°)
Operating Temp: 4°C to 40°C (external temp.)
Individual Roller Dims: 3 x 32cm (1.2 x 12.5 in.)
Vessels Accepted: 8mm to 20mm diameter
Roller Spacing: 5mm, on 35mm centers
Electrical: 115 or 230V, 50-60Hz, 50W
Warranty: 2 Years

	R3005	R3010
Number of Rollers:	5	10
Dimensions: (W x D x H):	18 x 7 x 3.5 in. 45 x 18 x 9 cm	18 x 14 x 3.5 in. 45 x 36 x 9 cm
Weight:	11lbs (5kg)	17.6lbs (8kg)

Typical Sample Load Capacity:

Vessel	R3005	R3010
12 x 75mm tubes	12	26
16 x 100mm tubes	8	18
16 x 125mm tubes	8	18
15ml screw cap tubes	8	18
50ml screw cap tubes	8	18
850cm² roller bottles	1	2

Ordering Information:		
Item No.	Description:	
R3005*	TubeRoller with 5 rollers	
R3010*	TubeRoller with 10 rollers	

^{*115}V with US plug. For 230v (EU plug), please add (-E).



TubeRocker[™] Fixed Speed Rocker (2D)



- Ideal for tube sizes 1.5ml to 50ml
- No tools or mounting hardware required

8x50ml



Technical Data:

Fixed, 24 rpm (230V: 20 rpm) Speed Range:

Tilt Angle: ±30°

12 x 4.5 in. / 30 x 11.4 cm Platform Size:

5 lbs (2.3kg) Load Capacity: +4°C to +65°C Operating Temp. Range:

13.3 x 5.5 x 4 in. / 33.6 x 13.5 x 10 cm Dimensions:

4 lbs (2.2ka) Weight:

115 or 230V, 50-60Hz, 50W Electrical:

2 Years





Ordering Information:

Item No. **Description:** M2100* TubeRocker with grooved mat

*115V with US plug. For 230v (EU plug), please add (-E).



BenchBlotter[™] Fixed Speed Rocker (2D)



BR1000 with BR1000-STACK

Ordering Information:		
Item No.	Description:	
BR1000*	BenchBlotter platform rocker with flat mat	
BR1000-STACK	Optional stacking platform with non-slip mat	
BR1000-DIMPLED	Optional dimpled mat	
B0718	Bungee cord, used for securing vessels, pack of 4	

*115V with US plug. For 230v (EU plug), please add (-E).

- Gentle mixing for blot washing and gel staining
- Optional dual platform doubles work surface

Technical Data:

Speed Range: Fixed, 12 rpm (230V: 10 rpm) Tilt Angle: Platform Size:

12 x 12 in./30 x 30 cm Load Capacity: 5 lbs (2.3kg)

Operating Temp. Range: +4°Cto+65°C 13.5 x 12 x 4.7 in. 34 x 30 x 12 cm Stacking Clearance:

3 in. / 7.6 cm Weight: 6.5 lb s (3kg)

Electrical: 115 or 230V, 50-60Hz, 50W 2 Years

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BenchRocker™ 2D Variable Speed Rocker (2D)





Adjustable tilt & speed for a wide range of applications

Large 14x12" work surface

- Safe for incubator or cold room use

The BenchRocker 2D is designed to provide the precise speeds and tilt angles required for a broad range of molecular and biological mixing applications. The user can adjust both parameters to match the vessel size and the volume of liquid being mixed, yielding optimum results.

Technical Data:

Speed Range: Variable, 2 to 30 rpm Tilt Angle: Variable, 0° to ± 30° Platform Size: 14 x 12 in. / 35 x 30 cm Load Capacity: 8 lbs (3.6kg) Operating Temp. Range: +4°Cto+65°C 14 x 12 x 8 in. 35 x 30 x 20 cm Stacking Clearance: 3 in. / 7.6 cm 7.5 lb s (3.4kg) 115 or 230V, 50-60Hz, 50W 2 Years

Ordering Information:		
Item No.	Description:	
BR2000*	BenchRocker™ 2D rocker with flat mat	
BR2000-STACK	Optional stacking platform (3") with flat mat	
BR2000-DIMPLED	Optional dimpled mat	
B0718	Bungee cord, used for securing vessels, pack of 4	
BR2000-SP	STACK-PLUS Extender set, adds 1.25" clearance to stacking platform	
	*115V with US plug. For 230v (EU plug), please add (-E).	



Everlast™ 247 Heavy Duty - Variable Speed Rocker (2D)



Technical Data:

Speed Range: Variable, 3 to 80 rpm Variable, 0° to ± 20° Tilt Angle: 16 x 12 in. / 40.5 x 30 cm Platform Size: Load Capacity: 16 lbs (7.5kg) +0°C to +65°C Operating Temp. Range: 16 x 13 x 6 in. 40.5 x 33 x 15.25 cm 3 in. / 7.6cm Stacking Clearance: 20 lb s (9kg) 115 or 230V, 50-60Hz, 50W Electrical:

5 Years

— Everlast™ 5 year warranty

🕂 Extra-Large, stainless steel 16x12" surface

+ 16lb load capacity

Safe for incubator or cold room use

With an unprecedented 5 year limited warranty, Benchmark's Everlast 247 Rocker is built to last. Twenty four hours a day, seven days a week... No problem! The powerful motor and heavy duty drive system remain reliable and consistent, even under constant usage in a cold room (min. 0°C) or incubator. (max. 65°C)

Ordering Information:	
Item No.	Description:
BR5000*	Everlast™ Rocker with flat mat
BR5000-STACK	Optional stacking platform with flat mat with 3.5" clearance
B0718	Bungee cord, used for securing vessels, pack of 4

*115V with US plug. For 230v (EU plug), please add (-E).



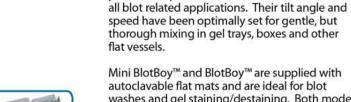
BlotBoy™ Low Speed Gyratory Rockers (3D)



- Optimized speed & tilt for gel blotting, washing and staining
- Tri-directional motion for thorough, gentle mixing
- Stacking platforms available
- Cold room and incubator safe



Mini BlotBoy B3D1008



Mini BlotBoy™ and BlotBoy™ are supplied with autoclavable flat mats and are ideal for blot washes and gel staining/destaining. Both models have been designed to conserve bench space. The Mini BlotBoy is supplied with a 10.5 x 7.5 inch platform while the larger BlotBoy's 12 x 12 inch platform expands the useable work surface by 80%.

Modeled after our popular BioMixer™ series of "nutating" shakers, these platform rockers provide the perfect 3-dimensional motion for

The Mini BlotBoy and BlotBoy can accept stackable platforms and handle loads up to 2kg. Both have maintenance free brushless motors and are safe for use in cold rooms and incubators.

Ordering	Information:
Item No.	Description:
B3D1008*	Mini BlotBoy with flat mat (10.5x7.5")*
B3D-STACK	Stacking platform with flat mat (10.5x7.5")
B3D-DIMPLED	Dimpled mat (10.5x7.5")
B0718	Bungee cord, used for securing vessels, pack of 4
B3D1308*	BlotBoy with flat mat (12x12")*
BR1000-STACK	Stacking platform with flat mat (12x12")
BR1000-DIMPLED	Dimpled mat (12x12")
B0718	Bungee cord, used for securing vessels, pack of 4

*115V with US plug. For 230v (EU plug), please add (-E).

CE

Technical Data:

Speed Range: Fixed, 12 rpm

Fixed, 10 rpm (230V, 50Hz)

Tilt Angle: Fixed, ±8°

Platform Size:

 Mini BlotBoy
 10.5 x 7.5 in./27 x 19 cm

 BlotBoy
 12 x 12 in./30 x 30 cm

Load Capacity: 4 lbs (2.2kg)
Operating Temp. Range: +4°Cto+65°C

bimensions: 10.5 x 7.5 x 8 in./27 x 19 x 20 cm (x D x H) 12 x 12 x 8 in./30 x 30 x 20 cm

Stacking Clearance: 3 in./7.6cm Weight: 4.4 lb s (2kg)

lectrical: 115 or 230V, 50-60Hz, 50W

arranty: 2 Years

BioMixer™ High Speed Gyratory Rockers (3D)





- Includes dimpled mat; perfect for for mixing blood & centrifuge tubes
- Tri-directional motion for thorough, uniform mixing
- Stacking platforms available
- Cold room and incubator safe



These multi-functional shakers provide a 3-dimensional "nutating" motion for thorough, foam-free mixing in blood and centrifuge tubes, as well as in a variety of flat vessels.

Both models come standard with autoclavable dimpled mats while optional flat mats are also available for mixing other vessel types. Stacking platforms can be purchased as accessories, effectively doubling the usable surface area of each model.

Even the smallest single platform configuration has 24% more platform work surface than traditional nutating mixers.

These mixers feature maintenance free, brushless motors capable of loads up to 2kg and are safe for use in cold rooms and incubators.

Technical Data:

B3D1320 with BR1000-STACK

Speed Range: Fixed, 24 rpm
Fixed, 20 rpm (230V, 50Hz)
Tilt Angle: Fixed, ± 20°
Platform Size:
Mini BioMixer 10.5 x 7.5 in./27 x 19 cm

BioMixer 12 x 12 in./30 x 30 cm Load Capacity: 4lbs (2.2kg) Operating Temp. Range: +4°C to +65°C

Operating Temp. Range: Dimensions (WxDxH):

Mini BioMixer 10.5 x 7.5 x 8 in./27 x 19 x 20 cm
BioMixer 12 x 12 x 8 in./30 x 30 x 20 cm

Stacking Clearance: 3 in./7.6 cm Weight: 4.4 lb s (2kg)

Electrical: 115 or 230V, 50-60Hz, 50W

Warranty: 2 Years

Ordering I	nformation:
Item No.	Description:
B3D1020*	Mini BioMixer with dimpled mat (10.5x7.5")
B3D-STACK-D	Stacking platform with dimpled mat (10.5x7.5")
B3D-FLAT	Flat mat (10.5x7.5")
B0718	Bungee cord, used for securing vessels, pack of 4
B3D1320*	BioMixer with dimpled mat (12x12")
BR1000-STACK-D	Stacking platform with dimpled mat (12x12")
BR1000-FLAT	Flat mat (12x12")
B0718	Bungee cord, used for securing vessels, pack of 4

^{*115}V with US plug. For 230v (EU plug), please add (-E).



BenchRocker™ 3D Variable Speed Gyratory Rocker (3D)



The BenchRocker 3D is designed to provide the precise speeds and tilt angles required for a broad range of molecular and biological mixing applications. The user can adjust both parameters to match the vessel size and the volume of liquid being mixed, yielding optimum results. Proprietary InstaTilt™ technology means no tools, no disassembly. Simply grip the platform with two hands and move to the desired position.

This model includes both flat and dimpled (autoclavable) mats for mixing a wide variety of tubes and other vessels. Stacking platforms can be purchased as accessories, effectively doubling the usable surface area of each model.

BenchRocker 3D features a maintenance free, brushless motor, capable of loads up to 4.4 lbs and is safe for use in cold rooms and incubators.

Ordering I	nformation:
Item No.	Description:
B3D2300*	BenchRocker 3D with flat and dimpled mats (12x12")
BR1000-STACK	Stacking platform with flat mat (12x12")
BR1000-STACK-D	Stacking platform with dimpled mat (12x12")
B0718	Bungee cord, used for securing vessels, pack of 4
BR2000-SP	STACK- <i>PLUS</i> Extender set, adds 1.25" clearance to stacking platform

^{*115}V with US plug. For 230v (EU plug), please add (-E).

Technical Data:

Speed Range: Variable, 2 to 30 rpm Variable, $0 \text{ to } \pm 30^{\circ}$ Tilt Angle: 12 x 12 in./30 x 30 cm Platform Size: 5 lbs (2.3kg) Load Capacity: +4°C to +65°C Operating Temp. Range: 12 x 12 x 8 in. 30 x 30 x 20 cm Stacking Clearance: 3 in. / 7.6 cm 7.5 lb s (3.4kg) Weight: 115 or 230V, 50-60Hz, 50W

2 Years

Orbi-Blotter™ Low Speed Orbital Shaker





The Orbi-Blotter™ features a gentle orbital motion with speed control down to as little as 3 rpm, making it the ideal orbital choice for low speed applications, such as blotting, washing, staining/destaining, etc. A large 14x12 in. work surface is included along with a non-slip rubber mat for holding trays, dishes, plates and other flat vessels.

An optional stacking platform can be purchased as an accessory, effectively doubling the usable work surface. The maintenance free, brushless motor is capable of loads up to 2kg and is safe for use in cold rooms and incubators.

Technical Data:

Variable, 3 to 70 rpm Speed Range: Orbital / 19mm Motion / Orbit: 3 x 2L or 5 lbs (2kg) Load Capacity: 14 x 12 in. / 35 x 30 cm Platform Size: Operating Temp. Range: +4°C to +65°C 14 x 12 x 8 in. 35.5 x 30.5 x 20 cm Stacking Clearance: 3 in. / 7.6 cm 7.5 lbs (3.4kg) 115 or 230V, 50-60Hz, 50W Electrical: Warranty:

Ordering	rdering Information:	
Item No.	Description:	
BT30*	OrbiBlotter™ low speed orbital shaker	
BR2000-STACK	Stacking platform with flat mat (14x12")	
BR2000-SP	STACK-PLUS Extender set, adds 1.25" clearance to stacking platform	

*115V with US plug. For 230v (EU plug), please add (-E).

See Pg. 32-33

Shaking Incubators



INCU-SHAKER Series

Exceptional temperature uniformity

Two models, Incu-Shaker Mini: Up to 5 x 500ml Incu-Shaker 10L: Up to 5 x 2L

Exchange flask clamps in one second with MAGic Clamp™ magnetic system



Orbi-Shaker™ JR. Orbital Shaker



Horizontally circular 19mm orbit for aeration and mixing

Extremely compact, perfect for low to medium capacity applications

Instantly exchange flask clamps with MAGic Clamp™ accessories

Technical Data:

Variable, 50 to 300 rpm Speed Range:

with

Speed Increment:

Motion / Orbit: Orbital / 19mm Load Capacity: 4x1Lor9lbs(4kg)

Platform Size: Standard (included):

9.5 x 8 in. / 24 x 20 cm MAGic Clamp (universal): 11.5 x 9.5 in. / 29 x 24 cm Operating Temp. Range: +4°C to +65°C

Dimensions: 11 x 10.7 x 5 in. 28 x 27 x 13 cm 12 lbs (5.5kg) Weight: **Universal Voltage** Electrical:

100 to 230V, 50-60Hz, 250W

2 Years Warranty:



Item No. Description:

BT300* Orbi-Shaker™ JR. with flat mat platform (9.5 x 8 in.) H1000-MR** MAGic Clamp™ universal platform for flasks and tubes BT300-RB Adjustable spring bar platform for unique vessel types

*Includes US plug. For EU plug, please add (-E).
**Flask clamps and tube racks sold separately, see pg. 17 for a complete listing.

BT300-RB

Orbi-Shaker™ Orbital Shaker





- High capacity, 9 x 500ml, 5 x 1L or 2 x 2L
- Circular 19mm orbit for aeration and mixing
- Instantly exchange flask clamps with MAGic Clamp™ accessories

Technical Data:

Variable, 30 to 300 rpm Speed Range:

1 rpm

Orbital / 19mm Motion / Orbit: 5x1L or 14 lbs (6kg) Load Capacity: 1 min. to 48 hr / continuous

Platform Size: (W x D x H):

13 x 12 in./33 x 30 cm Standard (included): 14 x 12 in./35 x 30 cm MAGic Clamp (universal):

+4°C to +65°C Operating Temp. Range:

Dimensions 11 x 13 x 3 in. / 28 x 33 x 7.5 cm 25 lbs (11.5kg) Weight:

115 or 230V, 50-60Hz, 600W

2 Years Warranty:

Item No.	Description:
BT3000*	Orbi-Shaker™ with flat mat platform (13

Ordering Information:

BT3000*	Orbi-Shaker™ with flat mat platform (13 x 12 in.)
BT3000-MR**	MAGic Clamp™ universal platform for flasks and tubes
H1000-P-SP	Universal spring platform for unique vessel types
H1000-P-MP	Dedicated platform for 4 x microplates
H1000-P-125	Dedicated platform, 12 x 125ml flasks
H1000-P-250	Dedicated platform, 8 x 250ml flasks
H1000-P-500	Dedicated platform, 5 x 500ml flasks

*115V with US plug. For 230v (EU plug), please add (-E).
**Flask clamps and tube racks sold separately, see pg. 17 for a complete listing.

Orbi-Shaker™ XL High Capacity Orbital Shaker







- High capacity, benchtop model
- Circular 19mm orbit for aeration and mixing
- Instantly exchange flask clamps with MAGic Clamp™ accessories

Ordering Information:

Item No.	Description:
BT1010*	Orbi-Shaker™ with flat mat platform (13 x 12 in.)
H1010-MR**	MAGic Clamp™ platform for flasks & tubes (18 x 18 in.)
H1010-P-SP	Universal spring platform for unique vessel types
H1010-P-MP	Dedicated platform for 4 x microplates

*115V with US plug. For 230v (EU plug), please add (-E).
**Flask clamps and tube racks sold separately, see page 17 for a complete listing.

Technical Data:

Variable, 30 to 300 rpm Speed Range:

Speed Increment:

Orbital / 19mm Motion / Orbit:

Load Capacity: 5 x 2L or 9 x 1L/65 lbs (30kg) 18 x 18 in. / 45 x 45 cm Platform Size: 4°C to +65°C (ambient temp.) Operating Temp. Range: Dimensions (WxDxH): 18.5 x 21.25 x 5 in. /47 x 54 x 12.5 cm

64lbs (30kg) Weight:

120 or 230V, 50-60Hz Electrical:

2 Years Warranty:

Orbi-Shaker™ CO₂ All Environment Orbital Shaker







Remote controlled, adjust settings from outside the chamber

Instantly exchange flask clamps with MAGic Clamp™ accessories



Ordering Information:

the second second	
Item No.	Description:
BT4000*	Orbi-Shaker™ with flat mat platform (13 x 12 in.)
BT3000-MR**	MAGic Clamp™ large platform for flasks & tubes
H1000-P-SP	Universal spring platform for unique vessel types
H1000-P-MP	Dedicated platform for 4 x microplates

*115V with US plug. For 230v (EU plug), please add (-E).
**Flask clamps and tube racks sold separately, see page 17 for a complete listing.

Technical Data:

Speed Range: Variable, 30 to 300 rpm Speed Increment: 1 rpm Orbital / 19mm Motion / Orbit: 5 x 1L or 14 lbs (6kg) Load Capacity: 1 min. to 48 hr / Continuous Timer: Platform Size: 13 x 12 in. / 33 x 30 cm Standard (included):

MAGic Clamp (Small): 11.5 x 9.5 in. / 29 x 24 cm 14 x 12 in. / 35 x 30 cm MAGic Clamp (Large): 0°C to +65°C Operating Temp. Range:

Shaker

12 x 13.4 x 3.5 in. /30 x 34 x 9 cm 7.2x6.7x3.5/18x17x9cm Remote Control: Cord Length: 60.5 in. / 154 cm 25 lbs (11.5kg) Weight:

120 or 230V, 50-60Hz, 600W

2 Years



Orbi-Shaker™ Series, **MAGic Clamp™ Accessories**

Item No.	Description:	Platform H1000-MR	Platform BT3000-MR	Platform H1010-MR
		Available For Orbi-Shaker JR.	Available For Models Orbi-Shaker & Orbi-Shaker CO2	Available For Orbi-Shaker XL
H1000-MR-50	Flask clamp, 50ml Erlenmeyer flask	20	30	49
H1000-MR-125	Flask clamp, 125ml Erlenmeyer flask	12	20	35
H1000-MR-250	Flask clamp, 250ml Erlenmeyer flask	8	14	25
H1000-MR-500	Flask clamp, 500ml Erlenmeyer flask	5	9	16
H1000-MR-1000	Flask clamp, 1L Erlenmeyer flask	4	5	9
H1000-MR-2000	Flask clamp, 2L Erlenmeyer flask	1	2	5

Item No.	Description:	Platform H1000-MR	Platform BT3000-MR	Platform H1010-MR
		Available For Orbi-Shaker JR.	Available For Models Orbi-Shaker & Orbi-Shaker CO2	Available For Orbi-Shaker XL
H1000-MR-T15	Tube Rack, 15ml conical tubes, 32 x 15ml	2	3	8
H1000-MR-T50	Tube Rack, 50ml conical tubes, 15 x 50ml	2	3	8
H1000-MR-1550	Combi-Tube Rack, 30 x 15ml & 20 x 50ml tubes	2	2	4
H1000-MR-T600	Tube/Bottle Rack, 4 x 500/600ml conical bottles	1	2	4
H1000-MR-T15H	Tube rack, 12 x 1.5/2.0ml tubes, horizontal	2	4	6
H1000-MR-T150H	Tube rack, 4 x 15ml tubes, horizontal	4	6	8
H1000-MR-T500H	Tube rack, 2 x 50ml tubes, horizontal	4	6	8
H1000-MR-MP	Plate rack, holds one microplate	4	6	8

Homogenizers







D1000 Homogenizer



Homogenize most samples in under 30 seconds

→ For volumes from 100µl to 250 ml

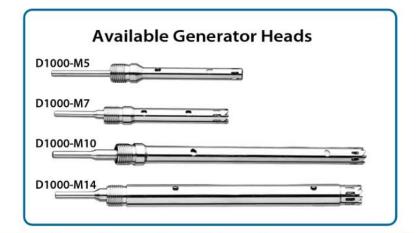
Supplied with both 5mm and 7mm generator probes

Benchmark's new hand-held homogenizer, the D1000, is designed to rapidly homogenize, emulsify, suspend and disrupt biological samples. Ideal for use with microtubes, the homogenizer works well with samples from 0.1ml to 250ml (depending upon the generator probe used).

The D1000 is a rotor stator homogenizer, and works by drawing the sample, in liquid, into the generator probe with the variable speed rotor, and then forcing it out through the slots in the stator. This achieves mechanical shearing of the sample. As the sample is repeatedly drawn up and forced through the stator, additional shearing takes place. Most samples are completely homogenized in 30 seconds are less.

A powerful, 130W motor drives the rotor at speeds from 8,500 to 30,000 rpm. Speed is adjustable in six steps to meet sample processing needs. A separate on/off switch allows the homogenizer to be left at the appropriate setting.

Generator probes are available in four sizes - 5mm and 7mm diameter probes, 50mm in length for use with samples in microbtubes, 10mm x 115mm for use with 15 and 50ml tubes, and 14mm x 130 mm, for 50ml tubes and vessels up to 250ml. The unit is supplied with one each of the 5mm and 7mm generator probes. All the generator probes are made of stainless steel and can be sterilized by autoclaving.



Technical Data:

Speed Range: 8,500 to 30,000 rpm

Capacity: 0.1 to 250 ml

Noise Level: <70 db

Operating Temp. Range: +4°C to +65°C (ambient temp.)

Dimensions: 1.8 x2.3 x 9 in. (without probe)

Weight: 4.5 x 5.8 x 22.5 cm 1.35 lbs (0.6kg)

Electrical: 115V or 230V, 50-60 Hz, 130W

Warranty: 2 Years

tem No.	Dosavintions
item No.	Description:
D1000*	D1000 Hand-held Homogenizer,115V
	Includes one 5mm (flat bottom) generator probe and one (7mm saw tooth) generator probe
Optional gene	erator probes:
D1000-M10	10mm x 115mm saw tooth, for 15ml & 50ml tubes
D1000-M14	14mm x 130mm saw tooth, for 50ml -250ml vessels
D1000-M5	5 x 50mm for microtubes, 5 pk.
D1000-M7	7 x 50mm for microtubes, 5pk.
D1000-ST	Stand for D1000

BeadBug[™] Microtube Homogenizer





Eliminates the cross contamination associated with hand-held homogenizers

- Faster & more effective than tissue grinders

Process up to 3 tubes simultaneously



The BeadBug™ is a high energy benchtop homogenizer that sets the performance standard for personal sized cell disruption and lysis instruments. Simultaneous homogenization of up to 3 samples takes place (often within 45 seconds) inside the disposable 2ml screw cap microtubes. The optimized mixing motion causes rapid cell disruption through constant high velocity impact from the hardened micro-beads chosen specifically for your sample type.

Developed for samples too tough to be homogenized in a common lab vortexer, the BeadBug provides a convenient and economical alternative to the traditional, larger and more expensive homogenizers on the market today. With up to three tube capacity and a footprint of just 7 x 8", the BeadBug is the ideal homogenizing instrument for low to medium throughput laboratories.

For Best Results, use with Benchmark prefilled tube kits:







Triple-Pure™ (Molecular Biology Grade)
Zirconium Beads

Ordering Information:

Item No.	Description:
D1030*	BeadBug™ Microtube Homogenizer*
Pre-filled Tub	lnclude 2.0ml Non-Skirted Screw Cap tubes with caps, sealing rings and beads as specified below:
D1031-01	Standard glass beads, ØD 0.1mm, 50pk.
D1031-05	Standard glass beads, ØD 0.5mm, 50pk.
D1031-10	Standard glass beads, ØD 1.0mm, 50pk.
D1032-01	Triple-Pure, high impact zirconium beads, ØD 0.1mm, 50pk.
D1032-05	Triple-Pure, high impact zirconium beads, ØD 0.5mm, 50pk.
D1032-10	Triple-Pure, high impact zirconium beads, ØD 1.0mm, 50pk
D1032-15	Triple-Pure, high impact zirconium beads, ØD 1.5mm, 50pk.
D1032-30	Triple-Pure, high impact zirconium beads, ØD 3.0mm, 50pk
D1032-SK	Starter Kit, 10 ea. of Ø 0.1, 0.5, 1.0, 1.5 & 3.0 Triple-Pure Zirconium
D1033-28	Stainless steel beads, ØD 2.8mm, 50pk.
D1031-T20	Empty tubes (2.0ml) pack of 1000

*115V with US plug. For 230v (EU plug), please add (-E).

Technical Data:

Speed Range: 2800 to 4000rpm

Max. Capacity: 3 x 2.0ml (non-skirted)

Timer: 3 sec. to 3 min.

Operating Temp. Range: +4°Cto+65°C (ambient temp.)

Dimensions: 6.9 x 8.3 x 5.3 in. 17 x 21 x 13.5 cm

Weight: 5 lbs (2.2kg)
Electrical: 115 or 230V, 50-60Hz, 50W

/arranty: 2 Years

BeadBlaster [™] 24 **Microtube Homogenizer**



Stainless steel, 24 position tube carrier

- Fast, efficient homogenization, usually in 35 seconds or less
- + For all sample types, from soft tissue to bone
- High throughput, up to 24 samples
- Sealed 2.0ml tubes, no cross contamination

The BeadBlaster™ 24 completely lyses, grinds and homogenizes a broad variety of biological samples. Even the most difficult and resistant samples are fully homogenized, often in 35 seconds or less. The stainless steel tube carrier subjects up to 24 samples to an optimized, high speed, 3D motion, producing high energy impacts between the samples and micro-beads to release cellular contents. To protect heat sensitive samples, the unit can be digitally programmed to operate in shortened consecutive cycles with a rest period in between.

Benchmark offers an assortment of prefilled tube kits for a variety of sample types. The popular Triple-Pure™ kits include acid washed, heat treated, zirconium beads. The beads are tested to be free of nucleases, making them ideal for molecular biology applications. A convenient starter kit (D1032-SK) is available to accommodate a broad range of samples and optimize applications.





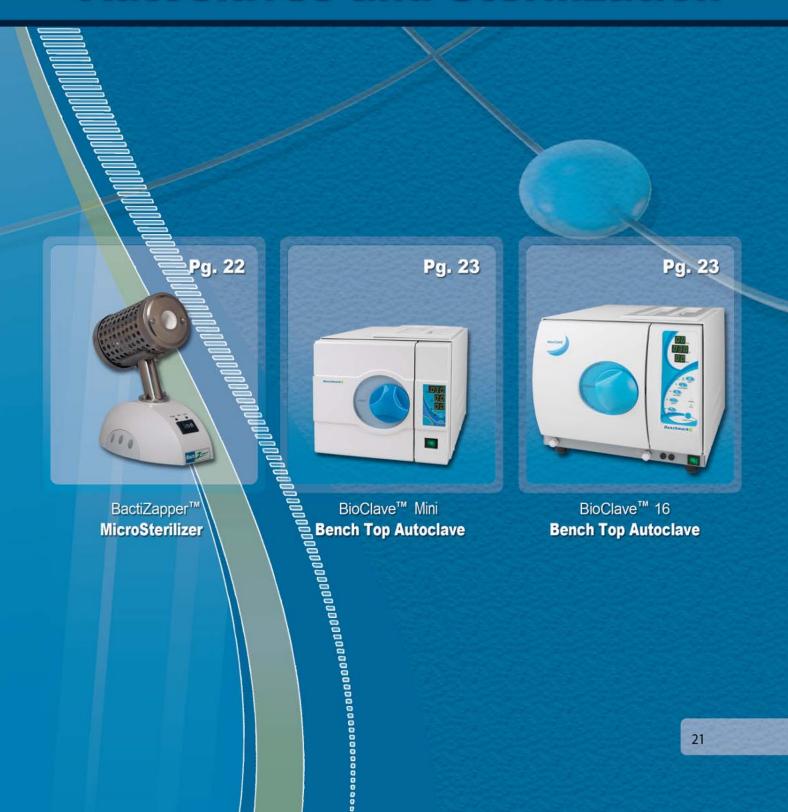
Technical Data:

4.00 to 7.00 m/s 0.05 m/s Speed Increments: 24 x 2.0ml tubes Capacity: 1 to 90 sec. (1 sec. increments) Cycle Time: 0 to 2 min. (1 sec. increments) Max Cycles per program: 10 50 <2 sec. / <2 sec. Accel/Decel: Noise Level: <68 db Operating Temp. Range: +4°C to +65°C (ambient temp.) 11 x 14.2 x 15.2 in. Dimensions: 28 x 36 x 23.5cm 55 lbs (25kg) Weight: 115 or 230V, 50-60Hz,

2 Years

Orderi	ng Information:
Item No.	Description:
D2400*	BeadBlaster™ 24 Microtube Homogenizer*
Pre-filled Tul	be Kits: Include 2.0ml Non-Skirted Screw Cap tubes with caps, sealing rings and beads as specified below:
D1031-01	Standard glass beads, ØD 0.1mm, 50pk.
D1031-05	Standard glass beads, ØD 0.5mm, 50pk.
D1031-10	Standard glass beads, ØD 1.0mm, 50pk.
D1032-01	Triple-Pure, high impact zirconium beads, ØD 0.1mm, 50pk.
D1032-05	Triple-Pure, high impact zirconium beads, ØD 0.5mm, 50pk.
D1032-10	Triple-Pure, high impact zirconium beads, ØD 1.0mm, 50pk.
D1032-15	Triple-Pure, high impact zirconium beads, ØD 1.5mm, 50pk.
D1032-30	Triple-Pure, high impact zirconium beads, ØD 3.0mm, 50pk.
D1032-SK	Starter Kit, 10 ea. of Ø 0.1, 0.5, 1.0, 1.5 & 3.0 Triple-Pure Zirconium
D1033-28	Stainless steel beads, ØD 2.8mm, 50pk.
D1031-T20	Empty tubes (2.0ml) pack of 1000

Autoclaves and Sterilization



BactiZapper™ MicroSterilizer / Cinerator





- Complete sterilization in 5-7 seconds
- Safe, convenient and no spatter
- Ideal for platinum loops, needles and tube mouths

The BactiZapper™ has an asbestos-free core element that uses infrared heating to produce 815°C (1500°F). It completely sterilizes in 5-7 seconds. The BactiZapper uses well-proven technology to provide instant sterilization of platinum inoculating loops, needles, glass tube/pipette mouths and various metal & borosilicate glass instruments. It also has a lower temperature setting (500°C) that can be used as a "standby" and extends usable life.

The ceramic heating element is safely enclosed in a perforated stainless steel guard chamber, protecting users from accidental contact with the extreme temperatures of the core area. It is extremely compact, convenient and can be used in anaerobic and aerobic chambers.

Technical Data:

High Temperature Setting:
Low Temperature Setting:
Sterilization Time:
Chamber Diameter:
Chamber Length:
External Dimensions:
(WxDxH)

815°C / 1500°F
500°C / 950°F
5 - 7 seconds
0.55 in. / 14mm
6 in. / 153mm
4 x 6 x 6.5 in.

Weight: Electrical Data: Warranty: 815°C / 1500°F 500°C / 950°F 5 - 7 seconds 0.55 in. / 14mm 6 in. / 153mm 4 x 6 x 6.5 in. 10.2 x 15.2 x 16.5 cm 2.9 lbs. (1.3 kg) 115 or 230V, 50-60Hz 170 Watts 1 Year*

*Excludes heating element

Ordering Information:	
Item No. Description:	
B1000*	Benchmark BactiZapper sterilizer
B1000-01	Loop holder attachment
B1000-03	Slide dryer attachment, 3 slides
B1000-RA	Replacement heating element, 115V
B1000-RAE	Replacement heating element, 230V

^{*115}V with US plug. For 230v (EU plug), please add (-E).

BioClave[™] Series Research Autoclaves





B4000-16



B4000-M

BioCLAVE"

- lack+ Fully automatic; just press start
- 🕂 Rapid, complete sterilization
- Extremely compact
- Built in water tank, does not require connection to an external water supply

Despite the space-saving exterior dimensions of the Bioclaves, the stainless steel sterilization chambers are surprisingly large, accommodating a variety of liquids, media, instruments, glassware, plasticware and other common laboratory items. Both of these benchtop models include a mechanical and electrical safety interlock that prevents the door from being opened until the pressure has reached zero PSI.

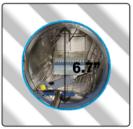
With large digital displays and fully automatic operation, all segments of the sterilization cycle (fill, sterilize, exhaust and dry) commence and run to completion by simply pressing the start button. An optional thermal mini-printer is also available for providing a record of sterilization parameters (compatible with BioClave 16 only).

BioClave 16™ Autoclave

The 16 liter BioClave offers three cycle options (standard programs), which are preset for the sterilization of liquids, wrapped instruments or unwrapped instruments/plasticware. A fourth option "Dry Only" is also available for additional drying time to be added to the end of a cycle. For special applications, requiring variations in cycle parameters, all settings on the BioClave 16 are fully adjustable.

BioClave Mini™ Autoclave

The 8 liter BioClave Mini is preprogrammed to meet basic sterilization needs. Although the temperature can be selected at either 121°C or 134°C, the sterilization time is fixed. The economical BioClave Mini is the ideal choice wherever benchtop sterilization is required and space is limited.







BioClave 16

Ordering Information:

ı			
	Item No.	Description:	
	B4000-M*	BioClave Mini Autoclave (8L)	
	B4000-16*	BioClave Autoclave (16L)	
	B4000-P*	Printer (For BioClave 16L only)	
	B4000-PA	Extra roll of paper for B4000-P	

^{*115}V with US plug. For 230v (EU plug), please add (-E). This product is intended for research use only.

Technical Data:

B4000-M (BioClave Mini)

Chamber Volume: 81

Max. Pressure: 29 PSI/2 Bar

Chamber Dimensions: 6.7 x 12.5 in. / 17 x 31cm
Tray Dimensions: 4.75 x 9.75 in. / 12 x 24.8 cm

Exterior Dimensions: 20 x 13.5 x 12.9 in. (WxDxH) 51 x 34 x 33 cm
Weight 74 lbs (33 kg)

Electrical: 115 or 230V, 50-60Hz, 950W

Warranty: 1 Year

B4000-16 (BioClave)

Chamber Volume: 16L

Max. Pressure: 29 PSI / 2 Bar Chamber Dimensions: 9 x 13.75 in. / 3

Chamber Dimensions: 9 x 13.75 in. / 23 x 35 cm

Tray Dimensions: 6.5 x 10.75 in. / 16.5 x 27 cm

Exterior Dimensions: 22 x 17.5 x 15.7 in. 56 x 44.5 x 40 cm
Weight: 89 lbs (40 kg)

Electrical: 115 or 230V, 50-60Hz, 1600W

Warranty: 1 Yea

Temperature Control Equipment

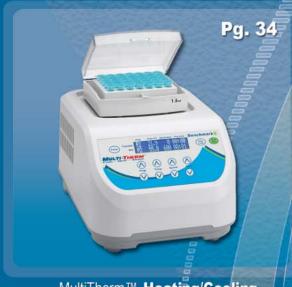




Incu-Shaker™ Mini **Shaking Incubator**



Incu-Shaker™ 10 Heating/Cooling
Shaking Incubators



MultiTherm™ Heating/Cooling Vortex Mixer

Hotplates, Stirrers and Hotplate Stirrers



Technical Data:

H4000-H (Hotplate)

Temp.Range: 80 to 380°C

Platform: 7.5 x 7.5 in / 19 x 19 cm
Control: Quick Adjustment Knob

Dimensions: 8x9x4.5 in. (WxDxH) 20x23x11.5 cm

Electrical: 115V or 230V, 50-60 Hz, 400W

Warranty: 2Years

H4000-S (Magnetic Stirrer)

Speed Range: 60 to 1500 rpm
Platform: 7.5 x 7.5 in / 19 x 19 cm
Control: Quick Adjustment Knob

Dimensions: 8x9x4.5 in. 20x23x11.5 cm

Electrical: 115V or 230V, 50-60 Hz, 300W

Warranty: 2 Years

H4000-HS (Hotplate & Magnetic Stirrer)

Speed Range: 60 to 1500 rpm Temp. Range: 80 to 380°C

Platform: 7.5 x 7.5 in / 19 x 19 cm
Control: Quick Adjustment Knob

Dimensions: 8x9x4.5 in. 20x23x11.5 cm

Electrical: 115V or 230V, 50-60 Hz, 500W

Warranty: 2 Years

Benchmark hotplates, stirrers and hotplate-stirrers feature an exceptionally durable, chemical resistant white ceramic work surface. Their space-efficient design (8 X 9 in. footprint), makes them ideal for use on crowded benchtops and inside of bio-hoods.

Advanced microprocessor controls with convenient turn knobs allow quick, precise adjustment and maintenance of speed and temperature. Safety indicator LED's on the front panel indicate when the heating and/or stirring functions have been activated. With a square 7.5 in work surface, all three models are compatible with a wide variety of popular sizes of borosilicate glass beakers, flasks, bottles and other vessels. The hotplate/magnetic stirrer model (H4000-HS) comes complete with a support rod for mounting thermometers and temperature probes.

Ordering Information:	
Item No.	Description:
H4000-H*	Benchmark Hotplate
H4000-S*	Benchmark Magnetic Stirrer
H4000-H5*	Benchmark Hotplate Stirrer

*115V with US plug. For 230v (EU plug), please add (-E).

myTemp™ Digital Incubators (20L)





- Digital temperature control
- Personal sized, 13 x 14.5 in. footprint
- Accepts bottles & flasks up to 2L
- → Two models, heat only or heat/cool
- Optional 3D mini shaker available for sample agitation

With digital temperature control, the MyTemp incubators provide convenient "set and walk away" operation, eliminating the need for external thermometers and repetitive "fine tuning" of an analog control knob. Simply choose the desired temperature and the incubator immediately begins to heat up (or cool down, -HC model only) while accurately monitoring the chamber temperature and conveniently displaying the temperature in real time on the large LED control panel.

Despite a modest footprint of 14.5 x 13", the MyTemp incubators feature large internal chambers, capable of storing flasks and bottles up to 2 liter. In addition, the incubators include two adjustable/removable shelves for increased capacity. A mini nutating rocker (supplied with both flat and dimpled mats) is also available for agitation of samples during incubation.



Ordering Information:		
Item No.	Description:	
H2200-H*	myTemp™ mini digital incubator, includes 2 shelves, (Heat Only, ambeint +1 to 60°C)	
H2200-HC*	myTemp™ mini digital incubator, includes 2 shelves, (Heat & Cool, ambeint -15 to 60°C)	
H3D-1020	Mini nutating rocker with flat cord, 6x8" platform, 115V	
H3D-1020-E	Mini nutating rocker with flat cord, 6x8" platform, 230V	
H2200-SH	Extra shelf, 10.5 x 8"	

*Includes US plug. For EU plug, please add (-E).

Technical Data:

Temp. Range (-H): Temp. Range: (-HC): Temp. Accuracy: Temp. Increments: Temp. Uniformity: Capacity: Dimensions: Interior: Exterior:

Interior: Exterior: Weight: Electrical: Warranty: Amb. +1° to 60 °C Amb. -15° to 60 °C ± 0.5°C (at 37°C) 1°C ± 1°C (at 37°C) 20L (wxdxh) 10.3x9.3x12.8/26x23.5x33 cm 13.2x14.5x18.7/33.5x37x48 cm 15 lbs (6.5kg) 100 to 240V, 50-60Hz

myBlock™ Series Digital Dry Baths



Benchmark's new myBlock™ series are the first digital dry baths to include advanced microprocessor controls, timed operation and a removable hinged lid. In addition, an optional external temperature feedback probe can be positioned directly inside a sample tube, providing real-time control and monitoring of *actual* sample temperature.

Both the single and dual block models can be ordered in a configuration that includes our unique Quick-Flip™ blocks. These universal blocks accept tubes from 0.5 to 2.0ml and, with just a quick flip to the other side, accommodate 0.2ml tubes, PCR strips or (in the dual block model only) a PCR plate. In addition, a wide variety of blocks are available for tubes up to 50ml.

	Information:
Item No.	Description:
BSH5001-1B*	myBlock I single chamber with 1 x BSWCMB
BSH5002-2B*	myBlock II dual chamber with 2 x BSWCMB
BSH5001	myBlock I single chamber, without blocks
BSH5002	myBlock II dual chamber, without blocks
BSH-TP1	External temperature sensor
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml, 6 x PCR strips / 48 x 0.2ml (& in dual model only) one PCR plate
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW15	Block, 12 x 15ml**
BSW50	Block, 5 x 50ml**
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm**
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)*
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR2	Block, 1 x 96-well PCR Plate (2 & 4 block models)
BSWPCR1	Block, 1 x 96-well PCR Plate (1 block model)
BSWMT	Block, 1 x Micro Plate (2 and 4 block models)
BSW01	Block, solid - for slides or custom machining

^{*115}V with US plug. For 230v (EU plug), please add (-E).
**Tube height may prevent the transparent lid from closing.

MY BLOCK

- Hinged lid, improves temperature uniformity and conserves energy
- Optional external temperature probe for control of actual sample temperature
- → Available with unique Quick-Flip™ universal blocks



Technical Data:

Temp. Range: Temp. Accuracy: Temp. Increments: Temp. Uniformity: Timer:

Dimensions (WxDxH): Single:

Operating Temp. Range: Electrical:

Warranty:

Amb.+5 to 105°C +/- 0.1°C 0.1°C +/- 0.2°C 1min. to 99 hr & 59 min.

7 x 10 x 5 in./18 x 25 x 13 cm 6.3 x 14.5 x 5 in./16 x 36.5 x 13 cm +4°C to +65°C 115V or 230V, 50-60 Hz, 120W (single)/240W (dual)

2 Yea

isoBlock™ Digital Dry Bath





- Two isolated chambers with indpendent time & temperature control
- Hinged lid, improves temperature uniformity and conserves energy
- → Available with unique Quick-Flip™ universal blocks

The new IsoBlock model from Benchmark contains two isolated block chambers. Each chamber is controlled independently, allowiwing the dry bath to serve as two dry baths in one. The hinged (and removable) lid is designed with a dividing wall, when the lid is closed this dividing wall acts as a barrier, preventing air transfer between chambers.

The control panel features large digital displays of both time and temperature. At any point, either setting of a block can be adjusted, without affecting the settings of the other block.

A wide variety of blocks are available for accommodating nearly all popular tubes sizes. In addition, the unique Quick-Flip™ universal blocks accept tubes from 0.5 to 2.0ml and, and with just a quick flip to the other side, accomodate 0.2ml tubes or PCR strips.

Item No.	Description:
BSH6000*	IsoBlock drybath, with two independent chambers
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml, 6 x PCR strips / 48 x 0.2ml & (in dual model only) one PCR plate
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW15	Block, 12 x 15ml [†]
BSW50	Block, 5 x 50ml [†]
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm [†]
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)*
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR2	Block, 1 x 96-well PCR Plate (2 & 4 block models)
BSWPCR1	Block, 1 x 96-well PCR Plate (1 block model)
BSWMT	Block, 1 x Micro Plate (2 and 4 block models)
BSW01	Block, solid - for slides or custom machining

^{*115}V with US plug. For 230v (EU plug), please add (-E).



Technical Data:

Temp. Range: Temp. Accuracy: Temp. Increments: Temp. Uniformity: Timer: Dimensions (WxDxH):

Operating Temp. Range: Electrical:

Warranty:

Amb. +5 to 105°C +/- 0.1°C 0.1°C +/- 0.2°C 1min. to 99 hr & 59 min. 6.3 x 14.5 x 5 in. 16 x 36.5 x 13 cm +4°C to +65°C 115V or 230V, 50-60 Hz 240W 2 Years

[†]Tube height may prevent lid from closing, temperature accuracy may be affected.

MyBlock™ **Digital Dry Baths**



Compact, fits in the palm of your hand
Exchangeable blocks for 0.2 to 50ml tubes
Clear cover ensures temperature uniformity
Room temperature to 37°C in two minutes
Portable; optional 12V car adapter

Technical Data:

 Temp. Range:
 Amb.+5 to 100°C

 Temp. Accuracy:
 ± 0.5°C

 Temp. Increments:
 0.1°C

 Temp. Uniformity:
 +/- 0.2°C

 Dimensions
 4x6x4.5 in. / 10.5 x 15 x 11.5 cm

Block Dimensions: 1.85 x 2.8 x 1.25 in.
4.7 x 7.1 x 3.2 cm

Weight: 2lbs (1kg)

Electrical: Universal Voltage
100-240V, 50-60 Hz, 50W

Warranty: 2Years

Benchtop control of sample temperature has never been this easy or economical. The new myBlock Mini fits almost anywhere and can even be used "on-the-go" in cars, boats or wherever a12 volt power source is available.

Its simple touch pad control with digital display is designed for "set and walk away" temperature selection and unrivaled accuracy. At less than 5 inches wide, myBlock Mini is truly the first personal block incubator.



For technical data, please see above (myBlock Mini). Temp Accuracy: +/- 0.3°C





Ordering Information:		
Item No.	Description:	
BSH200*	myBlock Mini Digital Dry Bath	
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips	
BSH100-05	Block, 24 x 0.5ml	
BSH100-15	Block, 15 x 1.5ml	
BSH100-1520	Block, 15 x 1.5 or 2.0ml	
BSH100-150	Block, 4 x 15ml (not compatible with cover/lid)	
BSH100-500	Block, 2 x 50ml (not compatible with cover/lid)	
BSH100-1232	Block, 15 x 2ml autosampler vials (12 x 32mm)	
BSH100-1213	Block, 15 x 12-13mm diameter tubes & vacutainers	
BSH100-CV	Block, 8 x cuvettes	
BSH100-CU	Block, custom manufactured	
BSH100-A12	12V vehicle power adapter	

*Includes US plug. For EU plug, please add (-E).

Ordering	Information:
Item No.	Description:
BSH200-HL*	myBlock Mini Digital Dry Bath with heated lid
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips
BSH100-05	Block, 24 x 0.5ml
BSH100-15HL	Block, 24 x 1.5ml

*Includes US plug. For EU plug, please add (-E).

The new myBlock™ HL is the first and only mini heat block featuring a heated lid for protecting samples against unwanted condensation and evaporation. Both the block and lid temperature can be selected independently in increments of 0.1°C, making this myBlock the ideal choice for the most temperature sensitive applications, including immunoassays, LAMP assays, enzyme reactions & other hypersensitive temperature procedures.

MyBath™ **Digital Water Bath (4L)**





- Digital accuracy and convenience
- Includes tube racks for 1.5/2.0ml, 15ml and 50ml tubes
- Quik-CAL™ user calibration function
- Hinged lid is also removable

Included Tube Racks:





This compact 4 liter water bath features easy to use controls that allow the user to digitally select and monitor temperature. Its hinged lid provides a secure, covered environment and can be flipped open (to the rear) or completely and instantly removed at the user's option.

The MyBath is also the only water bath that comes with test tube racks for 50ml, 15ml and 1.5/2.0ml tubes, making it complete and ready to use.

Designed with the molecular biology lab in mind, the MyBath 4 liter is the complete personal water bath.

Ordering Information: Item No. Description: B2000-4* MyBath™ 4L Digital Water Bath, includes tube racks for 1.5/2.0, 15 and 50ml tubes B2000-T5 Optional test tube rack for 40 x 0.5ml tubes

*115V with US plug. For 230v (EU plug), please add (-E).



Technical Data:

Temp. Range: Amb. +5 to 100 ℃
Temp. Accuracy: ± 0.2 ℃

Temp. Accuracy: ±0.2°C
Temp. Increments: 0.1°C
Temp. Uniformity: ±0.2°C
Capacity: 4L
Dimensions: 7.7 x 13

Dimensions: 7.7 x 13.9 x 9 in. (H: 12.2 in. with lid) 19.5 x 35 x 23 cm (H: 31 cm with lid)

Chamber: Stainles steel
Chamber Dimensions: 5.3 x 9.4 x 5.5 in.
(WxDxH) 13.5 x 24 x 14 cm
Weight: 15 lbs (6.5kg)

Electrical: 115 or 230V, 50-60Hz, 400W

Warranty: 2 Years

Incu-Shaker™ Mini Shaking Incubator





INCU-SHAKER^M Mini

- Exceptional temperature uniformity
- Extremely compact: just 11" wide
- Exchange flask clamps in one second with MAGic Clamp™ magnetic system

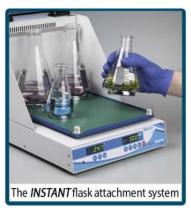
The Incu-Shaker™ Mini is the most compact shaking incubator in its class. Despite the remarkably small footprint, a large 11.5 x 9.5 in. work space accepts several platforms and a variety of flasks, tubes and other common vessels.

The standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, Petri dishes and staining trays.

The convenient MAGic Clamp™ platform is also available for use with Erlenmeyer flasks and test tube racks. The unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.









Technical Data:

Temperature Range:
Temperature Increments:
Temperature Uniformity
Temperature Accuracy:
Shaking Speed Range:
Speed Increments:
Shaking Orbit:
Platform Dimensions:
Exterior Dimensions:
Height with Lid Open:
Timer:
Weight:
Electrical:
Warranty:

Ambient +5 to 60°C 0.1°C ±0.25°C ±0.1°C 30 to 300rpm 1rpm 19mm (3/4") 9.5 x 11.5 in./23.5 x 29 cm 11 x 15.7 x 10.8 in./28 x 40 x 27 cm 25 in./63 cm 1 min. to 48 hours / continuous 25 lbs. (11.5 kg) 115 or 230V, 50-60Hz, 300W 2 Years

Ordering Item No.	Description:
H1000-M*	Incu-Shaker™ Mini with non-slip rubber mat
H1000-MR	MAGic Clamp™ Universal platform (for flasks/tubes)
H1000-P-500	Dedicated platform with 5 x 500ml flask clamps
H1000-P-250	Dedicated platform with 8 x 250ml flask clamps
H1000-P-125	Dedicated platform with 12 x 125ml flask clamps
H1000-P-MP	4 x microplate platform (standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels
Accessories for H	1000-MR MAGic Clamp Platform
H1000-MR-500	Flask clamp for MAGic clamp platform, 500ml (max. 5)
H1000-MR-250	Flask clamp for MAGic Clamp platform, 250ml (max. 8)
H1000-MR-125	Flask clamp for MAGic Clamp platform, 125ml (max. 12)
H1000-MR-50	Flask clamp for MAGic Clamp platform, 50ml (max. 20)
H1000-MR-MP	MAGic clamp for 1 x microplate (max. 4)
H1000-MR-1550	Tube Rack, 30x15 & 20x50ml (max. 1)
H1000-MR-T15	Tube Rack, 32 x 15ml (max. 2)
H1000-MR-T50	Tube Rack, 15 x 50ml (max. 2)



Incu-Shaker™ 10L Shaking Incubators





- Two models, heat only & heat/cool
- Exceptional temperature uniformity
 - High capacity, up to 5 x 2L
- Exchange flask clamps in one second with MAGic Clamp™ magnetic system
- **Optional shelf for Petri dishes,** microplates, etc.





The INSTANT flask attachment system

Incu-Shaker™ 10L is a heavy-duty performer, designed for heavy workloads and continuous use. Its outstanding temperature accuracy and uniformity are supported by proprietary heat distribution technology that ensures that temperatures are precisely maintained throughout the chamber. Inconsistencies due to stratification are reduced to negligible levels and the selected temperature is precisely maintained within 0.25%, even in the corners. In the Incu-Shaker 10LR model, a powerful compressor provides cooling to temperatures as low as 15 degrees below ambient.

The powerful brushless induction drive is designed for years of trouble-free service, even under continuous use conditions with heavy loads. Noise and vibration are minimized by an advanced, computer designed motor isolation system. Like other Incu-Shaker models, the 10L is built to last.

A standard, rubber mat platform is included and is ideal for use with tissue culture flasks, Petri dishes, staining trays and other flat vessels. The convenient MAGic Clamp™ platform is also available for use with Erlenmeyer flasks and test tube racks. The unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

Ordering Information: Item No. **Description:** H1010* Incu-Shaker™ 10L with non-slip rubber mat H1012* Incu-Shaker™ 10LR (refrigerated) w/ non-slip rubber mat MAGic Clamp™ Universal platform (for flasks/tubes) H1010-MR 6 x microplate platform (standard or deepwell) H1010-P-MP H1000-P-SP Spring rack platform, for uncommon vessels H1010-SH Shelf, 14 x 5.5" for Petri dishes, microplates, etc. Accessories for H1010-MR MAGic Clamp Platform Flask clamp for MAGic clamp platform, 2L (max. 5) H1000-MR-2000 H1000-MR-1000 Flask clamp for MAGic clamp platform, 1L (max. 9) Flask clamp for MAGic clamp platform, 500ml (max. 16) H1000-MR-500 H1000-MR-250 Flask clamp for MAGic Clamp platform, 250ml (max. 25) Flask clamp for MAGic Clamp platform, 125ml (max. 36) H1000-MR-125 Flask clamp for MAGic clamp platform, 50ml (max. 49) H1000-MR-50 Clamp, 1 x microplate, for MAGic Clamp platform (max.. 8) H1000-MR-MP Tube Rack, 30x15 & 20x50ml (max. 4) H1000-MR-1550 H1000-MR-T15 Tube Rack, 32 x 15ml (max. 8) Tube Rack, 15 x 50ml (max. 8) H1000-MR-T50 H1000-MR-T600 Tube/Bottle Rack, 4x 500/600ml conical bottle (max. 4)

*115V with US plug, for 230v (EU plug), please add (-E).

Technical Data:

Temperature Range: Temperature Increments: Temperature Uniformity Temperature Accuracy: Shaking Speed Range: Speed Increments:

Shaking Orbit: **Platform Dimensions: Exterior Dimensions:**

H1010 (W x D x H): H1012 (W x D x H): Hieght (lid open):

Timer

Weight (H1010): Weight (H1012): Electrical (H1010): Electrical (H1012): Warranty:

Ambient +5 to 60°C Ambient -15 to 60°C

0.1°C ±0.25% ±0.1℃ 30 to 300rpm 1rpm 19mm (3/4") 17.8 x 17.8 in. / 45 x 45 cm

20 x 26 x 19 in./51 x 65 x 47 cm 20 x 31 x 22 in./51 x 79 x 56 cm 38 in. / 96.5 cm 1 min. to 48 hours or continuous 120 lbs. (55 kg) 170 lbs. (78 kg)

120 or 230V, 50-60Hz, 450W 120 or 230V, 50-60Hz, 950W

2 Years

MultiTherm™ Heating/Cooling Vortexer







- Temperature control from 0° to 100°C
- Exchangeable blocks, for tube sizes 0.2 to 50ml
- Precision contoured wells for uniform thermal transfer
- Two models: **Heat/Cool or Heat only**
- Sequence link function for linking or repeating programs (HC model only)

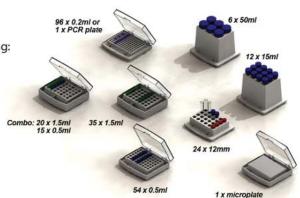
Ordering Information:

The MultiTherm shaker is a temperature controlled vortexer, useful for a variety of molecular biology applications, including:

- Denaturation of DNA, RNA & proteins Reverse transcription
- Lipid extractions
- Yeast and bacteria cultivation
- Restriction digests

- DNA/plasmid isolation Gentle thawing of biological materials

Despite its modest 8 x 11 in. footprint, all popular tubes and plates are compatible, including as many as six 50ml tubes. Speed, time and temperature settings are continuously visible on the LCD, simultaneously showing both actual and selected values. Integral over-temperature control ensures long life, safety and sample integrity.



Technical Data:

Temp. Range (HC): Temp. Range (H): Heating Ramp Rate: Cooling Ramp Rate: Temp. Accuracy: Speed Range: Motion / Orbit: Capacity: Dimensions:

Weight: Electrical:

Warranty:

Ambient -20° to 100°C Ambient +5° to 100°C 5.0°C/min. 2.5°C/min. (HC only) +/-1.0°C 200 to 1500 rpm, or "off" Orbital/3mm Per selected block 8.25 x 11.5 x 8.25 in. 21 x 29 x 21 cm 18lb. (8kg) 115 or 230V, 50-60Hz 500W

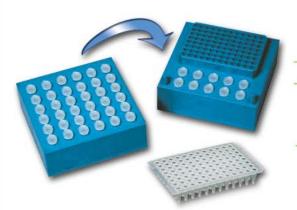
2 Years

Item No.	Description:
H5000-HC*	MultiTherm Shaker with heating and cooling
H5000-H*	MultiTherm Shaker with heating only
H5000-02	Block, 96 x 0.2ml or 1 PCR plate
H5000-05	Block, 54 x 0.5ml
H5000-CMB	Block, combination, 15x0.5ml & 20x1.5ml
H5000-15	Block, 35 x 1.5ml
H5000-20	Block, 35 x 2.0ml
H5000-12	Block 24 x 12mm (200-1200rpm / Amb10 to 100°C)
H5000-150	Block, 12 x 15ml (200-750rpm / Amb10 to 100°C)
H5000-500	Block, 6 x 50ml (200-750rpm / Amb10 to 100°C)
H5000-MP	Block, 1 x microplate (Amb10 to 60°C)
H5000-1232	Block, 24 x 2ml HPLC / Autosampler vials (12x32mm)
H5000-025	Block, 48 x 250ul vial insert (6x30mm)
H5000-CU	Block, custom drilled, for tubes/vials up to 40mm tall
H5000-WB	Block, multipurpose for liquids, beads, etc. chamber dimensions: 4 x 2.6 x 1"

Also Available from Benchmark



CoolCube™ Microtube and PCR Plate Cooler





- Maintains 0°C for 4 hours
- Ideal for:
 1.5ml & 2.0ml microtubes
 0.2ml PCR tubes & strips
 96 well PCR plates
- Also for use as a PCR workstation

The CoolCube™ is designed to store samples safely on the lab bench without sample degradation due to temperature increase or fluctuation. Simply place the CoolCube in a freezer overnight and it's ready for use, keeping samples cold, but not frozen. Maintains temperature at approximately 0° C for up to four hours.

Ordering Information:

Item No. Description:

R1000 CoolCube™ Microtube and PCR plate cooler

Technical Data:

Temperature: 0°C for up to 4 hours

Capacity:

Top Side: 36 x 1.5/2.0ml tubes

Bottom Side: 96 x 0.2ml tubes

12 x 0.2ml strips 1 x 96 well PCR plate

10 x 1.5/2.0ml

Dimensions: 5.6 x 5.6 x 2.5 in.

14.3 x 14.3 x 6.4 cm

Weight: 2 lbs (1 kg)
Warranty: 2 Years

hybex™ Media Storage Bottles





- Borosilicate 3.3 hybex glass
- Autoclavable caps (GL45) & drip rings
- Permanent enamel graduation markings
- Large area for bottle marking/identification
- Autoclavable, reuseable & breakage resistant
- Five cap colors

Technical Data:

Material: hybex™

borosilicate glass (3.3)

Cap Thread Size: GL45*

Temerature Range: -70° to 500°C Sterilization: -40° to 500°C Autoclave

Cap Material: Polypropylene (140°C)
Cap Colors: Standard Blue

Green Purple Yellow White Assorted

* 50ml bottles are only supplied with blue GL32 sealing caps

Item No.	Description:
B3000-50-B	Bottle, 50ml with (GL32) blue cap, 10/pk.
B3000-100-B*	Bottle, 100ml with standard (GL45) blue cap, 10/pk.
B3000-250-B*	Bottle, 250ml with standard (GL45) blue cap, 10/pk.
B3000-500-B*	Bottle, 500ml with standard (GL45) blue cap, 10/pk.
B3000-1000-B*	Bottle, 1L with standard (GL45) blue cap, 10/pk.
B3000-2000-B*	Bottle, 2L with standard (GL45) blue cap, 10/pk.
B3000-SP-B*	Bottle, Starter Pack with standard (GL45) blue cap, Starter Pack of ten bottles, includes, 2x100ml, 3x250ml, 3x500ml and 2x1L)
B3000-CAP-B*	Replacement cap, standard blue (GL45), 10/pk.
B3000-CAP2	Replacement cap, standard blue (GL32), 10/pk.
B3000-CAP-HTC	High temperature caps, red (GL45), up to 180°, 10/pk

*Please replace (-B) with (-G) for green caps, (-P) for purple caps, (-Y) for yellow caps, (-W) for white caps or (-AS) for assorted caps (2 of each color).

Benchmark[™] Agarose LE



Multi-purpose, high purity

Green Choice, free from organic solvents

Enhanced resolution and clarity

Low EEO / increased electrophoretic mobility

RNase, DNase and Protease free

Ordering Information:		
Item No.	Description:	
A1700	Benchmark Agarose LE, 25g	
A1701	Benchmark Agarose LE, 100g	
A1705	Renchmark Agarose LE 500g	

Also Available: Benchmark Specialty Agarose:

A1801-LM*	Benchmark Agarose Low Melting Point, 100g
A1801-HR*	Benchmark Agarose Hi-Res (PCR grade), 100g
A1801-31*	Benchmark Agarose 3:1, 100g

^{*} For technical data, or any additional information, please visit www.BenchmarkScientific.com

Technical Data:

 Gel Strength:
 ≥ 1200g/cm² (1%)

 Gel Temperature:
 36°C ±1.5°C (1.5%)

 Melt Temperature:
 88°C ±1.5°C (1.5%)

EEO (-mr): 0.13

Moisture Content: \leq 7%

Sulfate: \leq 0.2%

RNase/DNase: None Detected
Protease/Endonuclease: None Detected
Store Conditions: Room Temperature

EZ Pack™ **Agarose Tablets (0.5g)**



- Eliminates weighing
- 🕂 Fast dissolving, just 2 minutes
- Convenient blister pack protects tablet integrity
- Consistent reproducible gels
- Low EEO, standard molecular biology grade
- Produced without the use of organic solvents

Ordering Information: Item No. Description: A2501 EZ Pack agarose tablets, 100g (200 tablets) A2505 EZ Pack agarose tablets, 500g (1000 tablets)

Technical Data:

Gel Strength: \geq 1200g/cm² (1%) Gel Temperature: $36^{\circ}\text{C} \pm 1.5^{\circ}\text{C} (1.5\%)$ Melt Temperature: $88^{\circ}\text{C} \pm 1.5^{\circ}\text{C} (1.5\%)$

EEO (-mr): 0.13

Moisture Content: ≤ 7%

Sulfate: ≤ 0.2%

RNase/ DNase: None Detected
Protease/Endonuclease: None Detected
Store Conditions: Room Temperature









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