

A close-up, slightly low-angle shot of a man with short, dark hair, smiling warmly. He is wearing a white button-down shirt. He is looking down at a laptop screen, which is partially visible in the lower right corner. His right hand is resting on the laptop keyboard. The background is a bright, out-of-focus office or modern interior with large windows. In the top right corner, there is a semi-transparent orange circle containing the text "In touch with life".


In touch with life



2. Consumables, Heating, Cooling, Mixing

“Better results in sample preparation with the utmost reliability and efficiency—that’s what Eppendorf stands for”

Summary of applications

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All sample preparation consumables shown on the following pages can be provided as Customized Solutions . More information on page 256.		

Eppendorf recognizes its responsibility as a global citizen and is striving to reduce the environmental impact of its business operations and the products we produce, as well as to support the sustainable green initiatives of our customers. In this section you will find products with special epGreen features.



For more information on epGreen, see pages 312 and 313.

The best consumables for your samples



Eppendorf® is a leading manufacturer of high quality consumables for research laboratories. Since inventing the 1.5 ml microcentrifuge tube in 1963 we constantly keep your needs in mind to develop products that benefit you and your work processes. Some characteristic examples are:

- Optimized product design for reliable sealing to minimize sample evaporation
- Outstanding stability to protect your samples during centrifugation
- LoBind consumables to minimize sample loss
- Unique Safe-Lock tubes minimize accidental lid opening to protect from hazardous materials and prevent sample loss
- Minimized lid locking forces for ergonomic opening and closing of tube lids
- Patented OptiTrack® frame in MTP and deepwell plates for super easy well identification and less pipetting errors

With fully automated production and continuous quality monitoring of molding tools and production areas we assure minimal production tolerances to guarantee you batch-to-batch and tube-to-tube consistency.

Clean-room manufacturing from selected raw materials and advanced product handling ensures you the highest product purity and no foreign contaminants. As a further commitment to product purity, each batch of PCR-clean and Biopur® quality products is tested and certified by an independent laboratory to guarantee traceability and purity. This is quality you can rely on!



	Eppendorf Quality	Eppendorf Sterile	Eppendorf PCR clean	Eppendorf Biopur
Continuous quality control for the following quality criteria:				
Function, tightness, precision	●	●	●	●
Defined flow dynamics	●	●	●	●
Minimal water retention	●	●	●	●
High chemical resistance	●	●	●	●
High thermal stability	●	●	●	●
Precisely molded	●	●	●	●
Batch testing¹ (certified) for the following purity criteria:				
Free of human DNA			●	●
Free of bacteria DNA (<i>E. coli</i>)				●
DNase-free			●	
RNase-free			●	●
Free of PCR inhibitors			●	
ATP-free				●
Pyrogen-free (endotoxin-free)				●
Sterile (Ph.Eur./USP)		●		●








¹ Batch-specific certificates can be downloaded from www.eppendorf.com.



For more information on Eppendorf purity levels, see pages 301 to 305, or visit www.eppendorf.com/purity.

Find the right tube

Ordering information

							
Description	0.5 ml Safe-Lock tube			1.5 ml Safe-Lock tube			
Product features	<ul style="list-style-type: none"> ● Hinged Safe-Lock lid prevents accidental lid opening ● Hinged lid for easy, contamination-free opening ● Precise lid sealing for lowest evaporation rates during storage ● Exceptional centrifugation stability prevents tube breaking ● Large, frosted lid for easy labeling ● Graduation for easy volume reference ● High chemical resistance ● Guaranteed functionality between -80 °C to 100 °C ● Autoclavable (121 °C, 20 min) 			<ul style="list-style-type: none"> ● Hinged Safe-Lock lid prevents accidental lid opening ● Hinged lid for easy, contamination-free opening ● Precise lid sealing for lowest evaporation rates during storage ● Exceptional centrifugation stability prevents tube breaking ● Large, frosted lid for easy labeling ● Graduation for easy volume reference ● High chemical resistance ● Guaranteed functionality between -80 °C to 100 °C ● Autoclavable (121 °C, 20 min) 			
Type (purity/color)	Quantity (pcs.)	Catalog No.	List USD	Quantity (pcs.)	Catalog No.	List USD	
Standard Polypropylene Tubes							
Eppendorf Standard Quality Clear (1 bag of 500) 	500	022363611	\$48.70	500	022363204	\$44.50	
Blue	500	022363646	59.50	500	022363247	55.00	
Green	500	022363654	59.50	500	022363263	55.00	
Red	500	022363662	59.50	500	022363280	55.00	
Yellow	500	022363671	59.50	500	022363301	55.00	
Amber (light protection)	500	022363638	59.50	500	022363221	55.00	
Assorted colors, 100 each: clear, blue, green, red and yellow (5 bags of 100)	500	022363697	59.50	500	022363328	55.00	
Eppendorf PCR clean purity¹ Clear (1 bag of 500) 	500	022363719	67.30	500	022363212	61.70	
Eppendorf Biopur[®] purity² Clear (individually packaged) 	50	022600001	30.50	100	022600028	44.40	
LoBind tubes							
Protein LoBind plastic Clear, PCR clean (2 bags of 50) 	100	022431064	20.90	100	022431081	20.90	
DNA LoBind plastic Clear, PCR clean (5 bags of 50) 	250	022431005	31.60	250	022431021	31.60	
Miscellaneous							
Tube rack, for 24 tubes	1	022364243	25.00	1	022364227	25.00	
Micropestle				10	022365622	79.50	
Permanent, waterproof marker	5	022431242	15.30				



¹ PCR clean: Batch-certified free from DNA, DNase, RNase, and PCR inhibitors² Biopur: Batch-certified sterile and free from DNA, RNase, ATP and pyrogens/endotoxins

➔ For more information on Eppendorf purity levels, see pages 301 to 305, or visit www.eppendorf.com/purity.

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

Find the right tube

					
2.0 ml Safe-Lock tube			1.5 ml Flex-Tube®		
<ul style="list-style-type: none"> ● Hinged Safe-Lock lid prevents accidental lid opening ● Hinged lid for easy, contamination-free opening ● Precise lid sealing for lowest evaporation rates during storage ● High centrifugation stability prevents tube breaking ● Large, frosted lid for easy labeling ● Graduation for easy volume reference ● High chemical resistance ● Guaranteed functionality between -80 °C to 100 °C ● Autoclavable (121 °C, 20 min) 			<ul style="list-style-type: none"> ● Precision molded for tight lid closure but easy operation ● Exceptional centrifugation stability prevents tube breaking ● Frosted lid for easy labeling ● Graduation for easy volume reference ● High chemical resistance ● Guaranteed functionality between -80 °C to 100 °C ● Autoclavable (121 °C, 20 min) 		
Quantity (pcs.)	Catalog No.	List USD	Quantity (pcs.)	Catalog No.	List USD
500	022363352	\$48.00	500	022364111	\$30.60
500	022363395	58.20	500	022363531	40.30
500	022363417	58.20	500	022363557	40.30
500	022363433	58.20	500	022363573	40.30
500	022363450	58.20	500	022363590	40.30
500	022363379	58.20	500	022363514	40.30
500	022363476	58.20			
500	022363344	63.70	500	022364120	40.30
100	022600044	50.80			
100	022431102	20.90			
250	022431048	31.60			
1	022364227	25.00	1	022364227	25.00
10	022365622	79.50	10	022365622	79.50

Safe-Lock microcentrifuge tubes



Safe-Lock tubes with hinged lid to prevent accidental lid opening

Product features

- Hinged Safe-Lock lid prevents accidental lid opening
- Precise lid sealing for lowest evaporation rates during long-term storage
- Exceptional centrifugation stability prevents tube breaking:
 - Up to 30,000 x g for 0.5 ml and 1.5 ml tubes
 - Up to 25,000 x g for 2.0 ml tubes
 - 70,000 x g possible in form-fitting rotor
- Hinged lid allows for easy, contamination-free opening
- Large frosted lid and surface on the side for easy labeling
- Graduations for easy volume reference
- Guaranteed functionality between –80 °C to 100 °C
- Autoclavable (121 °C, 20 min)
- Available in batch-certified Eppendorf® PCR clean and Biopur® quality for guaranteed purity



2 ml blue

0.5 ml green

1.5 ml red






1.5 ml yellow

1.5 ml amber

Description

Eppendorf Safe-Lock tubes combine all the experience of over 45 years of constant improvement and development. The original Safe-Lock tube gives your sample outstanding stability during centrifugation, perfect sealing and evaporation protection. Trust in the original Eppendorf Safe-Lock tube because your samples deserve the best treatment!

Ordering information

Safe-Lock tubes	Catalog No.	List USD	Catalog No.	List USD	Catalog No.	List USD	
Tube size	0.5 ml		1.5 ml		2.0 ml		
Eppendorf Standard Quality, 500 pcs.							
Clear		022363611	\$48.70	022363204	\$44.50	022363352	\$48.00
Blue		022363646	59.50	022363247	55.00	022363395	58.20
Green		022363654	59.50	022363263	55.00	022363417	58.20
Red		022363662	59.50	022363280	55.00	022363433	58.20
Yellow		022363671	59.50	022363301	55.00	022363450	58.20
Amber (light protection)		022363638	59.50	022363221	55.00	022363379	58.20
Assorted colors ¹		022363697	59.50	022363328	55.00	022363476	58.20
Eppendorf PCR clean purity ² , 500 pcs.							
Clear		022363719	67.30	022363212	61.70	022363344	63.70
Eppendorf Biopur® purity ³		Packaging size, 50 pcs.		Packaging size, 100 pcs.		Packaging size, 100 pcs.	
Clear (individually packaged)		022600001	30.50	022600028	44.40	022600044	50.80

¹ 100 each: Clear, blue, green, red and yellow.

² PCR clean: Batch-certified free from DNA, DNase, RNase, and PCR inhibitors

³ Biopur: Batch-certified sterile and free from DNA, RNase, ATP and pyrogens/endotoxins

➔ For information on PCR tubes, see page 215.

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

Flex-Tube®



Flex-Tube lid guarantees tight lid closure but easy, stress-free opening and closing.

Description


The easy-open, easy-close design of our Flex-Tube provides convenient and reliable sample preparation, centrifugation and storage.



Product features

- Precision molded for tight lid closure but easy operation
- Rated to 30,000 x g for excellent mechanical stability during centrifugation prevents tube breaking
- Etched marking surfaces for easy labeling
- Graduations for easy volume reference
- Guaranteed functionality between -80 °C to 100 °C
- Autoclavable when open (121 °C, 20 min)

Ordering information

Flex-Tube, 1.5 ml	Catalog No.	List USD
Eppendorf® Standard Quality, 500 pcs.		
Clear	022364111	\$30.60
Blue	022363531	40.30
Green	022363557	40.30
Red	022363573	40.30
Yellow	022363590	40.30
Amber (light protection)	022363514	40.30
Eppendorf PCR clean purity*, 500 pcs.		
Clear 	022364120	40.30

* PCR clean: Batch-certified free from DNA, DNase, RNase, and PCR inhibitors

High-quality Eppendorf® microcentrifuge tubes



Now even safer!

Safe-Lock tubes and Flex-Tubes are rated up to 30,000 x g (0.5 ml and 1.5 ml).

Inferior quality tubes can burst during centrifugation—not Eppendorf Tubes®! They withstand forces up to 30,000 x g so that you can quickly and safely spin down your samples.



Tubes of inferior quality can burst or form bubbles during centrifugation.

Find the right Eppendorf Tube for your centrifuge applications:

	Standard/PCR clean	Biopur	DNA LoBind	Protein LoBind
Safe-Lock 0.5 ml	30,000 x g	22,000 x g	30,000 x g	18,000 x g
Safe-Lock 1.5 ml	30,000 x g	22,000 x g	30,000 x g	18,000 x g
Safe-Lock 2.0 ml	25,000 x g	22,000 x g	25,000 x g	18,000 x g
Flex-Tube 1.5 ml	30,000 x g	—	—	—

The tubes can be centrifuged in a 45° fixed-angle rotor at 40 °C for 90 min. with aqueous saline solution up to the above-indicated g-numbers (RFC). The centrifugation stability depends on the temperature. Liquids that have a higher density or that attack the stability of the plastic (organic solvents, acids), can reduce the mechanical loading capacity of the tubes.

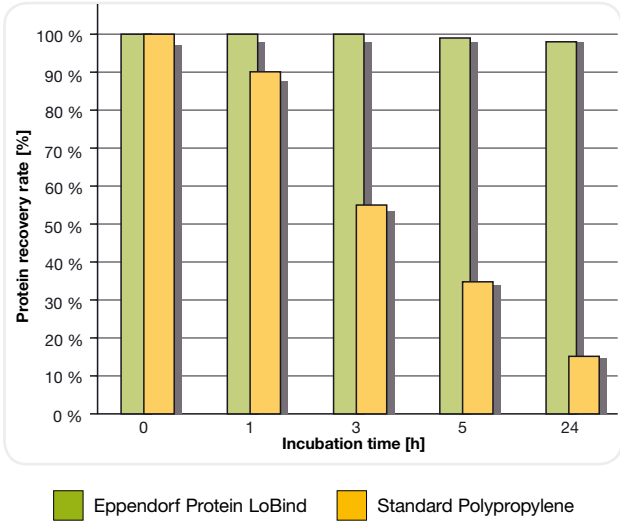
Protein LoBind tubes



Product features

- Protein LoBind tubes are ideal for preparation or storage of protein, peptide, antibody or virus samples
- LoBind material guarantees maximum sample recovery for improved assay results
- Free of surface coating (e. g. siliconization) to eliminate the risk of sample interference
- Hinged Safe-Lock lid prevents accidental lid opening during incubation
- Precise lid sealing for lowest evaporation rates during long-term storage
- Rated up to 18,000 x g centrifugation speed for molecular biology applications
- Additional features identical to Safe-Lock tubes (page 108)
- Certified free of DNA, DNase, RNase and PCR inhibitors (PCR clean)
- Also available in MTP and deepwell plate formats for easy up-scaling

Typical protein recovery rates in Eppendorf® Protein LoBind consumables



● **Fig. 1:** Protein recovery (fluorescein-labeled BSA) in Eppendorf Protein LoBind Deepwell Plates and plates made of standard material. The Eppendorf Protein LoBind material guarantees up to 97% sample recovery independent on incubation time. In contrast, protein sticks to standard material resulting in nearly 50% or 90% sample loss after 3 h or 24 h, respectively.

Description

When biological samples are stored or incubated in standard reaction vessels more than 90% sample material can be lost within 24 hours due to adsorption to the plastic surface. Eppendorf LoBind tubes and plates maximize sample recovery by significantly reducing sample-to-surface binding—without the use of any type of coating! A combination of specially developed technology and ultrapure selected polypropylene ensures best recovery rates of your valuable samples.

Eppendorf Protein LoBind tubes are specifically designed for use in proteomics or other fields of protein research (antibodies, cell biology, peptide drugs etc.), where protein concentration tend to be very small and sample recovery is vital for assay results. Significantly more protein can be recovered for downstream analyses and enzymes remain active as they are not denatured by any tube-surface interactions.

Ordering information

Description	Catalog No.	List USD
Protein LoBind tubes Clear, PCR clean purity*, 100 pcs. (2 bags of 50)		
0.5 ml	022431064	\$20.90
1.5 ml	022431081	20.90
2.0 ml	022431102	20.90

* PCR clean: Batch-certified free from DNA, DNase, RNase, and PCR inhibitors



➔ For more information on Eppendorf purity levels, see pages 301 to 305, or visit www.eppendorf.com/purity.

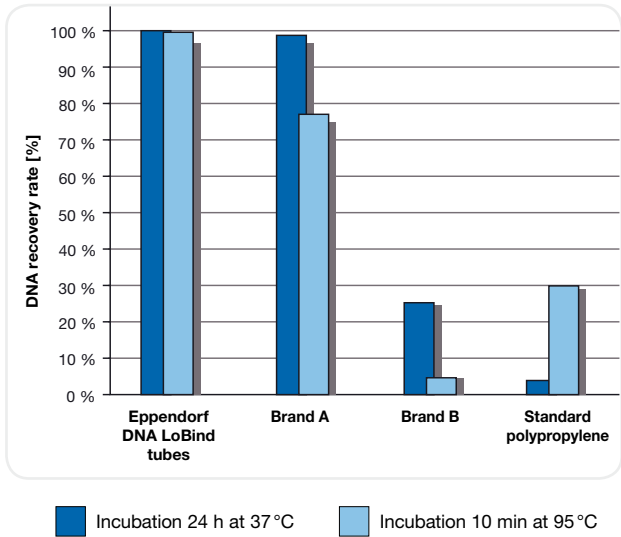
DNA LoBind tubes



Product features

- DNA LoBind for DNA or RNA applications in forensic analysis, microarrays, next generation sequencing
- LoBind material guarantees maximum sample recovery for improved assay results
- <0.3% sample loss at standard reaction conditions
- <1% loss at high-salt concentrations (e.g., for precipitation)
- Free of surface coating (e. g. siliconization) to eliminate the risk of sample interference
- Hinged Safe-Lock lid prevents accidental lid opening during incubation
- Precise lid sealing for lowest evaporation rates during long-term storage
- Exceptional centrifugation stability up to 30,000 x g (25,000 x g for 2.0 ml tube) prevents tube breaking
- Additional features identical to Safe-Lock Tubes (page 108)
- Certified free of DNA, DNase, RNase and PCR inhibitors (PCR clean)
- Also available in MTP and deepwell plate formats for easy up-scaling

DNA recovery rate under high-salt concentrations (2.5 M NaCl) after different incubation conditions



● **Fig. 2:** DNA recovery rate (0.2 ng/µl DNA fragment (130 bp, ³²P labeled) in 2.5 M NaCl/TE buffer) in Eppendorf® DNA LoBind tubes compared to standard polypropylene and maximum recovery tubes of different suppliers. The Eppendorf DNA LoBind material guarantees up to 99% sample recovery independent of incubation temperature or time. In contrast, sample recovery in standard microcentrifuge tubes is depending on incubation conditions and can be as low as 4%.

Description

DNA LoBind tubes improve recovery of nucleic acids by reducing their adsorption to the tube wall. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100% recovery of DNA/RNA molecules—without surface coating to eliminate the risk of sample contamination. DNA LoBind tubes are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase and PCR Inhibitors. Small packaging in bags of 50 tubes further reduces the risk of contamination.

Eppendorf DNA LoBind tubes are ideal for sample preparation or long-term storage of nucleic acids in forensic, microarrays, next generation sequencing applications.

Ordering information

Description	Catalog No.	List USD
DNA LoBind Tubes Clear, PCR clean purity*, 250 pcs. (5 bags of 50)		
0.5 ml	022431005	\$31.60
1.5 ml	022431021	31.60
2.0 ml	022431048	31.60

* PCR clean: Batch-certified free from DNA, DNase, RNase, and PCR inhibitors



Racks for Eppendorf Tubes®



Product features

- 24-place capacity
- Unique swivel connectors interlock multiple racks in front-to-back and side-to-side configurations
- Numbered positions
- UV-resistant
- Stackable
- Autoclavable (121 °C, 20 min)

Description

Eppendorf® Tube Racks, ideal for sample processing and the short- or medium-term storage of samples, can be stored in a freezer and withstand temperatures as low as –80 °C. Each tube is properly spaced and elevated for easy access and convenient handling. Tube Racks are available for 0.5 ml, 1.5 ml and 2.0 ml tubes. They can be stacked, even when fully loaded, interlocked to other racks on both sides and feature labeling surfaces to enable easy identification. The racks are UV-resistant and fully autoclavable.

Ordering information

Description	Catalog No.	List USD
Tube Racks, 24-place capacity		
For 0.5 ml tubes	022364243	\$25.00
For 1.5/2.0 ml tubes	022364227	25.00

Micropestle



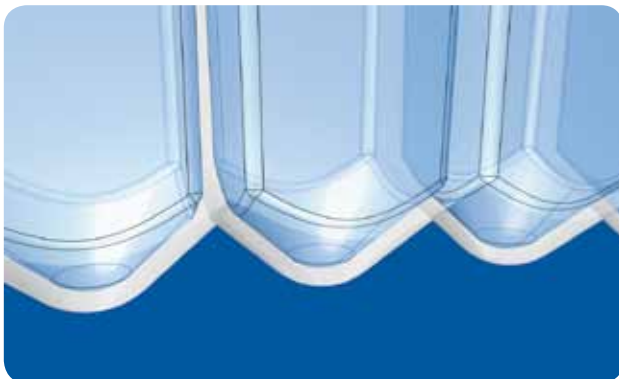
Product feature

- Autoclavable micropestle for resuspending pellets from 1.5 ml to 2.0 ml tubes

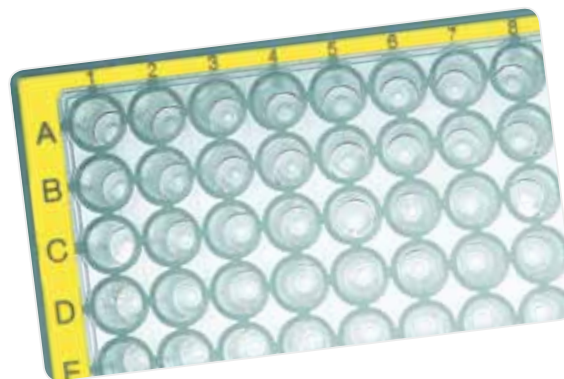
Ordering information

Description	Catalog No.	List USD
Micropestle, set of 10	022365622	\$79.50

Eppendorf® Deepwell Plates 96 and 384



RecoverMax® design: rounded-corners with conical bottom wells for maximum sample recovery and to prevent wicking effects in well corners.



OptiTrack matrix: colored frames with laser-inscribed alphanumeric coding for easy well identification.

Product features

- RecoverMax design—rounded-corner, conical bottom well provides maximum recovery of small volume samples and eliminates liquid “wall creep” to reduce potential well-to-well cross contamination
- OptiTrack® frames feature alphanumeric coding for easy well identification
- g-Safe—stable at high centrifugation up to 6,000 x g; durable for long term storage
- LoBind DNA and LoBind Protein versions reduce unspecific sample binding and loss for long term storage samples
- High chemical resistance
- Autoclavable (121 °C, 20 min)
- Suitable for automation
- Conforms to SBS* standards
- Optional bar coding available
- Raised well rims for effective sealing

Application

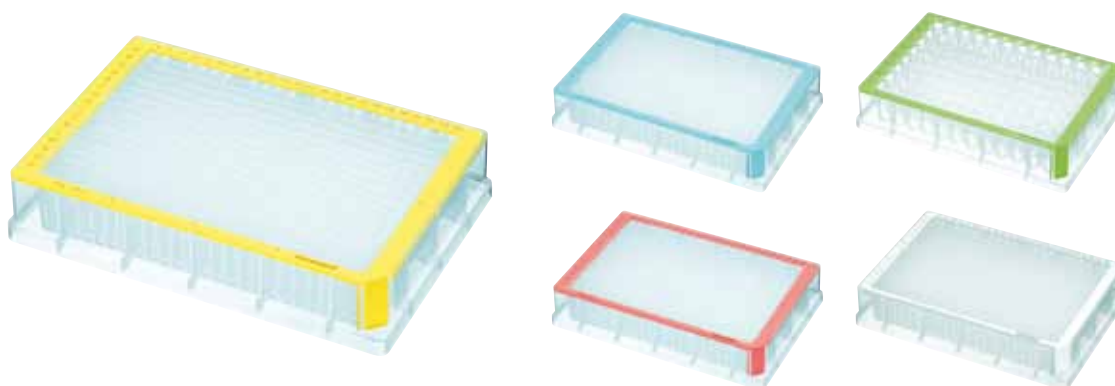
- For processing, transport and storage of samples

Description

Eppendorf sets a new standard for deepwell plates with the new RecoverMax well designs. The well geometry enables high-speed pipetting, excellent mixing and high-speed centrifugation to accelerate your manual as well as your automated work processes. Sophisticated colors and coding make reading, orientation and manual handling easier and faster.

Made of virgin polypropylene, each plate type is available with Standard and Sterile quality. Eppendorf Deepwell Plate 96/500, 96/1,000 and 384/200 are also available as DNA LoBind and Protein LoBind quality. Ease of stacking, multiple sealing options, as well as high chemical and temperature resistance make these plates excellent, multipurpose tools. The plates fulfill current guidelines: SBS*, EN ISO 9001/13485. Certificates are available on request at www.eppendorf.com.

* Society for Biomolecular Screening



Available in five frame colors: yellow, blue, green, red or white.

Eppendorf® Deepwell Plates 96 and 384

g-Safe™: Reliable centrifugation stability

Eppendorf Deepwell Plates 96 and 384 are designed to be centrifugation-stable and durable in a temperature range from 4 °C to 40 °C. Standard, DNA and Protein LoBind Eppendorf Deepwell Plate 96 and 384 can be centrifuged up to 6,000 x g¹. Sterile Eppendorf Deepwell Plate 96 and 384 are centrifugation stable up to 5,000 x g¹. For sample recovery after processing or storage, Eppendorf Centrifuge 5804 R and 5810 R and rotors A-4-81-MTP and A-2-DWP are recommended (see page 166).

¹ Centrifugation stability of each plate type generally depends on the plate itself, centrifuge, rotor, rotor bucket, adapter, max. rpm/max. g-force, operation temperature, operation time, liquid density, organic solvent, cumulative maximum weight and correct handling. Please read instruction manual prior to use.

Easy and safe sealing

Eppendorf Deepwell Plates 96 and 384 are high-quality consumables to ease high-throughput operation and handling. They are warp-resistant, always revealing a planar surface during each handling step; this planarity, together with precisely molded raised rims, leads to perfectly sealed wells, even after several sealing procedures. Other benefits include reduction of cross-contamination and minimized sample loss during storage. Sealing can be done by adhesive seal, heat-sealing or sealing mats.

Recommended sealing options for Eppendorf Plates Deepwell 96 and 384

Eppendorf Plate®	Adhesive seal	Heat sealing	Sealing mats
	● Self-adhesive	● Transparent	● Reusable
Deepwell 96/2,000	Eppendorf PCR Film Eppendorf PCR Foil	Eppendorf Heat Sealing Film	Eppendorf Sealing Mats
Deepwell 96/1,000	Eppendorf PCR Film Eppendorf PCR Foil	Eppendorf Heat Sealing Film	Eppendorf Sealing Mats
Deepwell 96/500	Eppendorf PCR Film Eppendorf PCR Foil	Eppendorf Heat Sealing Film	Eppendorf Sealing Mats
Deepwell 384/200	Eppendorf PCR Film Eppendorf PCR Foil	Eppendorf Heat Sealing Film	Not available from Eppendorf

Ordering information


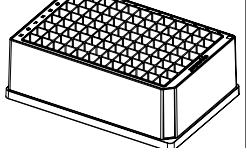
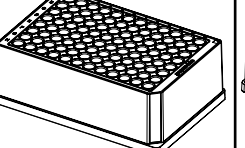
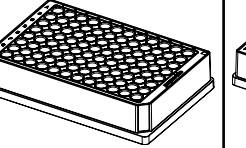
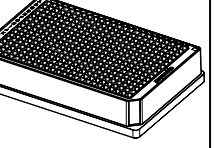
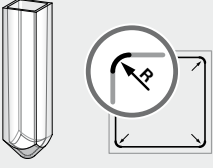


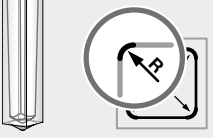
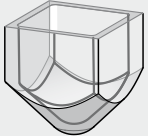
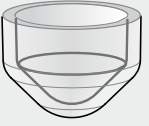
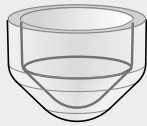
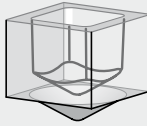
Description	Catalog No.	List USD
Eppendorf PCR Film (self-adhesive), 100 pcs.	951023019	\$ 179.00
Eppendorf PCR Foil (self-adhesive), 100 pcs.	951023001	164.00
Eppendorf Heat Sealing Film, 10 x 10 pcs.	951023060	179.00
Heat Sealer, 115 V/60 Hz	951023078	1,944.00
Eppendorf Sealing Mats		
For Deepwell 96/2,000, 50 pcs.	951030147	203.00
For Deepwell 96/1,000 and 96/500, 50 pcs.	951030121	203.00



Available in five frame colors: yellow, blue, green, red or white.





Eppendorf® Deepwell Plates 96 and 384

Technical specifications

				
Description	Deepwell 96/2,000 µl	Deepwell 96/1,000 µl	Deepwell 96/500 µl	Deepwell 384/200 µl
Number of wells	96	96	96	384
Total well volume	2,400 µl	1,200 µl	700 µl	240 µl
Work volume	50–2,000 µl	30–1,000 µl	30–550 µl	20–225 µl
Shape of well	 Square well with rounded edges			 Square well with rounded edges
Shape of well bottom				
Dimensions (W x D x H)*	5.03 x 3.37 x 1.74 in 127.8 x 85.5 x 44.1 mm	5.03 x 3.37 x 1.74 in 127.8 x 85.5 x 44.1 mm	5.03 x 3.37 x 1.07 in 127.8 x 85.5 x 27.1 mm	5.03 x 3.37 x 0.99 in 127.8 x 85.5 x 25.1 mm









* All Eppendorf plates fulfill the standards ANSI/SBS 1-2004 up to ANSI/SBS 4-2004.

Ordering information

Description	Quality	Color	Packaging	Catalog No.	List USD
Deepwell plate 96/2,000 µl					
Regular package	Standard	 White	20 plates (5 bags of 4)	951033405	\$122.00
		Yellow	20 plates (5 bags of 4)	951033421	122.00
		Red	20 plates (5 bags of 4)	951033448	122.00
		Green	20 plates (5 bags of 4)	951033464	122.00
		Blue	20 plates (5 bags of 4)	951033481	122.00
	Sterile	 White	20 plates (5 bags of 4)	951033502	138.00
		Yellow	20 plates (5 bags of 4)	951033529	138.00
		Red	20 plates (5 bags of 4)	951033545	138.00
		Green	20 plates (5 bags of 4)	951033561	138.00
		Blue	20 plates (5 bags of 4)	951033588	138.00
Large package	Standard	 White	80 plates (10 bags of 8)	951033600	427.00
		Yellow	80 plates (10 bags of 8)	951033626	427.00
		Red	80 plates (10 bags of 8)	951033642	427.00
		Green	80 plates (10 bags of 8)	951033669	427.00
		Blue	80 plates (10 bags of 8)	951033685	427.00
	Sterile	 White	80 plates (10 bags of 8)	951033707	488.00
		Yellow	80 plates (10 bags of 8)	951033723	488.00
		Red	80 plates (10 bags of 8)	951033740	488.00
		Green	80 plates (10 bags of 8)	951033766	488.00
		Blue	80 plates (10 bags of 8)	951033782	488.00

Eppendorf® Deepwell Plates 96

Ordering information









Description	Quality	Color	Packaging	Catalog No.	List USD	
Deepwell plate 96/1,000 µl						
Regular package	Standard		White	20 plates (5 bags of 4)	951032603	\$102.00
			Yellow	20 plates (5 bags of 4)	951032620	102.00
			Red	20 plates (5 bags of 4)	951032646	102.00
			Green	20 plates (5 bags of 4)	951032662	102.00
			Blue	20 plates (5 bags of 4)	951032689	102.00
	Sterile		White	20 plates (5 bags of 4)	951032701	112.00
			Yellow	20 plates (5 bags of 4)	951032727	112.00
			Red	20 plates (5 bags of 4)	951032743	112.00
			Green	20 plates (5 bags of 4)	951032760	112.00
			Blue	20 plates (5 bags of 4)	951032786	112.00
	DNA LoBind (also for RNA and other nucleic acids)		White	20 plates (5 bags of 4)	951032808	122.00
			Yellow	20 plates (5 bags of 4)	951032824	122.00
			Red	20 plates (5 bags of 4)	951032841	122.00
			Green	20 plates (5 bags of 4)	951032867	122.00
			Blue	20 plates (5 bags of 4)	951032883	122.00
	Protein LoBind		White	20 plates (5 bags of 4)	951032905	198.00
			Yellow	20 plates (5 bags of 4)	951032921	198.00
			Red	20 plates (5 bags of 4)	951032948	198.00
			Green	20 plates (5 bags of 4)	951032964	198.00
			Blue	20 plates (5 bags of 4)	951032981	198.00
Large package	Standard		White	80 plates (10 bags of 8)	951033006	351.00
			Yellow	80 plates (10 bags of 8)	951033022	351.00
			Red	80 plates (10 bags of 8)	951033049	351.00
			Green	80 plates (10 bags of 8)	951033065	351.00
			Blue	80 plates (10 bags of 8)	951033081	351.00
	Sterile		White	80 plates (10 bags of 8)	951033103	391.00
			Yellow	80 plates (10 bags of 8)	951033120	391.00
			Red	80 plates (10 bags of 8)	951033146	391.00
			Green	80 plates (10 bags of 8)	951033162	391.00
			Blue	80 plates (10 bags of 8)	951033189	391.00
	DNA LoBind (also for RNA and other nucleic acids)		White	80 plates (10 bags of 8)	951033201	427.00
			Yellow	80 plates (10 bags of 8)	951033227	427.00
			Red	80 plates (10 bags of 8)	951033243	427.00
			Green	80 plates (10 bags of 8)	951033260	427.00
			Blue	80 plates (10 bags of 8)	951033286	427.00
	Protein LoBind		White	80 plates (10 bags of 8)	951033308	701.00
			Yellow	80 plates (10 bags of 8)	951033324	701.00
			Red	80 plates (10 bags of 8)	951033341	701.00
			Green	80 plates (10 bags of 8)	951033367	701.00
			Blue	80 plates (10 bags of 8)	951033383	701.00

All Deepwell plates are available with bar code upon request. Available in five frame colors.



Eppendorf® Deepwell Plates 96

Ordering information









Description	Quality	Color	Packaging	Catalog No.	List USD	
Deepwell plate 96/500 µl						
Regular package	Standard		White	40 plates (5 bags of 8)	951031801	\$ 259.00
			Yellow	40 plates (5 bags of 8)	951031828	259.00
			Red	40 plates (5 bags of 8)	951031844	259.00
			Green	40 plates (5 bags of 8)	951031861	259.00
			Blue	40 plates (5 bags of 8)	951031887	259.00
	Sterile		White	40 plates (5 bags of 8)	951031909	290.00
			Yellow	40 plates (5 bags of 8)	951031925	290.00
			Red	40 plates (5 bags of 8)	951031941	290.00
			Green	40 plates (5 bags of 8)	951031968	290.00
			Blue	40 plates (5 bags of 8)	951031984	290.00
	DNA LoBind (also for RNA and other nucleic acids)		White	40 plates (5 bags of 8)	951032000	315.00
			Yellow	40 plates (5 bags of 8)	951032026	315.00
			Red	40 plates (5 bags of 8)	951032042	315.00
			Green	40 plates (5 bags of 8)	951032069	315.00
			Blue	40 plates (5 bags of 8)	951032085	315.00
	Protein LoBind		White	40 plates (5 bags of 8)	951032107	518.00
			Yellow	40 plates (5 bags of 8)	951032123	518.00
			Red	40 plates (5 bags of 8)	951032140	518.00
			Green	40 plates (5 bags of 8)	951032166	518.00
			Blue	40 plates (5 bags of 8)	951032182	518.00
Large package	Standard		White	120 plates (10 bags of 12)	951032204	701.00
			Yellow	120 plates (10 bags of 12)	951032221	701.00
			Red	120 plates (10 bags of 12)	951032247	701.00
			Green	120 plates (10 bags of 12)	951032263	701.00
			Blue	120 plates (10 bags of 12)	951032280	701.00
	Sterile		White	120 plates (10 bags of 12)	951032301	772.00
			Yellow	120 plates (10 bags of 12)	951032328	772.00
			Red	120 plates (10 bags of 12)	951032344	772.00
			Green	120 plates (10 bags of 12)	951032361	772.00
			Blue	120 plates (10 bags of 12)	951032387	772.00
	DNA LoBind (also for RNA and other nucleic acids)		White	120 plates (10 bags of 12)	951032409	843.00
			Yellow	120 plates (10 bags of 12)	951032425	843.00
			Red	120 plates (10 bags of 12)	951032441	843.00
			Green	120 plates (10 bags of 12)	951032468	843.00
			Blue	120 plates (10 bags of 12)	951032484	843.00
	Protein LoBind		White	120 plates (10 bags of 12)	951032506	1,396.00
			Yellow	120 plates (10 bags of 12)	951032522	1,396.00
			Red	120 plates (10 bags of 12)	951032549	1,396.00
			Green	120 plates (10 bags of 12)	951032565	1,396.00
			Blue	120 plates (10 bags of 12)	951032581	1,396.00

All Deepwell plates are available with bar code upon request. Available in five frame colors.



Eppendorf® Deepwell Plates 384

Ordering information

Description	Quality	Color	Packaging	Catalog No.	List USD	
Deepwell plate 384/200 µl						
Regular package	Standard		White	40 plates (5 bags of 8)	951031003	\$ 285.00
			Yellow	40 plates (5 bags of 8)	951031020	285.00
			Red	40 plates (5 bags of 8)	951031046	285.00
			Green	40 plates (5 bags of 8)	951031062	285.00
			Blue	40 plates (5 bags of 8)	951031089	285.00
	Sterile		White	40 plates (5 bags of 8)	951031101	315.00
			Yellow	40 plates (5 bags of 8)	951031127	315.00
			Red	40 plates (5 bags of 8)	951031143	315.00
			Green	40 plates (5 bags of 8)	951031160	315.00
			Blue	40 plates (5 bags of 8)	951031186	315.00
	DNA LoBind (also for RNA and other nucleic acids)		White	40 plates (5 bags of 8)	951031208	346.00
			Yellow	40 plates (5 bags of 8)	951031224	346.00
			Red	40 plates (5 bags of 8)	951031241	346.00
			Green	40 plates (5 bags of 8)	951031267	346.00
			Blue	40 plates (5 bags of 8)	951031283	346.00
	Protein LoBind		White	40 plates (5 bags of 8)	951031305	564.00
			Yellow	40 plates (5 bags of 8)	951031321	564.00
			Red	40 plates (5 bags of 8)	951031348	564.00
			Green	40 plates (5 bags of 8)	951031364	564.00
			Blue	40 plates (5 bags of 8)	951031381	564.00
Large package	Standard		White	120 plates (10 bags of 12)	951031402	757.00
			Yellow	120 plates (10 bags of 12)	951031429	757.00
			Red	120 plates (10 bags of 12)	951031445	757.00
			Green	120 plates (10 bags of 12)	951031461	757.00
			Blue	120 plates (10 bags of 12)	951031488	757.00
	Sterile		White	120 plates (10 bags of 12)	951031500	843.00
			Yellow	120 plates (10 bags of 12)	951031526	843.00
			Red	120 plates (10 bags of 12)	951031542	843.00
			Green	120 plates (10 bags of 12)	951031569	843.00
			Blue	120 plates (10 bags of 12)	951031585	843.00
	DNA LoBind (also for RNA and other nucleic acids)		White	120 plates (10 bags of 12)	951031607	934.00
			Yellow	120 plates (10 bags of 12)	951031623	934.00
			Red	120 plates (10 bags of 12)	951031640	934.00
			Green	120 plates (10 bags of 12)	951031666	934.00
			Blue	120 plates (10 bags of 12)	951031682	934.00
	Protein LoBind		White	120 plates (10 bags of 12)	951031704	1,513.00
			Yellow	120 plates (10 bags of 12)	951031721	1,513.00
			Red	120 plates (10 bags of 12)	951031747	1,513.00
			Green	120 plates (10 bags of 12)	951031763	1,513.00
			Blue	120 plates (10 bags of 12)	951031780	1,513.00

All Deepwell plates are available with bar code upon request. Available in five frame colors.



Eppendorf® Microplates 96 and 384

Sterile

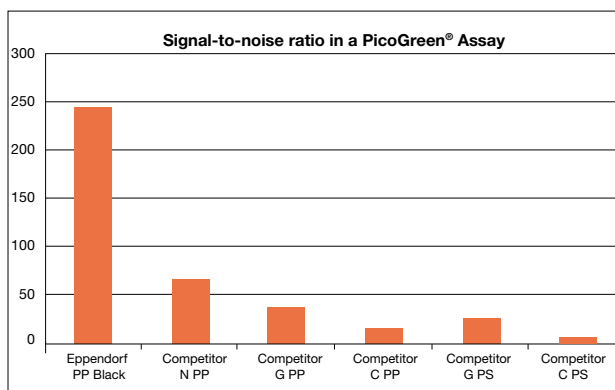
certified
PCR
clean**Description**

Suited for your application needs! The clear Eppendorf Polypropylene Microplates are ideal for storing substances or for applications requiring high resistance to solvents, such as DMSO.

For applications in small volumes, where maximum sample recovery is particularly important, the Microplates 384 are available in Protein and DNA LoBind quality.

Highest quality and purity

All Eppendorf Plates are manufactured under ISO certified cleanroom conditions. The Eppendorf microplates are available in PCR clean (free of human DNA, DNase, RNase and PCR inhibitors) and sterile quality. Each batch is tested individually and certified for safety and reproducibility for your application.



Comparison of the signal-to-noise ratio in a DNA quantification using the fluorescent dye PicoGreen. Black Eppendorf Microplates and black microplates of other manufacturers were used. PP = polypropylene, PS = polystyrene

Black and white microplates:

- The black Eppendorf Microplates are ideal for fluorescence detection. They offer an excellent signal-to-noise ratio, resulting in an extremely low detection limit—for clear signals even with low concentration samples!
- The white Eppendorf Microplates are optimized for highest sensitivity in the detection of luminescence or weak fluorescence signals, while their interfering background fluorescence is extremely low.
- Both versions are manufactured in high polished moulds from ultra-pure polypropylene. Thus unspecific binding of the sample, which may influence the test result at low sample concentrations, can be reduced.

Eppendorf Plate® Polypropylene

Description

The particularly warp resistant Eppendorf Plates perfectly fit into the Eppendorf® system. Its high level of measurement accuracy, heat and temperature resistance facilitate the direct integration into automated applications, such as serial dilutions, sample or reagent transfer or multi-stage assays. All Eppendorf Plates are available with barcode upon request.



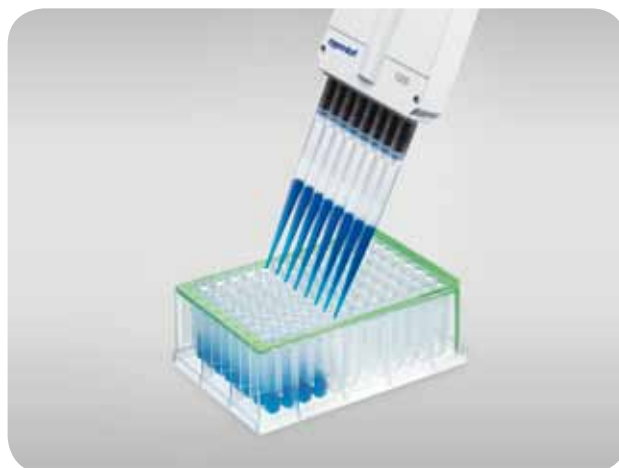
Centrifuging in Rotor A-2-MTP, A-2-DWP or A-4-81 (see page 176)



Efficient mixing with MixMate® (see page 124)



Immediately usable in epMotion® 5075/5070 (see page 78)



Simple manual pipetting in Deepwell Plates with epT.I.P.S.® 50–1,250 µl pipette tips and Research multi-channel pipette (see page 113)

Eppendorf Plate® Polypropylene

Sterile



Technical specifications Deepwell Plates

Description	Deepwell 384/200 µl	Deepwell 96/500 µl	Deepwell 96/1,000 µl	Deepwell 96/2,000 µl
Number of wells	384	96	96	96
Work volume	20–225 µl	30–550 µl	30–1,000 µl	50–2,000 µl
Total well volume	240 µl	700 µl	1,200 µl	2,400 µl
Well-bottom-shape				
Well shape				
	rounded edge			rounded edge
Dimensions (W x D x H)*	127.8 x 85.5 x 25.1 mm	127.8 x 85.5 x 27.1 mm	127.8 x 85.5 x 44.1 mm	127.8 x 85.5 x 44.1 mm



















Technical specifications Microplates

Description	Microplate 96/F	Microplate 96/U	Microplate 96/V	Microplate 384/F	Microplate 384/V
Number of wells	96	96	96	384	384
Work volume	96/F 50–350 µl	96/U 20–320 µl	96/V 20–300 µl	384/F 10–120 µl	384/V 5–120 µl
Total well volume	400 µl	360 µl	350 µl	150 µl	140 µl
Well-bottom-shape					
Well shape	round	round	round	rounded edge	rounded edge
Dimensions (W x D x H)*	127.8 x 85.5 x 14.4 mm				

* All Eppendorf plates fulfill the standards ANSI/SBS 1-2004 up to ANSI/SBS 4-2004.





Eppendorf® Microplates 96 and 384

Ordering information

Description	Quality	Border color	Well color	Catalog No.	List USD
Microplate 96					
Microplate 96/F		white	clear	951040005	\$165.00
		white	clear	951040021	189.00
Microplate 96/U		white	clear	951040048	165.00
		white	clear	951040081	189.00
		white	black	951040102	189.00
		grey	white	951040145	189.00
Microplate 96/V		white	clear	951040188	165.00
		white	clear	951040227	189.00
		white	black	951040260	189.00
		grey	white	951040308	189.00
Microplate 384					
Microplate 384/F		white	clear	951040341	227.00
		white	clear	951040383	318.00
Microplate 384/V		white	clear	951040421	277.00
		white	clear	951040464	318.00
		white	black	951040481	318.00
		grey	white	951040503	318.00
	DNA LoBind 	white	clear	951040546	331.00
	Protein LoBind 	white	clear	951040589	530.00

Larger packages and barcoded Eppendorf Microplates are available upon request.

MixMate®, Thermomixer® R, Thermomixer and ThermoStat plus

			
MixMate	Thermomixer R	Thermomixer	ThermoStat plus
Features			
Mixes Vortexes	Heats Cools Mixes	Heats Mixes	Heats Cools
Temperature control range			
Without temperature control	From 13 °C below RT to 99 °C	From 4 °C above RT to 99 °C	From 30 °C below RT to 99 °C
Application examples			
<ul style="list-style-type: none"> ● Low volume (5 µl) sample mixing; 384 well plates ● Mixing PCR preparations ● Resuspending pellets (e.g., bacteria, DNA, cell culture pellets) ● Incubation (e.g., ELISA assays) ● Colorimetric assays (e.g., Bradford, Lowry, BCA) ● Reporter gene assays (e.g., b-galactosidase, luciferase) ● Mixing restriction digestion preparations ● Vortexing numerous tube formats (e.g., 15 and 50 ml conical tubes) 	<ul style="list-style-type: none"> ● Enzyme reactions (e.g., DNA restriction digestion, cDNA production via reverse transcription, Proteinase K digestion) ● Transformation ● Denaturing of DNA, RNA, proteins ● Cultivation of bacteria ● Cultivation of yeasts ● Bead technology (e.g., protein purification) ● Isolation of DNA fragments from agarose gels ● Plasmid isolation ● Immunoprecipitation ● Hybridization experiments on slides, e.g., microarrays or <i>in situ</i> hybridization ● Gentle thawing of deep-frozen solutions such as buffers 	<ul style="list-style-type: none"> ● Enzyme reactions at temperatures 4 °C above RT (e.g., DNA restriction digestion, cDNA production via reverse transcription, Proteinase K digestion) ● Transformation ● Denaturing of DNA, RNA, proteins ● Cultivation of bacteria ● Cultivation of yeasts ● Bead technology (e.g., protein purification) ● Isolation of DNA fragments from agarose gels ● Plasmid isolation 	<ul style="list-style-type: none"> ● Enzyme reactions (e.g., DNA restriction digestion, cDNA production via reverse transcription, Proteinase K digestion) ● Transformation ● Denaturing of DNA, RNA, proteins ● Storage of enzymes, nucleic acids, etc., at defined temperatures ● Cell lysis ● <i>In vitro</i> translation ● Ligation ● Hybridization experiments on slides, e.g., microarrays or <i>in situ</i> hybridization ● Gentle thawing of deep-frozen solutions such as buffer

MixMate®



Product features

- ^{2D}Mix-Control: efficient and rapid mixing of volumes from 5 µl and up
- 3-in-1 format: mixing of plates, tubes and vortexing function
- Anti-spill technology: controlled mixing movement prevents spilling and lid splashing
- Universal holder: allows mixing of all skirted plate formats (up to 96- and 384-wells): MTPs, deepwell plates, PCR plates (skirted, semi-skirted, unskirted)
- Tube holders: enable mixing of skirted and unskirted PCR plates as well as tubes from 0.2 to 2.0 ml (0.2 ml PCR tubes, PCR strips, 0.5 ml, 1.5 ml, and 2.0 ml micro test tubes)
- 5 optimized presets—pre-programmed for the most common applications: 384-well plates; 384-well PCR plates; 96-well plates; 0.2/0.5 ml PCR tubes; and 1.5/2.0 ml tubes
- Vortexing numerous tube formats (e.g., microcentrifuge tubes, 15 ml and 50 ml conical tubes)
- Automatic imbalance detection
- Extremely small footprint
- User-friendly operation
- 2-year warranty

Description

Meet our compact and amazingly versatile mixer, specially designed for mixing small volumes in numerous plate and tube formats. MixMate's fast and precisely controlled mixing movements (^{2D}Mix-Control) enable efficient and homogenous mixing of samples in all vessel formats—allowing MixMate to be used for virtually any application. It accommodates micro test tubes, PCR plates, deepwell plates and MTPs. MixMate also features a touch vortex function with an innovative additional 2-second run timer to allow vortexing your next sample without restarting.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

MixMate®

MixMate accommodates all plate formats such as:



Skirted, semi-skirted,
unskirted PCR plates



Deepwell plates



Microplates



PCR tubes/strips
and test tubes

Technical specifications

Mixing speed	300 to 3,000 rpm (in 50 rpm increments)
Mixing and vortexing radius	1.5 mm (3 mm mixing stroke)
Touch vortexing frequency	3,500 rpm
Adjustable mixing time	15 s to 99.5 h; continuous
Noise level	<50 dB(A)
Power supply	100–230 V, 50–60 Hz
Power consumption	40 W
Dimensions (W x D x H)	6.7 x 9.1 x 5.1 in/17 x 23 x 13 cm
Weight	9.25 lb/4.2 kg

Ordering information

Description	Catalog No.	List USD
MixMate, includes 3 tube holders: PCR 96, 0.5 ml, 1.5/2.0 ml		
120 V	022674200	\$1,990.00
230 V	022674226	1,990.00
MixMate Accessories		
Tube Holder PCR 96 , for 96 x 0.2 ml PCR tubes, PCR strips or 96-well PCR plates, semi-skirted or unskirted	022674005	47.00
Tube Holder 0.5 ml , for 24 x 0.5 ml micro test tubes	022674021	41.00
Tube Holder 1.5/2.0 ml , for 24 x 1.5 ml or 2.0 ml micro test tubes	022674048	41.00

↩ See application list on page 123.

i Also visit the MixMate website: www.eppendorf.com/mixmate

Thermomixer®



Product features

- Dedicated for 24 x 1.5 ml microcentrifuge tubes
- ShortMix function
- Includes an IsoTherm rack and an IsoTherm cooling pack for sample storage at 0°C (see page 134)
- Small footprint
- Quiet operation due to perfect fit of the test tubes in the thermoblock
- Complete coverage of tubes in block for uniform heating
- 2-year warranty

Description

Small and ideally designed: Thermomixer is the perfect compact unit for 24 x 1.5 ml microcentrifuge tubes. Its impressive features include an extremely small footprint, a straightforward design and high stability—even at maximum mixing frequency.

➡ See application list on page 123.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Thermomixer® R



Product features

- Wide temperature range and application control due to active Peltier technology heating and counter-cooling
- Excellent reproducible mixing and incubating performance
- Ten different interchangeable thermoblocks which offer a high degree of flexibility
- Selectable "time" and "temp" controls: programmed runs can start immediately or when preset temperature is reached
- ShortMix function
- Interval mixing
- Pause function
- RS-232 interface
- Automatic thermoblock identification properly sets speed and temperature ranges for each block
- Quiet operation due to precise fitting of the test tubes in the thermoblock
- 2-year warranty

Description

The Thermomixer R conveniently offers simultaneous mixing and temperature control. It meets even the highest demands for user-friendliness and flexibility: its counter-cooling ability provides efficient cooling; thereby greatly expanding both its temperature control functions and range of applications.

Ten different thermoblocks are available, all of which can be simply and quickly interchanged, to adapt the unit to daily and/or changing requirements in the laboratory. All blocks are fully insulated for safety when exchanging and completely surround sample tubes for even heating from the bottom of the tube all the way up to the top. Two freely selectable program sequences with incubating, mixing and rest phases, as well as subsequent cooling to 13°C below room temperature, make everyday lab routines much easier.

➔ For interchangeable thermoblocks ordering information, see next page.

➔ See application list on page 123.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Thermomixer® and Thermomixer R

Technical specifications

	Thermomixer	Thermomixer R
Temperature control range	From approx. 4 °C above RT to 99 °C	From 13 °C below RT to 99 °C*
Temperature settings	From 1 °C to 99 °C	From 1 °C to 99 °C
Mixing speed	300–1,400 rpm	300–1,500 rpm*
Temperature accuracy	±1 °C between 20 °C and 45 °C ±2 °C below 20 °C and above 45 °C	±0.5 °C between 20 °C and 45 °C ±2 °C below 20 °C and above 45 °C
Heat-up speed	Approx. 5 °C/min	Approx. 5 °C/min
Cool-down speed	N/A	2–3 °C/min between 99 °C and RT 0.5–1 °C/min between RT and 13 °C below RT
Timer	N/A	1 min to 99:59 h, continuous
Mixing orbit	3 mm	3 mm
Power supply	100–240 V, 50–60 Hz	100–240 V, 50–60 Hz
Power requirement	90 W	90 W
Interface	N/A	RS-232
Dimensions, without block (W x D x H)	6.5 x 9.4 x 5.7 in/16.5 x 24 x 14.5 cm	8.7 x 9.8 x 4.9 in/22 x 25 x 12.5 cm
Weight	5.3 lb/2.4 kg	7.0 lb/3.2 kg

*Upper limit depends on thermoblock chosen (thermoblock options on page 131)

Ordering information

Description	Catalog No.	List USD
Thermomixer with thermoblock		
For 1.5 ml tubes, includes IsoTherm work rack and 0 °C cool pack, 120 V/50–60 Hz	022670000	\$2,538.00
For 1.5 ml tubes, includes IsoTherm work rack and 0 °C cool pack, 220 V/50–60 Hz	022670051	2,538.00
Thermomixer R		
Without block, 120 V/50–60 Hz	022670107	3,284.00
Without block, 220 V/50–60 Hz	022670158	3,284.00
Thermomixer R interchangeable thermoblocks and accessories		
24 x 0.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670506	660.00
24 x 1.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670522	660.00
24 x 2.0 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670549	660.00
24 test tubes , diameter 11–11.9 mm, height 30–76 mm	022670581	757.00
4 x 1.5–2.0 ml cryotubes® , external diameter max. 12.5 mm, all base shapes	022670557	513.00
8 x 15 ml conical tubes (Falcon® tubes)	022670531	615.00
4 x 50 ml conical tubes (Falcon tubes)	022670514	615.00
4 slides , for hybridization experiments	022670590	975.00
Slides DC , holds 4 Eppendorf DualChip® slides, with clamping plate	022670786	975.00
MTPs and deepwell plates , with lid	022670565	873.00
Adapter plate for 96 x 0.2 ml PCR tubes and PCR plates 96 to insert in exchangeable thermoblock for MTPs	022670573	290.00

➔ For information on the Eppendorf IsoTherm-System, see page 134.

ThermoStat plus



Product features

- Precise temperature control with active cooling and heating
- Choice of 11 different interchangeable thermoblocks
- Temperature control range from -5°C to 99°C
- Individual programming of up to 4 separate temperature and time phases and temperature ramps
- The run time for the linear transition between 2 temperature levels can be individually programmed
- User-friendly operation
- RS-232 interface
- Pause function
- 2-year warranty

Description

Convenient and accurate temperature control for all commonly used lab tubes is the concept behind our ThermoStat plus. The result is a compact benchtop thermostat with Peltier technology. Its most notable feature is its ability to maintain different temperature levels: it can heat up samples to 99°C and also cool them down to as low as -5°C .

Interchangeable thermoblocks ensure effective heat transfer and the flexibility to adapt the ThermoStat plus to your particular application. Operation is incredibly easy: simply select the temperature and press "Start" to initiate the timer. Both the temperature and run time can be programmed for special applications.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

➡ For interchangeable thermoblocks ordering information, see page 131.

➡ See application list on page 123.

ThermoStat plus

Technical specifications

Temperature control range	From 30 °C below RT to 99 °C*
Temperature settings	From -5 °C to 99 °C
Incubating accuracy	±1.0 °C at 0 °C ±0.5 °C at 37 °C ±1.0 °C at 90 °C
Heat-up speed	5 °C/min
Cool-down speed	6 °C/min between 99 °C and 25 °C 1.5 °C/min between 25 °C and -5 °C
Timer	1 min to 99:59 h, continuous
Power supply	100–240 V, 50–60 Hz
Power requirement	75 W
Interface	RS-232
Dimensions, without block (W x D x H)	8.7 x 9.8 x 4.9 in/22 x 25 x 12.5 cm
Weight, without block	11 lb/5 kg

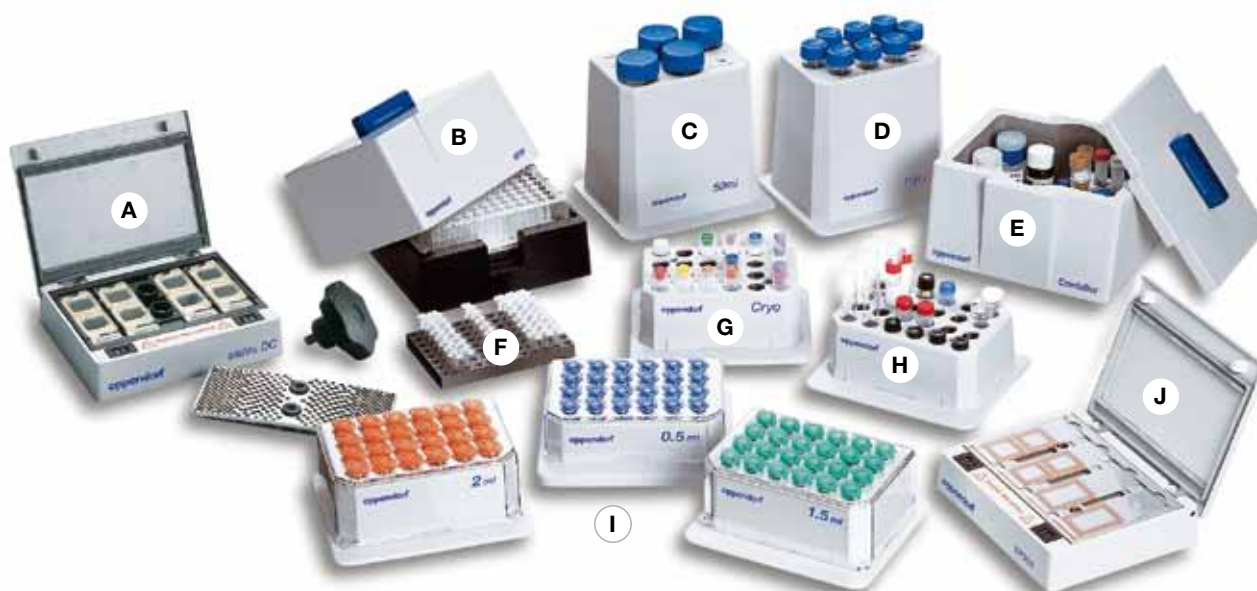
* Upper limit depends on thermoblock chosen (thermoblock options on next page)

Ordering information

Description	Catalog No.	List USD
ThermoStat plus		
Without block, 100–240 V/50–60 Hz	022670204	\$2,436.00
ThermoStat plus interchangeable thermoblocks and accessories		
24 x 0.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670506	660.00
24 x 1.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670522	660.00
24 x 2.0 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670549	660.00
24 test tubes , diameter 11–11.9 mm, height 30–76 mm	022670581	757.00
4 x 1.5–2.0 ml cryotubes ®, external diameter max. 12.5 mm, all base shapes	022670557	513.00
8 x 15 ml conical tubes (Falcon® tubes)	022670531	615.00
4 x 50 ml conical tubes (Falcon tubes)	022670514	615.00
4 slides , for hybridization experiments	022670590	975.00
Slides DC , holds 4 Eppendorf DualChip® slides, with clamping plate	022670786	975.00
MTPs and deepwell plates , with lid	022670565	873.00
Adapter plate for 96 x 0.2 ml PCR tubes and PCR plates 96 to insert in exchangeable thermoblock for MTPs	022670573	290.00
CombiBox , for ThermoStat plus, accommodates various size test tubes and flasks, interior 13.5 x 9.0 x 6.0 cm (W x D x H)	022670603	863.00

➔ For information on the Eppendorf IsoTherm-System, see page 134.

Interchangeable thermoblocks for Thermomixer® R and ThermoStat plus

**Interchangeable thermoblocks accommodate:**

- A. 1–4 Eppendorf DualChip® slides, with clamping plate
- B. MTPs and deepwell plates
- C. 4 x 50 ml conical tubes
- D. 8 x 15 ml conical tubes
- E. CombiBox provides universal temperature control (e.g., for the preparation/cooling of enzymes) for flasks and beakers with a height of ≤60 mm; for ThermoStat plus only
- F. Adapter plate for 96 x 0.2 ml PCR tubes and PCR plates 96 easily inserts into exchangeable thermoblock for MTPs (see B)
- G. 24 x 1.5–2 ml cryotubes®
- H. Test tubes with a diameter of 11–11.9 mm and a height of 30–76 mm
- I. 24 x 0.5 ml, 1.5 ml and 2.0 ml microcentrifuge tubes*
- J. 1–4 standard glass slides

*Includes an IsoTherm rack and IsoTherm cool pack for 0 °C. For more information see page 134.

Product features

- Contact-safe due to optimally shielded thermoblocks
- Better laboratory hygiene—eliminates use of water baths: reduced risk of contamination
- Efficient and simple exchange of all thermoblocks
- Tubes are easily accessible
- Samples are fully contained inside the block for uniform heating—from top to bottom

Description

The interchangeable thermoblock system for the Thermomixer R and ThermoStat plus ensures a precise “fit” for all common lab tubes: from simple temperature control of a chemical to complex enzyme reactions and hybridization experiments, and from MTPs to 50 ml conical tubes—the application possibilities are virtually endless!

➔ For more information on interchangeable thermoblocks for slides and microarrays, see page 133.

Interchangeable thermoblocks for Thermomixer® R and ThermoStat plus

Technical specifications

Interchangeable thermoblock for	Max. Temp.	Max. rpm	Thermomixer R	ThermoStat plus
24 x 0.5 ml microcentrifuge tubes	99 °C	1,500	●	●
24 x 1.5 ml microcentrifuge tubes	99 °C	1,400	●	●
24 x 2.0 ml microcentrifuge tubes	99 °C	1,400	●	●
24 test tubes, dia. ≤11.9 mm, height 30–76 mm	99 °C	1,400	●	●
24 x 1.5–2.0 ml cryotubes®	99 °C	1,400	●	●
8 x 15 ml conical tubes	99 °C	750	●	●
4 x 50 ml conical tubes	99 °C	750	●	●
MTPs and deepwell plates, PCR tubes and plates	99 °C	1,400*	●	●
4 slides	99 °C	1,400	●	●
Slides DC	70 °C	1,400	●	●
CombiBox (ThermoStat plus only)	95 °C	0		●

*With a load of, e.g., 200 g, the max. rpm is 800.

Ordering information

Description	Catalog No.	List USD
Thermomixer R and ThermoStat plus interchangeable thermoblocks and accessories		
24 x 0.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670506	\$660.00
24 x 1.5 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670522	660.00
24 x 2.0 ml microcentrifuge tubes , with rack and cool pack for 0 °C (from IsoTherm-System)	022670549	660.00
24 test tubes , diameter 11–11.9 mm, height 30–76 mm	022670581	757.00
4 x 1.5–2.0 ml cryotubes , external diameter max. 12.5 mm, all base shapes	022670557	513.00
8 x 15 ml conical tubes (Falcon® tubes)	022670531	615.00
4 x 50 ml conical tubes (Falcon tubes)	022670514	615.00
4 slides , for hybridization experiments	022670590	975.00
Slides DC , holds 4 Eppendorf DualChip® slides, with clamping plate	022670786	975.00
MTPs and deepwell plates , with lid	022670565	873.00
Adapter plate for 96 x 0.2 ml PCR tubes and PCR plates 96 to insert in exchangeable thermoblock for MTPs	022670573	290.00
CombiBox , for ThermoStat plus, accommodates various size test tubes and flasks, interior 13.5 x 9.0 x 6.0 cm (W x D x H)	022670603	863.00

➔ For information on the Eppendorf IsoTherm-System,
see page 134.

Thermomixer® R and ThermoStat plus thermoblocks for slides and microarrays



Product features

- Interchangeable thermoblocks for 1 to 4 slides (standard object holder format) or Eppendorf DualChips®
- Uniform heating and atmospheric control improves signal-to-background ratio, increases signal intensity and results in excellent reproducibility
- Increased hybridization efficiency due to rapid and homogeneous mixing of the sample (when using the Thermomixer R)
- High level temperature stability during hybridization
- System ensures the highest level of homogeneity of the hybridization parameters between the chambers
- Reservoir pads ensure high air humidity
- Light-proof interior
- The pressure plate of the interchangeable thermoblock for slides DC ensures optimal hybridization signals when using Eppendorf DualChips

Application

- Hybridization experiments using slides for
 - Microarray hybridization
 - *in situ* hybridization (e.g. FISH, CISH)
 - Immunohistochemistry

Description

Our interchangeable thermoblocks are ideal for hybridization experiments using 1 to 4 slides (e.g., microarrays, FISH, CISH, Eppendorf DualChip microarrays). The interchangeable thermoblock for 4 slides can be used for any application with standard glass microscope slides, whereas the interchangeable thermoblock for slides DC was specially designed for Eppendorf DualChips, our specific gene expression slides.

Technical specifications

Slide dimensions	
Length	75.0–76.5 mm
Width	25.0–26.0 mm
Height	0.9–1.2 mm
Rotational speed	Maximum 1,400 rpm
Temperature control	max. 99 °C (thermoblock for slides DC: max. 70 °C)
Temperature homogeneity	≤2 °C* (at 70 °C) ≤0.5 °C* (at 45 °C)
Heat-up speed	>5 °C/min*1

*Values were determined using the Thermomixer R.

Ordering information

Description	Catalog No.	List USD
Interchangeable thermoblock		
For 4 slides , for hybridization experiments	022670590	\$975.00
For Slides DC , holds 4 Eppendorf DualChips slides, with clamping plate	022670786	975.00

IsoTherm-System



Product features

- Holds 24 micro tubes (e.g., 0.5 ml or 1.5/2.0 ml)
- Two versions of IsoPack (cold pack) available:
 - **White** maintains 0 °C for up to 6 hours
 - **Blue** maintains –21 °C for up to 3 hours
- No more melting ice baths (reduces risk of contamination)
- All system components can be used separately
- Racks are stackable, autoclavable and floatable; can be centrifuged in an MTP rotor (page 181)

Application

- Cooling, transporting and storing deep-frozen samples

Description

The IsoTherm-System*, which consists of an IsoRack (work rack), IsoSafe (insulating box) and two IsoPacks (cold packs), specializes in cooling samples effectively and consistently at –21 °C or 0 °C over many hours. The IsoTherm-System can be used to prevent enzymes from becoming inactive as well as for PCR sample preparation, sample transport and slow thawing of frozen samples.

* U.S. Pat. 6,616,897

Ordering information

Description	Catalog No.	List USD
IsoTherm-System starter set , includes IsoSafe, IsoRack, 0 °C IsoPack and –21 °C IsoPack		
For 0.5 ml tubes	022510002	\$148.00
For 1.5/2.0 ml tubes	022510053	148.00
IsoPack and IsoRack set , includes 1 each IsoPack and IsoRack		
For 0.5 ml tubes, 0 °C	022510282	46.00
For 0.5 ml tubes, –21 °C	022510291	46.00
For 1.5/2.0 ml tubes, 0 °C	022510240	46.00
For 1.5/2.0 ml tubes, –21 °C	022510258	46.00
IsoRack , set of 5 racks		
For 0.5 ml tubes	022510100	275.00
For 1.5 ml/2.0 ml tubes	022510169	275.00

➡ IsoRacks with proper support adapters can be centrifuged up to 2,700 x g; see page 177.

PCR-Cooler



Product features

- Keeps an entire 96-well PCR plate cold for more than an hour at 0 °C*
- Temperature safety is indicated by color change when temperature is exceeded: violet or dark blue when ice cold, pink or light blue when above 7 °C
- Space saving
- Superior to an ice bath: safe from contamination
- Prohibits freezing of samples due to special cone contour
- The temperature of each individual well is indicated by its color
- For 96-well skirted, semi-skirted and unskirted PCR plates format
- Also accommodates 0.2 ml and 0.5 ml PCR tubes, and 8- tube strips
- With two-hour precooling at –20 °C

*With two-hour precooling at –20 °C.

Application

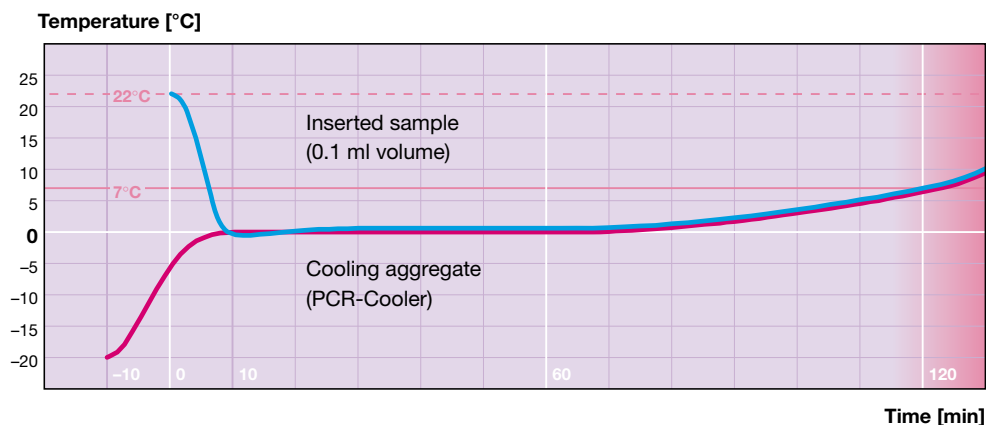
- For the protection, transport and storage of sensitive samples, as well as safely stopping reactions

Description

By changing its color from violet to pink or dark blue to light blue, the PCR-Cooler indicates when the temperature ceiling of 7 °C has been exceeded.

Ordering information

Description	Catalog No.	List USD
PCR-Cooler		
Starter Set (1 pink, 1 blue)	022510509	\$127.00
Pink	022510541	66.00
Blue	022510525	66.00



Cooling curve

Temperature behavior of a precooled PCR-Cooler and a sample inserted at room temperature (the background color indicates the color change)