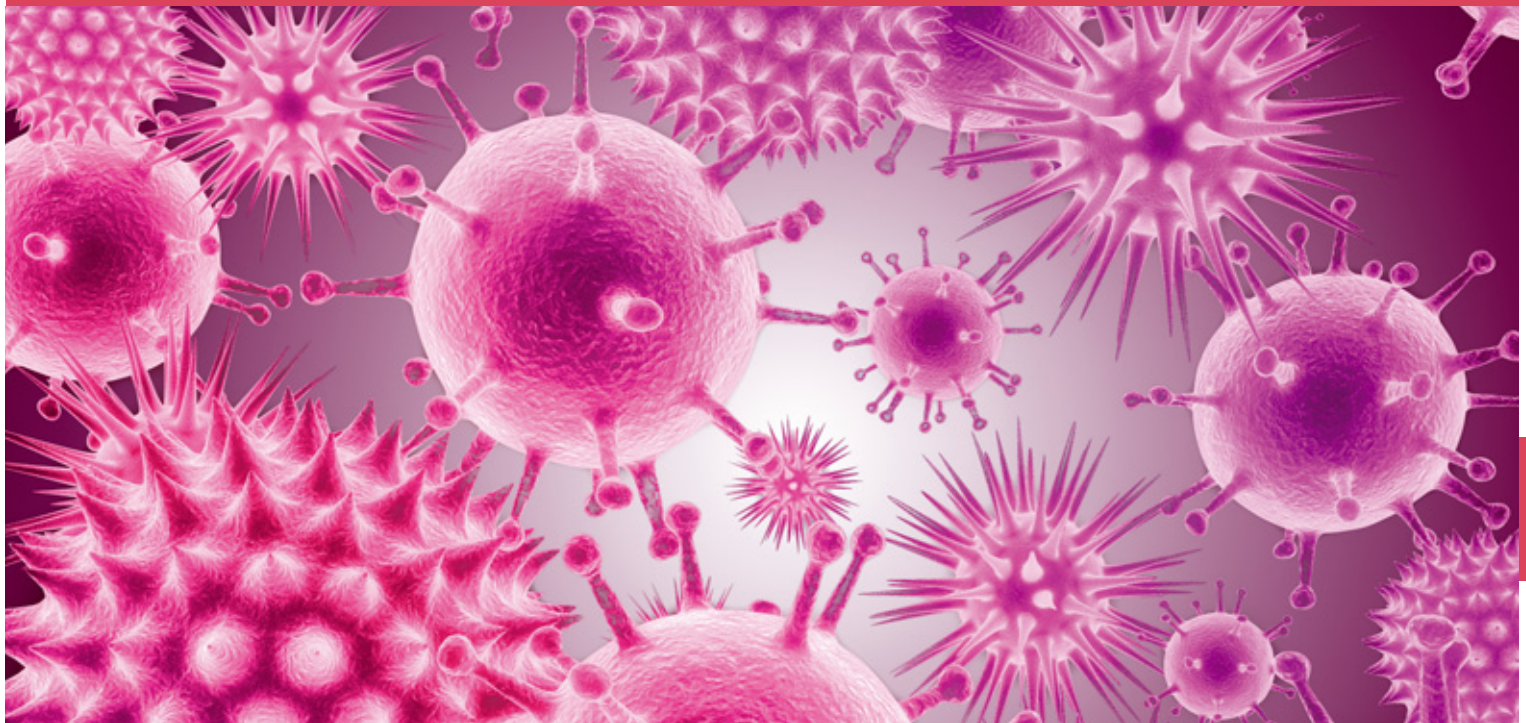


Life sciences



Think Development and production of customized products



Liquid handling products



Labware for general lab applications



Life sciences products for microbiology and biotechnology



Cryo products for deep-freeze applications

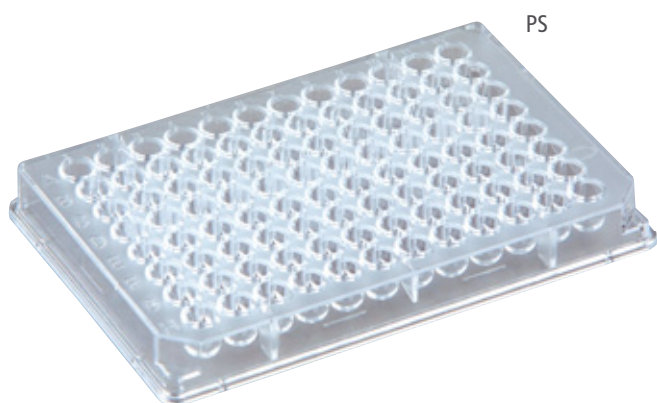
Micro Test Plates






96-Well Micro Test Plates, volume approx. 300 µl

Clear polystyrene (PS) or translucent polypropylene (PP).

- with U-, F-, or V-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumerically coded
- wells with raised rims for reduced cross-contamination and effective sealing
- precise design, perfectly shaped for use with automatic systems
- optimum space for precise positioning
- one corner cut away for definite orientation
- space-saving and stackable
- polypropylene plates may be sealed with heat-sealing films without deformation



	Bottom	Material	Sterilized	Packaging	Quantity per Pack	Order No.
	U-bottom	PS		cardboard box 1 x 100	100	60 18 110
	U-bottom	PS		bags 10 x 10	100	60 18 111
	U-bottom	PS	■	individually in bags 100 x 1	100	60 18 113
	U-bottom	PP		cardboard box 1 x 100	100	60 18 120
	U-bottom	PP		bags 10 x 10	100	60 18 121
	U-bottom	PP	■	individually in bags 100 x 1	100	60 18 123
	F-bottom	PS		cardboard box 1 x 100	100	60 18 210
	F-bottom	PS		bags 10 x 10	100	60 18 211
	F-bottom	PS	■	individually in bags 100 x 1	100	60 18 213
	F-bottom	PP		cardboard box 1 x 100	100	60 18 220
	F-bottom	PP		bags 10 x 10	100	60 18 221
	F-bottom	PP	■	individually in bags 100 x 1	100	60 18 223
	V-bottom	PS		cardboard box 1 x 100	100	60 18 310
	V-bottom	PS		bags 10 x 10	100	60 18 311
	V-bottom	PS	■	individually in bags 100 x 1	100	60 18 313
	V-bottom	PP		cardboard box 1 x 100	100	60 18 320
	V-bottom	PP		bags 10 x 10	100	60 18 321
	V-bottom	PP	■	individually in bags 100 x 1	100	60 18 323

Micro Test Plates



96-Well Luminescence Plates, volume approx. 300 µl

Black polypropylene (PP).

- with U-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumerically coded
- wells with raised rims for reduced cross-contamination and effective sealing
- precise design, perfectly shaped for use with automatic systems
- optimum space for bar code labels on the side walls
- one corner cut away for precise positioning
- space-saving and stackable

Bottom	Color	Packaging	Quantity per Pack	Order No.
U	black	bags 10x10	100	60 18 710



384-Well Micro Test Plates, volume approx. 100 µl

Clear polystyrene (PS).

- with F-bottom
- SBS standard micro test plate format
- 16 x 24 wells alphanumerically coded
- precise design, perfectly shaped for use with automatic systems
- optimum space for bar code labels on the side walls
- one corner cut away for precise positioning
- space-saving and stackable

Bottom	Color	Packaging	Quantity per Pack	Order No.
F	PS	bags 10x10	100	60 18 511



Lids for Micro Test Plates

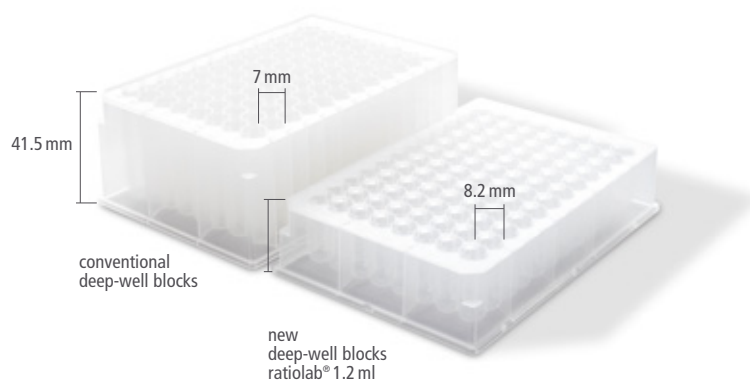
Optional in highly transparent polystyrene (PS) or polypropylene (PP).

Material	sterilized	Packaging	Quantity per Pack	Order No.
PS		cardboard box 1 x 100	100	60 18 403
PS		bags 10 x 10	100	60 18 402
PS		individually in bags 100 x 1	100	60 18 400
PS	■	individually in bags 100 x 1	100	60 18 401
PP		cardboard box 1 x 100	100	60 18 423
PP		bags 10 x 10	100	60 18 422
PP		individually in bags 100 x 1	100	60 18 420
PP	■	individually in bags 100 x 1	100	60 18 421

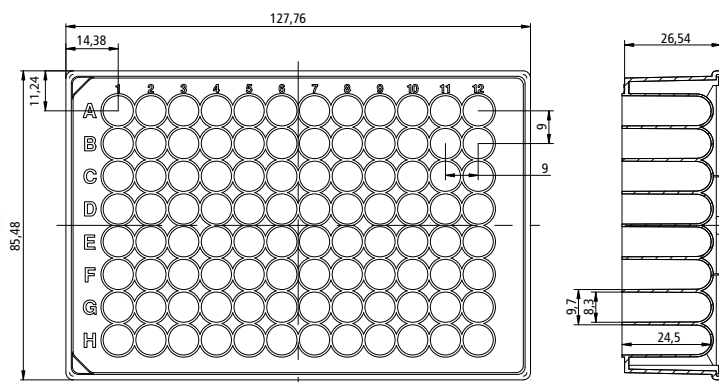
Deep-Well Blocks

ratiolab® low-profile deep-well blocks (96)

These 1.2 ml low-profile deep-well blocks are ideal for pharmaceuticals, biotechnology and diagnostics. Of the same standard dimensions (Society for Biomolecular Sciences – SBS), they are one-third lower than standard deep-well plates (96). They thus require less space! Requiring some 30 % less space, they help to optimize warehouse space, hence lowering costs – especially for expensive cryo-storage applications.



The cavities are some 20 % larger than conventional plates. Thus, when used with robots, they provide additional security. The chimney form of the wells reliably prevents cross-contamination. Their precise, true-to-size form makes them highly suitable for high-throughput screening (HTS).

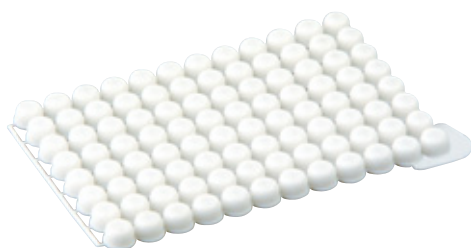


Clear polypropylene (PP).

- about half as high as conventional deep-well blocks
- SBS standard micro test plate format
- well with significantly larger cross section
- wells with raised rims for reduced cross-contamination
- improved visual control due to clear polypropylene
- autoclavable at 121 °C, 20 min
- temperature-resistant to –80 °C
- 8 x 12 wells with alphanumeric code in micro test plate format
- optimally sealable
- precise design, for use in automatic pipetting systems for High Throughput Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable



Volume per Well, ml	Material	Packaging	Quantity per Pack	Order No.
0.3	1 PP	cardboard box 1 x 100	100	81 01 003
1.2	2 PP	cardboard box 1 x 50	50	81 01 012



Closures for ratiolab® 96-Deep-Well-Blocks, 1.2 ml

Made of thermo-plastic elastomer (TPE).

- autoclavable at 121 °C, 20 min

Product	Material	Packaging	Quantity per Pack	Order No.
96-well cover mat	TPE	cardboard box 10 x 10	100	81 01 101

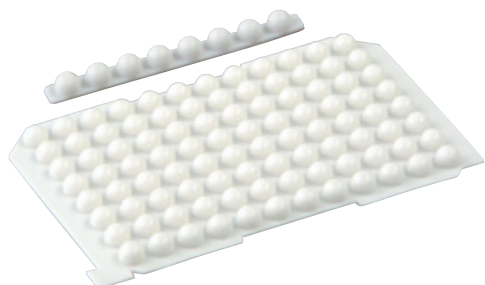
Deep-Well-Blocks

96-Deep-Well-Blocks

Clear polystyrene (PS) or translucent polypropylene (PP).

- SBS standard micro test plate format
- deep-well blocks of PP are autoclavable at 121 °C, 20 min
- 8 x 12 wells, alphanumerically coded, micro test plate format
- precise design, for use in automatic systems for High Throughput Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable

Volume per Well, ml	Material	Packaging	Quantity per Pack	Order No.
1.2	PS	bags 10 x 5	50	60 20 111
1.2	PP	bags 10 x 5	50	60 20 121
2.2	PP	bags 10 x 5	50	60 20 221



Closures for 96-Well Deep Well Blocks

Made of thermo-plastic elastomer (TPE) or ethylene vinyl acetate (EVA).

Product	Material	Packaging	Quantity per Pack	Order No.
1.2 ml 8-well-cover strips	TPE	bags 1 x 1.000	1.000	82 00 008
1.2 ml 96-well-cover mats	TPE	bags 10 x 10	100	82 00 009
2.2 ml 96-well-cover mats	EVA	bags 5 x 10	50	82 00 010

384-Deep-Well Blocks

Translucent polypropylene (PP).

- RNase- and DNase free, non-sterile
- autoclavable at 121 °C, 20 min
- 16 x 24 wells alphanumerically coded, micro test plate format
- precise design, for use in automatic systems for High Throughput Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable

Product	Material	Packaging	Quantity per Pack	Order No.
0,3	PP	1 x 48	48	60 20 320



ratiolab® Micro-Tubes System

The ratiolab® micro-tubes system

This is a highly practical system for processing small volumes. The reusable Micro-Rack is the work station and takes 96 micro-tubes in the standard 8 x 12 SBS microplate format. It is a stable and robust system and has a dust-tight lid. A sloping edge helps the positioning of the refill unit. The side edges can be labeled with a barcode. The rack is excellently suited to use in automatic dosing and robotic systems.

The 0.65 and 1.2 ml micro-tubes can be supplied as single, strips of 8 or in 96-well format as a refill system for 8 x 12 plates.

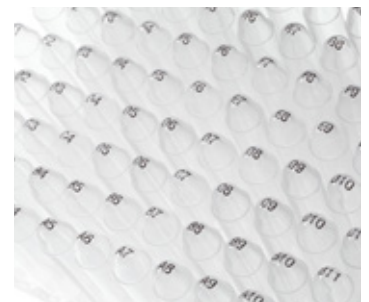
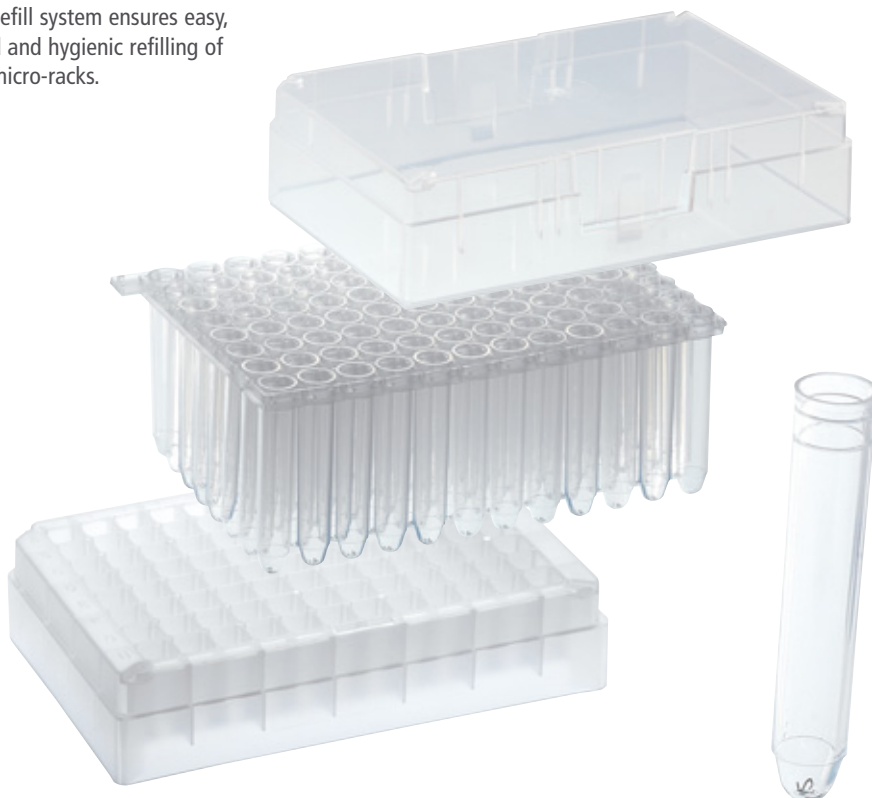
The tubes are closable either with an 8-lid strip or an 8 x 12 closure mat.

- the micro-tubes are autoclavable for 20 min at 121 °C
- temperature-resistant to –80 °C



The refill system ensures easy, rapid and hygienic refilling of the micro-racks.

The tubes can be removed singly and are numbered on the bottom.



ratiolab® Micro-Tubes System



ratiolab® Micro-Tubes

Translucent polypropylene (PP) with very low protein binding.

- available as individual Micro-Tubes or Micro-Tube-Strips of 8 tubes for use with Micro-Racks
- volume 0.65 or 1.2 ml with round bottom

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratiolab® Micro-Tubes, individual	0.65	round	bags 5 x 1000	5000	82 00 021
ratiolab® Micro-Tubes, individual	1.2	round	bags 5 x 1000	5000	82 00 001
ratiolab® Micro-Tube-Strips of 8 tubes	0.65	round	bags 5 x 120	600	82 00 022
ratiolab® Micro-Tube-Strips of 8 tubes	1.2	round	bags 5 x 120	600	82 00 002



ratiolab® Micro-Racks, loaded or empty

Micro-Racks, tray and lid of translucent polypropylene (PP).

- available as empty racks or equipped with coded or non-coded Micro-Tubes
- pressure-tested tightness of the Micro-Tubes
- stackable, for the use with stacker instruments

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratiolab® Micro-Racks, loaded, non-coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 023
ratiolab® Micro-Racks, loaded, coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 024
ratiolab® Micro-Racks, empty	0.65	–	50 Micro-Racks of 96 Micro-Tubes	50	82 00 027
ratiolab® Micro-Racks, loaded, non-coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 003
ratiolab® Micro-Racks, loaded, coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 004
ratiolab® Micro-Racks, empty	1.2	–	50 Micro-Racks of 96 Micro-Tubes	50	82 00 007

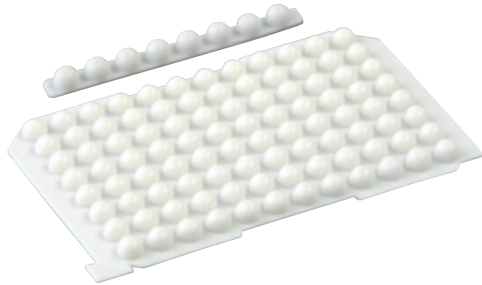


ratiolab® Micro-Tubes Refill-System for Micro-Racks

The Micro-Tubes are placed on an 8 x 12 tray and packed in an environmentally friendly cardboard box. The loaded tray can easily be moved from the cardboard box into the empty Micro-Rack.

- available with coded or non-coded Micro-Tubes
- for the very efficient, hygienic, and fast loading of Micro-Racks
- convenient handling and reduced waste
- pressure-tested tightness of the Micro-Tubes

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratiolab® Refill with 96 Micro-Tubes, non-coded	0.65	round	50 Refills à 96 Micro-Tubes	50	82 00 025
ratiolab® Refill with 96 Micro-Tubes, coded	0.65	round	50 Refills à 96 Micro-Tubes	50	82 00 026
ratiolab® Refill with 96 Micro-Tubes, non-coded	1.2	round	50 Refills à 96 Micro-Tubes	50	82 00 005
ratiolab® Refill with 96 Micro-Tubes, coded	1.2	round	50 Refills à 96 Micro-Tubes	50	82 00 006



Closures for ratiolab® Micro-Tubes

For the air-tight sealing of 0.65 and 1.2 ml ratiolab® Micro-Tubes.
For sampling processes and filling the closures can be pierced with needles.

Product	Material	Packaging	Quantity per Pack	Order No.
8-Cap Strips 8 x 12	TPE	bags 1 x 1000	1000	82 00 008
cover mats	TPE	bags 10 x 10	100	82 00 009
aluminum universal cover film	Al	pack 1 x 100	100	60 18 611

TPE = Thermo-plastic elastomer
Al = Aluminum



Cryo Boxes for ratiolab® Micro-Racks

White, robust cardboard box, water repellent.

- temperature-resistant to $-80\text{ }^{\circ}\text{C}$

For	Type	Packaging	Quantity per Pack	Order No.
2x2 Micro-Racks	standard	10	10	51 49 001
1x3 Micro-Racks	standard	10	10	51 49 002

PCR* Tubes



PCR* Tubes

Pure polypropylene (PP).

- rapid and homogeneous heat transfer due to consistently ultrathin wall design
- perfect fit, compatible with all major brands of thermocyclers due to precise production
- DNase-, RNase- and DNA-free
- variety of tight closures available to reduce sample evaporation

Volume ml	Caps	Packaging	Quantity per Pack	Order No.
0.2	domed	bags 1 x 1000	1000	86 10 001
0.2	flat	bags 1 x 1000	1000	86 10 006
0.5	domed	bags 1 x 1000	1000	86 10 005
0.5	flat	bags 1 x 1000	1000	86 10 007

PCR* Tubes, single

- volume 0.2 or 0.5 ml
- with attached cap, flat or domed
- caps designed for tight sealing, easy to open and to close



PCR* Strips of 8 Tubes

- volume 0.2 ml
- with attached domed cap strips or for use with detached 8-cap strips
- caps designed for tight sealing, easy-to-open and to close

Volume ml	Caps	Packaging	Quantity per Pack	Order No.
with attached individual caps				
8 x 0.2	1	domed	bags 1 x 125	125 86 10 039
8 x 0.2	1	flat	bags 1 x 125	125 86 10 040
for separate cap strips				
8 x 0.2	2	without	bags 1 x 125	125 86 10 002
cap strips				
8-cap strips	3	domed	bags 1 x 125	125 86 10 003
8-cap strips	3	flat	bags 1 x 125	125 86 10 015

* The Polymerase Chain Reaction (PCR) is a patented process by Hoffmann-La Roche.

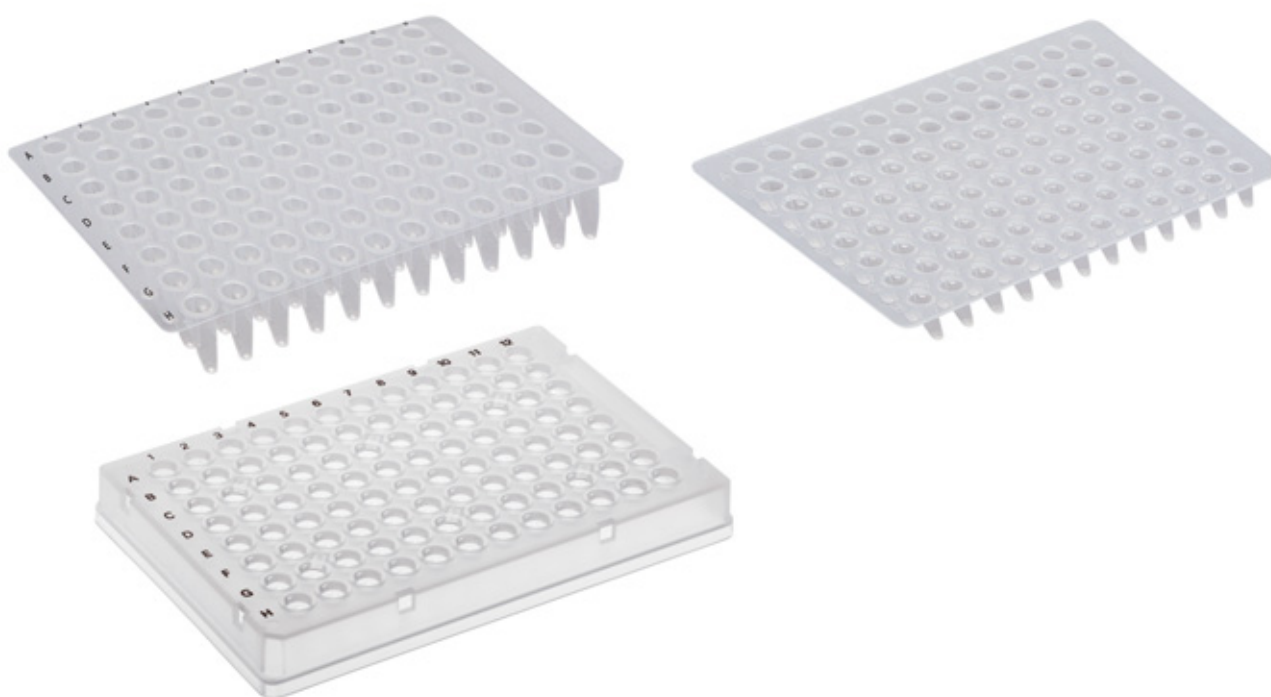
PCR* Plates

96-well PCR* Plates

These plates conform fully to the highest requirements of PCR* (Polymerase Chain Reaction). They are made of polypropylene and are characterized by their very thin but uniform walls. In this way, optimal heat transfer in short cycle times is achieved. The smooth inside walls of the cavities minimize the bonding of enzymes and nucleic acids.

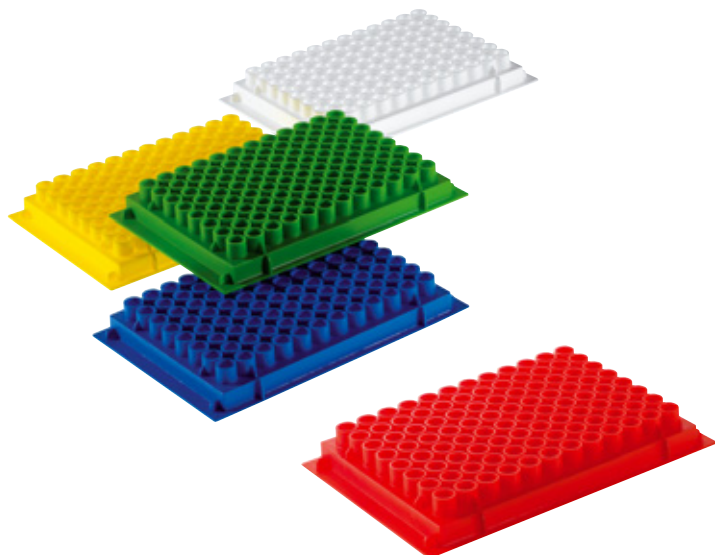
The plates are free of DNA, DNase and RNase. They are available optionally without or with edges (the latter to minimize cross-contamination).

- working volumes 0.2 ml
- alphanumeric coding for optimal sample identification
- available in three versions for various PCR systems



Volume ml	Description	Packaging	Quantity per Pack	Order No.
96 x 0.2	without rim, low form	bags 10 x 10	100	86 10 014
96 x 0.2	without rim, high form	bags 4 x 25	100	86 10 010
96 x 0.2	with rim, high form	bags 10 x 10	100	86 10 011

* The Polymerase Chain Reaction (PCR) is a patented process by Hoffmann-La Roche.

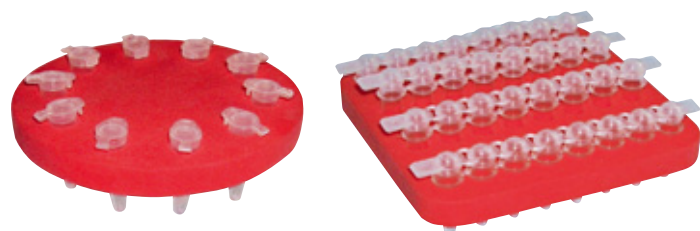


96-Well PCR Racks

Work and storage rack for 0.2 and 0.5 ml PCR tubes, PCR strips, and PCR segments.

- 8 x 12 positions, micro test plate format
- available in five colors for the convenient identification of different types of samples
- transparent lids available in two different heights

Product	Quantity of Pack	Order No.
PCR rack white	10	61 14 100
PCR rack yellow	10	61 14 101
PCR rack blue	10	61 14 102
PCR rack green	10	61 14 103
PCR rack red	10	61 14 104
lid for PCR racks, 14 mm high	10	61 14 110
lid for PCR racks, 28 mm high	10	61 14 111



Floating Cryo Racks

Ideal for the thawing out or cooling of samples in PCR tubes and PCR strips. The loaded racks remain floating. The tubes fit firmly in the racks and keep them well positioned in the bath.

Product	Quantity of Pack	Order No.
Floating Cryo Racks for 10 PCR tubes	10	61 14 200
Floating Cryo Racks for 4 PCR strips of 8 tubes	10	61 14 201



Micro Centrifuge for PCR Strips and Microcentrifuge Tubes

Space and energy saving micro centrifuge with adequate power for routine centrifugations.

- for two PCR strips of 8 tubes, 0.2 ml or 8 microcentrifuge tubes 0.5 to 2.0 ml
- speed 6600/min, RCA 2200 x g
- lid must be closed for operation mode
- safety: the lid can only be opened when the rotor is not rotating
- rapid start and stop within seconds
- power supply 230 V, 50 Hz, 10 W
- diameter 160 x 161.5 mm, height 140 mm, weight 900 g
- supplied with two rotors for two PCR strips of 8 tubes, 0.2 ml and 8 microcentrifuge tubes 0.5 to 2.0 ml

Product	Quantity of Pack	Order No.
Micro Centrifuge with two rotors	1	71 00 006

Cover Films for Micro Test and PCR* Plates



Cover Films and Film Dispenser

For micro test plates, deep-well blocks, micro test tubes and PCR plates.

- self-adhesive
- for manual operation
- temperature resistant from -80 bis $+120$ °C*
- adhesive with high solvent resistance, specially resistant against DMSO*
- all films of SBS standard format*

Polyethylene Peeling Cover Film

- low-cost film for polystyrene plates
- can be removed without any residues
- ideal for the storage of plates at room temperature

Aluminum Universal Cover Film

- can be easily removed
- ideal for piercing
- for polystyrene and polypropylene plates
- also for use with micro-racks and critical PCR plates

Polypropylene Peeling Cover Films

- can be removed without any residues and repeatedly used
- for polystyrene and polypropylene plates
- very suitable for PCR plates
- lower limit for photometer plates 276 nm

Film Dispenser

- manually operated
- for the safe and tight sealing of plates

Further films on request.

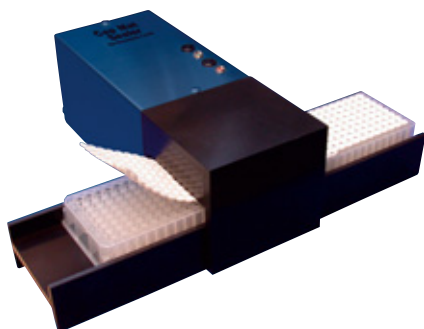
Product	Material	Packaging	Quantity per Pack	Order No.
polyethylene peeling cover film	PE	pack 1 x 100	100	60 18 610
aluminum universal cover film	Al	pack 1 x 100	100	60 18 611
polypropylene peeling cover film	PP	pack 1 x 100	100	60 18 612
film dispenser	–	1	1	60 18 613

PE = Polyethylene
Al = Aluminum
PP = Polypropylene

* except order number 60 18 610

* The Polymerase Chain Reaction (PCR) is a patented process by Hoffmann-La Roche.

Film-Sealing Instruments and Cover Films

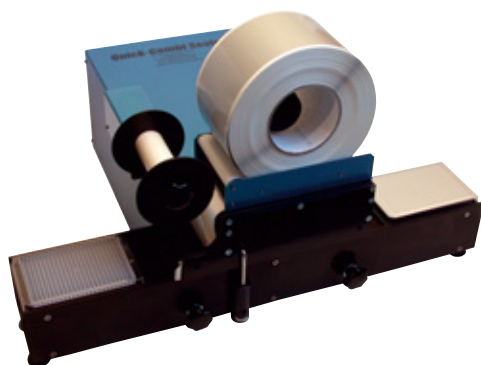


Sealing Instrument for Cover Mats, Cap Mat Sealer

Electrically operated instrument for the sealing of micro test plates, micro tubes, special plates and cassette systems with cover mats.

- easy to use
- fast operation
- safe sealing

Product	Voltage	Quantity per Pack	Order No.
Cap Mat Sealer	230 V	1	60 18 600



Micro Test Plate Sealing Instrument, Quick Combi Sealer

Semi-automatic instrument for the sealing of micro test plates of all kinds with cover films.

- films and adhesive proved resistant against DMSO
- very easy handling
- fast operation, seals a single plate within 4 seconds
- low-priced films of aluminum and plastics for peeling and piercing
- 100 m rolls sufficient for approx. 780 plates

Product	Packaging	Quantity per Pack	Order No.
Quick Combi Sealer	1	1	60 18 615
cleansing spray for Sealer	1 bottle	1	60 18 601
aluminum piercing cover film for sealers	roll of 12.5 m	1	60 18 602
aluminum peeling cover film for sealers	roll of 12.5 m	1	60 18 614
aluminum peeling cover film	roll of 100 m	1	60 18 603
aluminum peeling and piercing cover film	roll of 100 m	1	60 18 604
polyolefin peeling cover film	roll of 100 m	1	60 18 605
polyolefin cover film, gas permeable, for sealers	roll of 100 m	1	60 18 606
nonwoven cover film gas permeable	roll of 100 m	1	60 18 607
polypropylene peeling cover film	roll of 100 m	1	60 18 608