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1



1 LLG-PCR tubes with attached lids, PP



- Individual tubes
- Compatible with all common thermocyclers
- 0.2 ml or 0.5 ml
- Individual attached flat or domed snap caps
- Consistent wall thickness for uniform heat transfer
- Cap design ensures fit and helps reduce sample evaporation
- Virgin polypropylene, certified RNase-, DNase- and Endotoxin-free

Description	PK	Cat. No.
0.2 ml, single, flat cap	1000	6.313 401
0.2 ml, single, domed cap	1000	6.313 402
0.5 ml, single, flat cap	1000	6.313 403

2

LLG-PCR-Tubes, 8 Strips with attached individual caps, PP



- For 0.2 ml Thermocycler blocks
- With domed or flat cap
- Made of high quality polypropylene, RNase-, DNase- and Endotoxin-free

Description	PK	Cat. No.
8 PCR tube strips with individually attached flat snap caps	126	6.313 405
8 PCR tube strips with individually attached domed snap caps	126	6.313 407
Domed caps for 8 PCR tube strips	125	6.313 406

2



3

LLG-PCR-Tubes, 8 Strips, PP



- For 0.2 ml thermocycler blocks
- Detached cap strips can be used as individual tubes when cut
- With domed or flat caps
- Consistent wall thickness for uniform heat transfer
- Contamination-free opening
- Cap strips provide tight seal during all PCR cycles
- Highly transparent cap makes them ideal for qPCR
- Virgin polypropylene, certified RNase-, DNase- and Endotoxin-free

Description	PK	Cat. No.
8 PCR tube strips plus detached cap strips, domed caps	125	6.313 412
8 PCR tube strips plus detached cap strips, flat caps	80	6.313 404

3



1 PCR Products, BRAND

BRAND has significantly expanded its product range of extra-thin-wall disposable products, which were specially developed to satisfy the demands of PCR applications.

Quality features

- Suitable for use in common thermocyclers
- PP, extra-thin uniform wall thicknesses to provide the optimal thermal transfer and short cycle times
- 96-well PCR plates with blue alphanumeric code and cut corner marking
- Highly clear flat covers optimally suited for qPCR
- DNase-, DNA- and RNase-free
- Autoclavable at 121°C (2 bar), acc. DIN EN 285
- qPCR: Products which are suitable for Real Time PCR (qPCR)

White PCR products offer significantly better results for qPCR, and are specifically recommended by many thermocycler manufacturers.



2 Single PCR tubes with attached caps, PP



BRAND

0.2 ml and 0.5 ml PCR tubes with attached caps are compatible with leading thermocyclers with heated lids. The caps are easy to open and close without tools, yet ensure a tight fit to reduce sample evaporation. The various colors of the PCR tubes allow fast sample classification.

Other colors available on request.



Capacity ml	Description	Colour	PK	Cat. No.
0.2	domed cap	clear	1000	9.409 370
0.2	flat cap	clear	1000	9.409 371
0.5	flat cap	clear	1000	9.409 372

3 Strips of 8-/12- PCR tubes plus detached cap strips, PP



BRAND

Strips of 8 or 12 connected PCR tubes (0.2 ml). Cap strips consisting of 8 or 12 domed caps (available separately) provide tight seal during all PCR cycles, thus protecting samples from cross-contamination. The tubes have a holding strap at one end, and the cover strips on each lid have a small lip on the side for careful, contamination-free opening. Consistent tube wall thickness allows rapid heat transfer along the entire exterior tube surface. Made of pure, virgin polypropylene, free from RNase-, DNase- and DNA. Autoclavable at 121 °C (2 bar), according to DIN EN 285.

Other colors on request.



Capacity ml	Description	Colour	PK	Cat. No.
0.2	Strips of 8 PCR tubes, without caps	clear	125	9.409 374
0.2	Strips of 8 PCR caps, domed	clear	125	9.409 375
0.2	Strips of 8 PCR tubes, with separate flat caps	clear	250	4.007 894
0.2	Strips of 8 PCR tubes, with separate domed caps	clear	250	4.007 895
0.2	Strips of 12 PCR tubes, without caps	clear	125	9.409 628
0.2	Strips of 12 PCR caps, domed	clear	125	9.409 633

4 PCR cap strips



NEW
BRAND

For PCR-tubes with detached cap strips.



Description	Colour	PK	Cat. No.
PCR cap stripes of 8, flat	transparent	300	4.668 917
PCR cap stripes of 8, domed	transparent	300	4.668 918



9.409 377

1 PCR tubes strips, with attached individual caps, PP

BRAND



The strips of 8 PCR tubes with attached, flat individual caps provide an ideal protection against contamination. The highly transparent cap makes them ideal for a quantitative Real Time PCR. Available in Standard (0.2 ml) or Low Profile (0.15 ml).



6.228 560

Capacity ml	Type	Colour	PK	Cat. No.
0.15	Low Profile, 1 ridge	transparent	120	9.409 377
0.15	Low Profile, 3 ridges	transparent	120	4.665 989
0.20	Standard, 1 ridge	transparent	120	6.228 560
0.20	Standard, 3 ridges	transparent	120	4.668 916
0.15	Low Profile, 3 ridges	white	120	9.409 246
0.20	Standard, 3 ridges	white	120	9.409 245



3 Strips of 8 PCR tubes with attached cap strips

BRAND



Eight 0.2 ml PCR tubes joined together in a strip with attached, hinged 8-cap strips. PP. The hinged, domed cap makes opening and closing the tubes with one hand easier.

Type	PK	Cat. No.
Colourless	125	9.409 373



4 5 PCR tubes, 0.2ml and 0.5ml, thin-walled

Eppendorf AG



Polypropylene tubes for PCR experiments

Product characteristics of 0.2ml PCR tube:

- Contamination shield on attached lid
- Defined lid position (90°) due to special hinge
- Highly transparent
- Tight sealing
- Easy to open
- Can be used in all thermal cyclers with 0.2ml block format
- The work tray for holding 96 tubes is placed in a frame and with this forms a complete rack for 0.2ml tubes. Both parts are made of polycarbonate and are autoclavable (at 121°C for 20 mins.)
- Certified being free from human DNA, DNase, RNase and PCR inhibitor

Product features of thin-walled 0.5ml PCR tube:

- frosted writing surface
- Autoclavable when open (at 121°C for 20 mins.)
- Highly transparent
- Easy to open
- Can be used in Mastercyclers with 0.5ml block format
- Certified being free from human DNA, DNase, RNase and PCR inhibitor



Description	PK	Cat. No.
0.2 ml PCR tubes, transparent	1000	9.283 579
8-tube strip of 0.2 ml PCR tubes, transparent	120	9.283 622
Work tray for 96 x 0.2 ml PCR tubes	10	9.283 623
Frame for work tray	5	9.283 624
0.5 ml PCR tubes, thin-walled, with attached lid, transparent	500	9.283 626



6 PCR cap tool, PA

NEW

Cap Tool for attaching and detaching caps on PCR plates.

BRAND

Type	PK	Cat. No.
PCR cap tool	1	4.668 919

1 LLG-96-well PCR Plates, PP



- Clear well bottom for sample visibility, with V-Bottom
- Compatible with leading thermocyclers
- Consistent wall thickness for uniform heat transfer
- Holes in the skirt for easy handling
- Virgin polypropylene, certified RNase-, DNase- and Endotoxin-free

Description	Capacity µl	PK	Cat. No.
96 Well Plate, skirted	200	50	6.313 409
96 Well Plate, non-skirted	200	100	6.313 408
96 Well Plate, half skirted	200	50	6.313 394



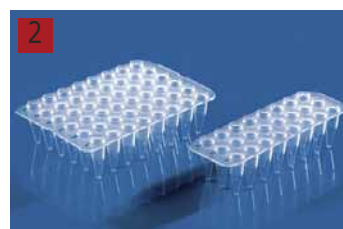
2 24/48 well PCR Plates, non-skirted, PP, for qPCR



0.2ml wells. The 24 /48 well plates reduce material costs and allow work on a compact PCR plate even with small sample throughputs. Suitable for most types of standard thermal cyclers.

Description	Colour	PK	Cat. No.
24-well, standard profile, elevated rim	clear	40	6.229 655
24-well, standard profile, elevated rim	white	40	4.007 901
48-well, standard profile, elevated rim	clear	20	9.409 368
48-well, standard profile, elevated rim	white	20	4.007 902

BRAND



96 well PCR-Plates, PP, for PCR or qPCR

The ultra thin-walled PCR plate design facilitates constant, rapid and precise heat transfer. The smooth vessel interior minimizes the binding of enzymes and nucleic acid to the walls. The rim of the wells are designed to protect against cross-contamination, allowing a reliable seal with the sealing mats tailored to the plates. With blue alphanumeric code and cut corner for easy orientation, or as indicated.

BRAND

96-well, non-skirted

PP. 0.2 ml wells. 96-well non-skirted PCR plates are suitable for most commercially available thermocyclers.

96-well, semi-skirted

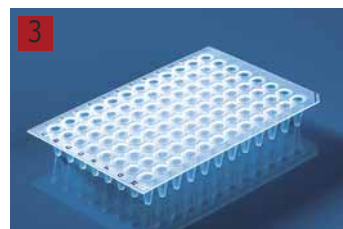
PP. 0.2 ml wells. 96-well semi-skirted PCR plates can easily be labelled or tagged with a barcode.

96-well, semi-skirted. Suitable for Roche® LightCycler® 480 and other thermocyclers

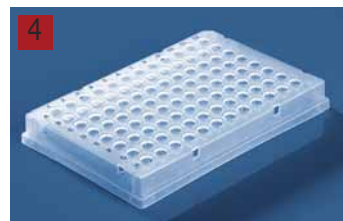
PP. 0.15 ml wells. Semi-skirted. With black alphanumeric code. Available with or without self-adhesive sealing film (polyester, high-transparent, for qPCR).

96-well, skirted

PP. 0.2 ml wells. 96-well skirted PCR plates are especially rigid, and are optimally suited for use with automatic pipetting systems and for being transported.



9.409 247



9.409 351

Description	Volume ml	Colour	Cut corner	PK	Cat. No.
Low Profile, non-skirted	0.15	clear	H12	50	9.409 247
Low Profile, semi skirted	0.15	clear	A12	50	9.409 256
Low Profile, semi skirted, raised skirt	0.15	clear	A1	50	9.409 258
Low Profile, fully skirted*	0.15	clear	H1	50	9.409 351
Low Profile, non-skirted	0.15	white	H12	50	9.409 248
Low Profile, semi skirted	0.15	white	A12	50	9.409 257
Low Profile, semi skirted, raised skirt	0.15	white	A1	50	9.409 259
Low Profile, for LightCycler® 480 (Roche®), semi skirted*	0.15	white	H12	50	4.007 899
Low Profile, for LightCycler® 480 (Roche®), semi skirted, incl. films*	0.15	white	H12	50	4.007 900
Low Profile, fully skirted*	0.15	white	H1	50	9.409 266
Standard profile, non-skirted	0.20	clear	A12	50	9.409 254
Standard profile, semi skirted	0.20	clear	A12	50	9.409 264
Standard profile, non-skirted, elevated rim	0.20	clear	H12	50	9.409 381
Standard profile, semi skirted, elevated rim	0.20	clear	H12	50	9.409 383
Standard profile, non-skirted	0.20	white	A12	50	9.409 255
Standard profile, semi skirted	0.20	white	A12	50	9.409 265
Standard profile, non-skirted, elevated rim	0.20	white	H12	50	4.007 896
Standard profile, semi skirted, elevated rim	0.20	white	H12	50	4.007 897

*Black alphanumeric code, no additional markings on the cut corner.



1 2 PCR plates, 96/384 well Eppendorf twin.tec®

Eppendorf AG

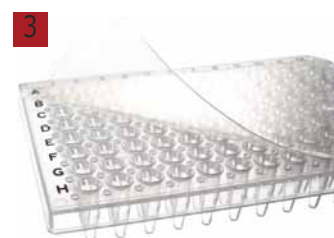


Purity, stability, color and other features to facilitate laboratory work.

- Extremely thin-walled polypropylene wells guarantee an optimal temperature transfer
- Exceptionally stable and torsion-resistant polycarbonate frame
- Elevated well edges ensure effective sealing and reduce the risk of cross-contamination
- Batch-tested and certified free of DNA, DNase, RNase and PCR-inhibitors (PCR clean), Eppendorf twin.tec® *microbiology* additionally free of bacterial DNA
- Two versions available: With edge (skirted) or half-skirted (semi-skirted)
- Autoclavable up to 121 °C
- Available with bar code (on request)



Description	Capacity µl	Colour	PK	Cat. No.
96 well, skirted	150	clear	25	9.283 661
96 well, skirted	150	blue	25	9.283 664
96 well, skirted	150	red	25	9.283 665
96 well, skirted	150	yellow	25	9.283 662
96 well, skirted	150	green	25	9.283 663
96 well, skirted, <i>microbiology</i>	150	clear	10	4.655 267
96 well, skirted, <i>microbiology</i>	150	blue	10	4.655 268
96 well, semi-skirted	250	clear	25	9.283 595
96 well, semi-skirted	250	blue	25	9.283 669
96 well, semi-skirted	250	red	25	9.283 670
96 well, semi-skirted	250	yellow	25	9.283 667
96 well, semi-skirted	250	green	25	9.283 668
96 well, semi-skirted, <i>microbiology</i>	250	clear	10	4.655 269
96 well, semi-skirted, <i>microbiology</i>	250	blue	10	4.655 270
384 well, skirted, <i>microbiology</i>	40	clear	10	4.655 271
384 well, skirted, <i>microbiology</i>	40	blue	10	4.655 272



3 LLG-PCR adhesive film and foil

For use in cyclers with screw-down or clip-down lids.

PCR Film: Clear film allows both the visual inspection of samples and fluorescence measurements.

PCR Foil: Aluminium, easy to pierce, no residue of adhesive on the pipette tips.

QPCR Foil: Adhesive seal optically clear, peelable, for QPCR and fluorescence applications.

Description	Temp. range °C	PK	Cat. No.
PCR film	-40 ... 102	100	6.313 398
PCR foil	-80 ... 104	100	6.313 400
QPCR foil	-70 ... 100	100	6.313 399



4 PCR Foil, self-adhesive

For micro test plates, deep well plates, micro test tubes and 96/384 Well PCR plates. DMSO resistant. Easily perforable, even with pipette tips.

Ratiolab

- For manual use
- Temperature resistant from -80 to 120 °C
- Adhesive of PP and aluminium foils with high solvent and DMSO resistance
- All films in SBS standard format

Description	Temp. range °C	PK	Cat. No.
PP	-80 ... 120	100	7.634 537



5 Sealing paddle for sealing films, PE

NEW

White. The sealing paddle helps to attach the self-adhesive film to the plate with a uniform pressure. Especially suited for plates with raised rim.

BRAND

Type	PK	Cat. No.
Sealing paddle for sealing films	1	6.310 361

1 Sealing Films, Self-adhesive

In case the microplates, PCR- and Deepwellplates need not only to be covered, but also securely sealed, self-adhesive sealing films are available. These film sheets can be easily applied on the plates and removed also without the use of expensive equipment. They are available in different versions and are especially well-suited for storage or cell- and tissue-culture. BRAND



Description	Application	Material	PK	Cat. No.
single film, gas-permeable	Cell- and tissue culture	Rayon	100	9.407 620
single film, gas-permeable, sterile	Cell- and tissue culture	Rayon	50	6.224 223
single film, DMSO-resistant	Storage, ELISA, PCR	PP	100	9.408 983
single film	Automation	PE / PP	50	4.000 389
single film	Fluorescence measurement	Vinyl, black	50	4.000 390
single film	Luminescence measurement	Vinyl, white	50	4.000 391
single film	Automation	Vinyl	100	6.272 009
single film	Cold storage, storage	Aluminium	100	6.223 125
single film	PCR, storage	Aluminium	50	4.665 819
single film	PCR, Real-time PCR, storage	Polyester	1	4.665 818
single film	ELISA, PCR	Polyester	100	9.409 386
single film, highly transparent	ELISA, Real Time PCR	Polyester	100	4.000 237

2 PCR adhesive film and foil

Ideal for sealing PCR plates.

Eppendorf AG

- PCR clean: Certified free from human DNA, DNase, RNase and PCR inhibitor
- PCR Film: Allows visual monitoring of samples
- PCR Foil: Easy to pierce, no sticking of the pipette tips (ideal for automated systems)
- Heat Sealing: Position the film or the foil with the adhesive edges on the plate. Seal the plate using the heat sealer.



Description	PK	Cat. No.
PCR foil, self-adhesive	100	9.283 672
PCR film, self-adhesive	100	9.283 679
Heat Sealing PCR foil	100	9.776 567
Heat Sealing PCR film	100	6.241 459
Storage Film, self-adhesive	100	4.655 243
Storage Foil, self-adhesive	100	6.241 374
Sealing Mats 96/2000 *	50	6.280 065
Sealing Mats 96/1000 und 96/500 *	50	7.644 255

* autoclavable (at 121°C for 20 mins.)

3 AccuSeal Semi-Automated Plate Sealer

- Accepts a wide range of microplates and heat seals
- User-friendly control system
- Large digital display shows all operating parameters
- Adjustable sealing temperature: 100°C to 190°C, or no heat
- Precise temperature, timing and pressure for consistent sealing

Labnet



Specifications

Dimensions (W x D x H):	171mm x 324mm x 362mm
Weight:	12kg
Sealing Temperature:	Off, 100 to 190°C (increments of 1.0°C)
Temperature Accuracy:	±1.0°C
Temperature Uniformity:	±1.0°C
Sealing Time:	0.5 to 10 sec (incements of 0.1 sec)
Compatible Plate Materials:	PP (Polypropylene), PS (Polystyrene), PE (Polyethylene)
Compatible Plate Types:	Standard Assay Plates, Deep-Well Storage plates, PCR Plates (Non-Skirted, Semi-Skirted, Full-Skirted)
Maximum Plate Height:	45mm
Compatible Sealing Film Types:	Foil Polypropylene laminate, Clear Polyester-polypropylene laminate, Clear polymer, Thin clear polymer, Foil-laminate, Foil

Type	Description	PK	Cat. No.
AccuSeal	includes adapters for standard and deepwell microplates, 230V	1	9.595 290
AccuSeal	adapter for sealing PCR plates	1	9.595 291



9.409 015

1 LLG-Temperature block *exact*, aluminium

Suitable for both cooling and heating, universally usable, uniform temperature distribution within the block, ideal for all temperature-sensitive applications.

Aluminum blocks with conical compartments and closed bottom for easy and precise tempering of reaction tubes and PCR tubes. The precisely adapted shape of the borings and the closed bottom offer advantages compared with cylindrical drilled blocks with open bottom, such as much better heat transfer and temperature accuracy. Made of a special aluminum alloy with high thermal conductivity. Identical temperature conditions for all samples. Compact size, requiring little space. Suitable for 96-well plates, 8 or 12 strips and single tubes. Ideal for working with 8- or 12-channel pipettes. Blocks for different tube sizes and combinations of tube sizes as indicated, all working steps in one block, holes closed at the bottom and tapered to fit perfectly the respective tube sizes and offer an optimum heat exchange.



9.409 017

Array	Dimensions (W x D x H) mm	PK	Cat. No.
96 x 0.2 ml PCR tubes + 6 x 1.5 ml tubes	118 x 89 x 24	1	9.409 015
36 x 0.5 ml tubes + 11 x 1.5 ml tubes	180 x 79 x 24	1	9.409 016
24 x 1.5 ml tubes	115 x 89 x 34	1	9.409 017
24 x 2.0 ml tubes	115 x 89 x 34	1	9.409 018
25 x 2.0ml Cryogenic tubes with round bottom	197 x 99 x 32	1	9.409 006
12 x 15.0ml Centrifuge tubes	75 x 89 x 38	1	9.409 008



3 96-Well PCR Rack, PP

- Manufactured from high density polypropylene which is fully autoclavable. ISOLAB
- Excellent rack for "before" and "after" PCR sampling.
- This rack can be used alone or inserted in the workstation.
- This working/storage rack is designed to accommodate 96 pieces 0.2 ml PCR tubes or strips of 8 and 12 tubes.
- Tube wells are easily identified with alphanumeric, embossed numbers and letters.
- Translucent clear cover protects the tubes from dust and has a non-slip surface to allow safe storage of multiple racks.
- Dimensions (W x D x H): 125 x 88 x 31 mm

For tubes ml	PK	Cat. No.
0.2	1	6.255 804

4 96-Well PCR® Rack, Low-Temp

The PCR® rack base is made from robust ABS construction, and the lid is made from PC. Versatile Rack for use on a bench top or for freezer storage.

Heathrow Scientific

- Storing of tubes down to -80 °C
- Holds 0.2 ml individual tubes or strips
- Ambidextrous
- Detachable lid
- Stackable

For tubes ml	Colour	PK	Cat. No.
0.2	purple, blue, green, orange, yellow	5	4.666 432
0.2	blue	5	4.666 433
0.2	green	5	4.666 434
0.2	purple	5	4.666 435



1 2 PCR-Coolers

PCR-Cooler made of PP with lid made of PC. Ice-free cooling system for PCR preparation and storage of 0.2 and 0.5 ml PCR tubes and strips as well as 96 well plates in standard and low profile well shape. Maintains sample temperature of less than 5 °C for up to 3 hours (with lid off). Maintains the entire 96-well plate at a temperature of 0 °C for 1 hour. When the temperature ceiling of 6 °C has been exceeded, users are signaled by a contrasting color change of the cooler, or a single well.

Heathrow Scientific

- 2 colour options: Purple to pink or dark blue to light blue
- Ice-free cooling reduces the risk of contamination
- Fully sealed and sonic welded cooler keeps coolant contained
- Detachable lid serves also as a stand
- Lid is suitable for left and right handed users
- Ergonomic textured finger grips provide a secure hold, especially when using gloves
- Can be used for freezer storage down to -80 °C
- Alphanumeric identification
- 2 years warranty



Description	PK	Cat. No.
Pink	2	6.292 157
Blue	2	6.292 158
1 x Pink + 1 x Blue	2	6.292 159

3 PCR box and PCR rack, PP

The rack can be fitted into the box. Together, they create an ideal workstation for 0.2 ml PCR tubes, available in individual, 8-tube strip and 12 tube strip or 96-well plate formats. The box with transparent lid can be stacked to save space and is temperature resistant from -80 to +121°C. Assorted colours (red, yellow, purple, green, blue).

BRAND



Description	PK	Cat. No.
PCR-Box /-Rack	5	9.409 379

4 PCR Mini cooler, PP

With transparent lid. For protecting samples prior to warming. The mini PCR cooler keeps samples at 4 °C for approx. 3 hours. The insulating gel changes from violet to pink at 7°C. Suitable for 0.2 ml single vessels, 8-strips, 12-strips as well as 96-well PCR plates.

BRAND



Description	PK	Cat. No.
PCR Mini cooler	2	6.228 848

5 6 PCR-Coolers

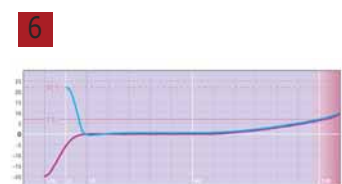
The PCR-Cooler acts as a thermochromic temperature self-indicator: pink or light-blue (depending on the model chosen) when temperature exceeds +7°C, violet or dark blue when ice-cold. The new Eppendorf PCR-Cooler reliably maintains a sample temperature of 0°C* for over an hour, changing colour when the temperature exceeds +7°C. Better than an ice bath, PCR-Cooler is simple to handle, space-saving and contamination-free, making it the perfect preparation for PCR reactions. The temperature of single tubes is indicated by the colour of the respective individual apertures. Furthermore, samples are prevented from freezing by the specially developed cone contour.

Eppendorf AG

Eppendorf PCR-Cooler: the cooling unit in the universal 96-well format for 0.2ml and 0.5ml PCR tubes, for tube strips, plates and for individual tubes. The Eppendorf PCR-Cooler is a compact, innovative solution for protecting, transporting and storing sensitive samples and obviously also ideal for safely stopping reactions.

Application note:

By changing colour from violet to pink or dark blue to light blue, the PCR-Cooler shows when the temperature has exceeded +7°C. The crucial factor for sample cooling is the well colour in the PCR-Cooler.



Description	PK	Cat. No.
PCR-Cooler, 0.2ml starter set (1 x pink, 1 x blue)	1	9.283 576
PCR-Cooler, 0.2ml pink	1	9.283 577
PCR-Cooler, 0.2ml blue	1	9.283 578
PCR tubes, 0.2ml, transparent	1000	9.283 579
twin.tec PCR Plate 96 semi-skirted, transparent	25	9.283 595
twin.tec PCR Plate 384 skirted, transparent	25	9.283 596

* With 2 hours precooling at -20°C.

➔ More PCR cooler, see page 794.



1 Cooling Block Systems, FreezeBox™

Blue. FreezeBox™ is a new, energy-saving, environmentally friendly and safe cooling equipment, without additives. It does not require electricity (except for pre-cooling the cores in the freezer) and no ice for low-temperature cooling of biological samples. The system can be used ice-free, is lightweight, easy to transport and ideal for the collection and storage of biological samples. It can be combined with interchangeable cores and different tube modules. Cooling cores can be tempered in a refrigerator or freezer and inserted into the FreezeBox™. For operation with dry ice, leave out the cooling core and fill with 200 g dry ice instead.

- For use with cooling core, ice or dry ice
- Easy to clean and disinfect
- Durable, suitable for frequent use
- Easy to mount

Type	Description	Dimensions (W x D x H) mm	PK	Cat. No.
FreezeBox™	with cooling core, -0.5 °C ... 4 °C and CM-01-module	152 x 170 x 123	1	4.665 848
FreezeBox™	with cooling core, -0.5 °C ... 4 °C and CM-02-module	152 x 170 x 123	1	4.665 856
FreezeBox™	with cooling core, -0.5 °C ... 4 °C and CM-03-module	152 x 170 x 123	1	4.665 857
FreezeBox™	with cooling core, -0.5 °C ... 4 °C and CM-04-module	152 x 170 x 123	1	4.665 858
FreezeBox™	with freeze core, -18 °C ... -4 °C and CM-01-module	152 x 170 x 123	1	4.665 859
FreezeBox™	with freeze core, -18 °C ... -4 °C and CM-02-module	152 x 170 x 123	1	4.665 860
FreezeBox™	with freeze core, -18 °C ... -4 °C and CM-03-module	152 x 170 x 123	1	4.665 861
FreezeBox™	with freeze core, -18 °C ... -4 °C and CM-04-module	152 x 170 x 123	1	4.665 862
FreezeBox™	Empty FreezeBox™	152 x 170 x 123	1	4.665 849
Cooling core	for -0.5 °C ... 4 °C	105 x 100 x 26	1	4.665 850
Freeze core	for -18 °C ... -4 °C	105 x 100 x 26	1	4.665 851
CM-01-module	for 30 x 2 ml tubes, Ø 12,6	119 x 101 x 38	1	4.665 852
CM-02-module	for 48 x 1.5 ml tubes, Ø 11	119 x 101 x 38	1	4.665 853
CM-03-module	for 30 x 5 ml tubes, Ø 13,5	119 x 101 x 38	1	4.665 854
CM-04-module	for 96 PCR-tubes, Ø 7	119 x 101 x 38	1	4.665 855



2 Water, nuclease-free

For use in any molecular biology application. Nuclease-free water is pure, quality-tested water suitable for use in all experiments that require nuclease-free water, including molecular biology applications. Nuclease-free water is prepared in a proprietary process, which yields DNase, RNase, and nuclease-free, deionized water without the use of chemical additives, such as diethylpyrocarbonate (DEPC). Nuclease-free water is provided in nuclease-free containers.

CHEM-LAB n.v.

NEW

Type	Nominal capacity ml	PK	Cat. No.
Water, nuclease-free	1000	1	4.675 029



3 Sample collection cards GenSaver™

Cards are designed for the collection, transport and storage of biological fluids at ambient temperature. This includes: blood, saliva, buccal cells, urine, semen, plant extracts.

Ahlstrom-Munksjö

GenSaver™: Preservation of DNA at ambient temperature for up to 20 years

GenSaver™ 2.0: Preservation of DNA at ambient temperature for up to 20 years, cells lysing and antimicrobial properties

Each product type is available in coloured and clear formats depending on sample colour.

Type	Capacity µl	Description	PK	Cat. No.
GenSaver™	125	4 spots, for blood, incl. stabilising agent	100	6.315 072
GenSaver™	125	2 spots, for blood, incl. stabilising agent	100	6.315 070
GenSaver™	125	1 spot, for blood, incl. stabilising agent	100	7.911 002
GenSaver™ Color	70	4 spots, for clear fluids, incl. stabilising agent	100	6.315 074
GenSaver™ Color	70	2 spots, for clear fluids, incl. stabilising agent	100	6.315 080
GenSaver™ Color	70	1 spot, for clear fluids, incl. stabilising agent	100	6.315 073
GenSaver™ 2.0	125	4 spots, for blood, incl. lysing and stabilising agent	100	6.315 077
GenSaver™ 2.0	125	2 spots, for blood, incl. lysing and stabilising agent	100	6.315 076
GenSaver™ 2.0	125	1 spot, for blood, incl. lysing and stabilising agent	100	6.315 078
GenSaver™ Color 2.0	70	4 spots, for clear fluids, incl. lysing and stabilising agent	100	6.315 075
GenSaver™ Color 2.0	70	2 spots, for clear fluids, incl. lysing and stabilising agent	100	6.315 071
GenSaver™ Color 2.0	70	1 spot, for clear fluids, incl. lysing and stabilising agent	100	6.315 079

Plasmid Purification-Kits I-Blue Mini/Midi

For rapid and efficient extraction of plasmid DNA from bacterial cells. *IBI Scientific*
The method is based on a combination of alkaline lysis and RNase treatment to obtain a clear lysate with minimal genomic DNA and RNA contamination. The bound plasmid DNA is washed and finally eluted by adding a buffer. The test kit contains the I-Blue Lysis Buffer, an optional colour indicator. The use of this indicator prevents common handling errors that impair efficient cell lysis and neutralization.

- Fast extraction time
- High yield
- Prevention of handling errors during cell lysis and neutralisation by I-Blue colour indicator

Specifications	I-Blue Mini Plasmid Kit // I-Blue Midi Plasmid Kit
Method:	Spin column // Anion-Exchange
Sample size:	1 - 7 ml // 50 - 100 ml high-copy plasmid/100 - 150 ml low-copy plasmid
Binding capacity:	50 µg // 500 µg
Fragment size:	1 - 15 kb // 1 - 20 kb
Typical yield:	up to 50 µg // 200 - 500 µg
Operation Time:	<15 min. // <80 min.

Type	Description	For	PK	Cat. No.
I-Blue MINI	Spin column	100 preps	1	4.661 766 1
I-Blue MINI	Spin column	300 preps	1	4.661 769
I-Blue MIDI	Gravity flow	25 preps	1	4.661 764 2



4.661 766



4.661 764

3 Gel/PCR DNA Fragment Extraction Kit

The test kit was developed to obtain or concentrate DNA fragments from agarose gels, PCR or other enzymatic processes. *IBI Scientific*
The agarose gel is dissolved, the enzymes are denatured and the DNA fragments will bind to the glass fibre matrix in the spin column. Wash buffers (containing ethanol) are used to remove contaminants and a low salt elution buffer is used to recover the purified DNA fragments. Recoveries are 90 - 95 % for PCR clean-up. With this kit, PCR purification and gel extraction procedures can be performed, so that a second test kit is not necessary.

- High recovery rate
- Short process time
- One test kit for two methods

Specifications	
Sample size:	up to 300 mg of agarose gel/up to 100 µl of PCR product
Binding capacity:	10 µg DNA
Fragment size:	<10 kb
Typical yield:	80-90% gel extraction/90-95% PCR clean-up
Operation Time:	<20 min.

For	PK	Cat. No.
100 preps	1	4.661 770
300 preps	1	4.661 771



4 Spin Columns, glass fibre filters

Spin column system consisting of filter tubes with glass fibre filter and collection tubes. *IBI Scientific*
For the use of leftover reagents from IBI I-Blue MINI Plasmidpurification-Kits (IB47170, IB47171, IB47172), Gel/PCR/DNA Fragment Extraction Kits (IB47010, IB47020, IB47030), Plasmidpurification-Kits High-Speed MINI (IB47101, IB47102) or similar products from other suppliers using a binding, washing and elution method. Sample size, binding capacity and elution volume listed in the specifications must be observed.

Specifications	Gel Fragment Extraction Kit // Plasmidpurification-Kits
Sample size:	300 mg agarose gel/100 µl PCR product // 1 - 4 ml bacterial culture
Binding capacity:	up to 10 µg // up to 30 µg
Elution volume:	20 - 50 µl // 50 - 100 µl

Type	PK	Cat. No.
MINI Hi-Speed Plasmid Columns	25	4.661 776
MINI Hi-Speed Plasmid Columns	50	4.661 777
MINI Hi-Speed Plasmid Columns	100	4.661 778
PCR / Gel DNA Fragment Extraction Columns	25	4.661 779
PCR / Gel DNA Fragment Extraction Columns	50	4.661 780
PCR / Gel DNA Fragment Extraction Columns	100	4.661 781

Genomics/DNA and RNA isolation-Thermocyclers



1 2 Micro plates Riplate® magnetic

Riplate® magnetic plates have been specially developed for the reproducible magnetic separation of DNA and proteins and can also be used for cleaning, mixing or centrifugation of samples as well as for the storage and preparation of substances.

Ritter

For the filtration of proteins as well as for DNA extraction, an automated method called magnetic separation is commonly used. The technology is based on magnetic particles which allow the fast and efficient sample preparation with high throughput. The sustainability of these products as well as reliable analysis results are ensured by the production under cleanroom conditions (class 8). The plates are in line with the SBS standard (Society for Biomolecular Screening) and have been especially developed for the magnetic separation technology.

- High resistance towards commonly used chemicals, solvents and alcohols
- High stability also during centrifugation
- Newly developed cylindrical wells enable a good bioturbation of samples
- Slightly raised rims reduce the risk of cross-contamination
- The alphanumeric code allows the registration and identification of individual samples even in confined spaces

Specifications

Total volume	
Riplate® 96 SRW magnetic 0.2 ml:	0.2 ml/Well
Riplate® 96 SRW magnetic 2 ml:	2 ml/Well
Working volume	
Riplate® 96 SRW magnetic 0.2 ml:	0 to 100 µl
Riplate® 96 SRW magnetic 2 ml:	20 to 1000 µl (with knobbed lid)

Type	PK	Cat. No.
Riplate® 96 SRW magnetic 0,2 ml	60	6.272 030
Riplate® 96 SRW magnetic 2 ml	60	6.272 031
Riplate® 96 comb	60	6.272 032

3 Thermocyclers ³PRIMEBASE/³PRIMEX/³PRIMEG

Mid-size thermocyclers - find space on any laboratory bench

Techné

- Approved cyclers with new design
- With and without gradient function
- Gradient upgrade from ³PRIMEX to ³PRIMEG
- 3.5" colour touch screen with graphical display
- Height-adjustable and heatable lid, temperature from 100°C to 115°C, with ON/OFF switch and automatic switch off against overheating
- Password protected
- Auto-Restart
- USB port
- 4 years warranty for the Prime Thermocycler

Specifications

Block temperature:	+4°C to +100°C
Temperature gradient (only ³ PRIMEG or ³ PRIMEX with upgrade):	+30°C to +80°C
Max. Gradient:	+14°C
Block uniformity at 55°C:	<±0.3°C
Max. Heating rate:	3.0°C/s
Dimensions (W x D x H):	210 x 350 x 180

Type	Description	PK	Cat. No.
³ PRIMEBASE	incl. block for 18 x 0.5ml tubes	1	9.595 501
³ PRIMEBASE	incl. block for 24 x 0.2ml tubes	1	9.595 502
³ PRIMEX	incl. block for 30 x 0.5ml tubes	1	9.595 503
³ PRIMEX	incl. block for 48 x 0.2ml tubes	1	9.595 504
³ PRIME gradient upgrade	Gradient upgrade from ³ PRIMEX to ³ PRIMEG	1	9.595 505
³ PRIMEG	incl. block for 30 x 0.5ml tubes	1	9.595 506
³ PRIMEG	incl. block for 48 x 0.2ml tubes	1	9.595 507

Further models can be found in our online shop.

3



1 Real-time PCR-system Prime Pro 48

The new Prime Pro 48 real time PCR system from Techne (UK) is a high specification, economically priced real-time thermocycler. Techne
 The Prime Pro 48 system has a unique high thermal block uniformity ($\pm 0.1^{\circ}\text{C}$). This uniformity as well as validated sample volumes of down to 5 μl enable an optimized reaction run time for 40 cycles down to only 15 minutes. The uniform temperature across the plate is achieved with a unique heating and cooling system that quickly enables a uniform temperature of $\pm 0.1^{\circ}\text{C}$ in every well of the block within a fraction of a second of reaching each well temperature. This high uniformity eliminates the need for triplicates which reduces reagent running costs. Prime Pro 48 accommodates a unique and economical 48-well PCR plate, the size of which is only 1/8 the size of a standard 96-well plate. The well format mirrors a 384-well plate therefore allowing the use of a 16-channel micropipette. The small plate cuts reagent costs in half whilst still producing a strong fluorescent signal. Applications include e.g. absolute and relative quantification, Allelic Discrimination and High Resolution Melt.

Features:

- Validated volume per well: 5 to 20 μl
- High temperature uniformity of $\pm 0.1^{\circ}\text{C}$ across the whole block instantly after every temperature change
- 40 cycles in 40 minutes before optimization, and down to only 15 minutes when optimized
- Genotype in 4 minutes with over 99% accuracy
- Patented "Adaptive LED Control" minimizes optical artifacts and prevents premature detector saturation
- Dual LED excitation (452nm to 486nm and 542nm to 582nm)
- 4 emission filters (505nm to 545nm, 562nm to 596nm, 604nm to 644nm, 665nm to 705nm)
- Data is always collected in all four filters for all wells
- Distinguishes 5000 and 10000 template copies with 99 percent confidence

Additional features:

- 48-well block
- MIQE compliant
- 400 analyte specific qPCR reagent kits available
- No calibration required
- Calibrated dyes: SYBR[®], FAMTM, HEXTM, ROXTM, Cy[®]5.
- Additional dyes within the filter wavelength range are supported with no additional calibration required
- Unlimited software license
- 1 year warranty

Custom 48-well qPCR plates and corresponding seals have to be ordered separately.

Specifications

Temperature range:	30 to 100°C
Temperature stability:	$\pm 0.1^{\circ}\text{C}$
Temperature uniformity:	$\pm 0.1^{\circ}\text{C}$ within 1sec
Average ramp rate:	5.5°C/sec
Dimensions (W x D x H):	345 x 310 x 320mm
Weight:	13.6kg

Type	PK	Cat. No.
Prime Pro 48	1	9.595 515
PCR plates Prime Pro 48	50	9.595 517
Plate seals Prime Pro 48	50	9.595 516

1



1 Thermocycler Alpha Cyclers

The Alpha Cyclers family from PCRmax provides a range of features which are specifically designed to meet the needs of modern researchers when amplifying DNA. Given the flexibility in format and block options (96 or 384 well) scalability is core in the Alpha Cyclers range. Alpha Cyclers software has features such as recently used programmes, allowing users to quickly access their most commonly used protocols without the need to navigate through folders to find it, individual user logins, with protected protocols. The Alpha Cyclers systems also contain a novel programme wizard which allows users to define a protocol based specifically on their primer sequence and template source. Primer sequences or T_m 's are entered, amplicon length and source defined and the on board algorithm generates an optimised protocol for your assay. The Alpha Cyclers range of block options allow for use of the most commonly used consumables from different manufacturers and includes 96 well plates (0.2 ml), tubes (0.2 ml), strip tubes (0.2 ml) and 384 well plates.

- Single, dual or four block options available with either 96 or 384 well gradient blocks
- **Multi-block units have totally independent blocks for maximum flexibility**
- HD Android driven touchscreen interface for simplified programming
- Generate and send instrument reports to diagnose the health of your system and identify any issues before they impact users work
- Lock programs with user defined password
- Alpha Track mobile app allows remote monitoring of run progress

Alpha Track App (free of charge): Track the progress of runs and health of your system remotely via the mobile app
The Alpha Track Application is used in conjunction with your Alpha Cyclers and allows users to:

- Remotely track the progress of runs
- Send a health report for diagnosis by the technical support team
- Be notified of any issues and prevent system failures before occurring

Specifications

Block temperature:	+10 to +100 °C
Block uniformity at 55°C:	±0.3 °C
Temperature accuracy at 55°C:	±0.25 °C
Max. Heating rate:	3.4 °C/s

Type	Description	Dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
AC196	1 x 96 well block	430 x 260 x 200	12	1	4.658 855
AC1384	1 x 384 well block	430 x 260 x 200	12	1	4.658 856
AC296	2 x 96 well blocks	470 x 535 x 330	30	1	4.658 857
AC2384	2 x 384 well blocks	470 x 535 x 330	30	1	4.658 858
AC2196	1 x 96 + 1 x 384 well blocks	470 x 535 x 330	30	1	4.658 859
AC496	4 x 96 well blocks	700 x 535 x 330	45	1	4.658 860
AC4384	4 x 384 well blocks	700 x 535 x 330	45	1	4.658 861
AC4196	1 x 96 + 3 x 384 well blocks	700 x 535 x 330	45	1	4.658 862
AC4296	2 x 96 + 2 x 384 well blocks	700 x 535 x 330	45	1	4.658 863
AC4396	3 x 96 + 1 x 384 well blocks	700 x 535 x 330	45	1	4.658 864

1



UV sterilisation cabinets

These UV sterilisation cabinets provide a convenient area for setting up PCR reactions in a nucleic acid free environment thus limiting PCR reaction contamination. Acting effectively as a low cost alternative to a Cleanroom, the powerful UV lights on the cabinets denature nucleic acids in 5 to 30 minutes making them unsuitable for amplification. The cabinet incorporates safety features to prevent user exposure to UV light. The UV lights themselves are timer controlled and there are safety switches on the cabinets doors which turn off the UV lights when opened. Constructed from 10 mm acrylic, the cabinets also act as efficient shields from beta radiation emissions and can therefore be safely used with isotopes such as ³²P.

Cleaver Scientific



9.584 775

Specifications

UV Lights:	Maxi/Midi/Mini
White Lights:	4 x 15 W
Dimensions (H x W x D):	15
Weight:	770 x 580 x 420 mm/620 x 580 x 420 mm/450 x 580 x 350 mm
	19 kg/14.6 kg/12 kg

Description

	PK	Cat. No.
UV sterilisation cabinets Maxi with timer, four UV lights and white light	1	9.584 774
UV sterilisation cabinets Midi with timer, four UV lights and white light	1	4.670 734
UV sterilisation cabinets Mini with timer, UV light and white light	1	9.584 775
General purpose tray white, 680 x 540 mm	1	6.258 034
Radiation hazard tray yellow, 680 x 540 mm	1	9.584 788

UV/PCR cabinets UVT-B-AR/UVT-S-AR/UVC/T-M-AR

Bench-top models for protection against contamination during a variety of DNA/RNA procedures. *Grant*

- UV surface irradiation, via 1 x 25 W 254 nm open UV lamp or 2 x 30 W open UV lamp (UVT-S-AR)
- Patented high intensity UV air cleaner, 25 m³/hour cleaner-recirculator continuous air flow with 1cm UV irradiation distance
- UV lamp in the upper hood disinfects the working area, inactivating DNA/RNA fragments during 15-30 min of exposure
- UV exposure control, 24 hour digital timer
- Convenient, easy to use digital timer for accurate control of UV exposure
- White lamp provides local illumination of the workplace to optimise visual control during operations
- Shock proof glass panels, metal framework and stainless steel work surface
- Automatic switch-off of open UV light when door opened
- UVT-B-AR is available with 1 x access port or 1 x internal power socket, UVT-S-AR with 3 x internal power socket, UVC/T-M-AR with 1 x access port



9.721 070

Type	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
UVT-B-AR, with access port	690 x 585 x 555	650 x 475 x 450	32	1	6.284 214
UVT-B-AR, with internal socket	690 x 585 x 555	650 x 475 x 450	32	1	9.721 070
UVT-S-AR	1245 x 585 x 555	1200 x 520 x 425	31	1	6.237 057
UVC/T-M-AR	690 x 515 x 555	650 x 475 x 450	58	1	7.970 866



6.237 057

4 PCR Cabinets Type Streamline®/Airstream®

Active PCR Cabinet with built-in UV Decontamination and true vertical laminar airflow. *ESCO*

- Average Airflow Velocity (adjustable): 0.3 m/s
- HEPA filter with pre-filter
- The air cleanliness within the work zone is better than ISO Class 5
- Sentinel-Microprocessor maintains steady blower speed (only 0.9 m and 1.2 m models)
- Hinged polycarbonate front window
- Tempered glass side panel
- ISOCIDE™ antimicrobial coating on all painted surfaces minimizes contamination.
- Fluorescent lighting provides superior illumination of the work zone
- Build-in UV lamp with timer
- Pass-through ports in the back wall

Options on request:
Support stands, installation

Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
Streamline® SCR-2A1	0.6 m	730 x 617 x 950	630 x 538 x 550	1	4.658 988
Airstream® PCR-3A1	0.9 m	1035 x 617 x 950	935 x 538 x 550	1	4.658 783
Airstream® PCR-4A1	1.2 m	1340 x 617 x 950	1240 x 538 x 550	1	4.658 998





1 Gel electrophoresis tank MultiSUB Mini

The MultiSUB Mini is the smallest unit in the range, designed for low to medium numbers of samples. The cost-effective small gel size does not compromise versatility as two tray options are available: 7 x 7 cm and 7 x 10 cm. Easy preparation up to 16 samples. Simply by altering the gel tray or comb, this compact unit is capable of resolving up to 64 different samples, prepping 1ml of sample or separating sample bands over a distance of 9 cm. *Cleaver Scientific*

Supplied with:

MultiSUB Mini 7: 7 x 7 cm UV Tray, 2 x 8 sample combs.
 MultiSUB Mini 10: 7 x 10 cm UV Tray, 2 x 8 sample combs.
 MultiSUB Mini DUO: 7 x 7 cm and 7 x 10 cm UV Tray, 2 x 8 sample combs.
 Set: MultiSUB Mini DUO + Power supply OmniPAC, MINi 300 V 400mA 60 W, 110/230 V.
 Each model has an additional loading guides and dams.

Specifications

Gel dimensions (W x L): 7 x 7cm and 7 x 10 cm
 Unit dimensions (W x L x H): 21 x 9 x 9 cm
 Max. sample capacity: 7 x 7 cm tray, 32 samples
 7 x 10 cm tray, 64 samples
 Buffer volume: 225 ml

Description	PK	Cat. No.
MultiSUB Mini 7	1	6.258 373
MultiSUB Mini 10	1	9.584 650
MultiSUB Mini DUO	1	7.920 043
MS Mini DUO Nano 300 incl. CSL-AG100, CSL-Loaddye, CSL-MDNA-1kb	1	7.971 555

2



2 3 Gel electrophoresis tank MultiSUB Choice

Gel size: 15 x 15 cm (W x L). This unit is ideal for restriction fragment analysis, sample prep or checking of high number of samples. The MultiSUB Choice offers a high degree of versatility. Two additional tray options are available: 15 x 7 cm and 15 x 10 cm. *Cleaver Scientific*

- Colour coded combs 0.75/1.0/1.5/2.0 mm
- 3, 4 or 6 comb positions for maximum 210 samples
- Low buffer volume: 500 ml
- Simple gel casting by using dams

Supplied with:

MultiSUB Choice 7: 15 x 7 cm UV tray, 2 x 20 sample combs.
 MultiSUB Choice 10: 15 x 10 cm UV tray, 2 x 20 sample combs.
 MultiSUB Choice 15: 15 x 15 cm UV tray, 2 x 20 sample combs.
 MultiSUB Choice Trio: 15 x 7, 10 and 15 cm UV tray, 2 x 20 sample combs.
 MultiSUB Choice Trio 15: 15 x 15 cm UV tray, 2 x 20 sample combs.
 MultiSUB Choice Stretch 20: 15 x 20 cm UV tray, 4 x 28 sample combs.
 MultiSUB Choice Stretch 25: 15 x 25 cm UV tray, 4 x 28 sample combs.
 Each model has an additional loading guides and dams.

3



Specifications

Unit dimensions (w x l x h): 26.5 x 17.5 x 9 cm
 41 x 17.5 x 9 cm (Stretch models)
 Max. sample: 15 x 7 cm Tray - 70 Samples
 15 x 10 cm Tray - 140 Samples
 15 x 15 cm Tray - 210 Samples
 15 x 20 cm Tray - 280 Samples
 15 x 25 cm Tray - 350 Samples
 Buffer volume: 500 ml
 1000 ml (Stretch models)

Description	PK	Cat. No.
MultiSUB Choice 7	1	6.264 824
MultiSUB Choice 10	1	7.655 972
MultiSUB Choice 15	1	9.584 651
MultiSUB Choice Trio	1	6.239 273
MultiSUB Choice Trio 15	1	7.629 932
MultiSUB Choice Stretch 20	1	9.584 663
MultiSUB Choice Stretch 25	1	9.584 664

Suitable accessories can be found in our online shop.

1 Gel electrophoresis tank MultiSUB Midi

Extending only the width of this unit allows more samples to be resolved per gel than the MultiSUB Mini without a significant increase in buffer or gel volumes. A maximum of 100 samples per gel can be resolved making this unit ideal for those routinely checking medium numbers of samples over short to medium gel run lengths. *Cleaver Scientific*

Supplied with:

MultiSUB Midi 7: 10 x 7 cm UV tray, 2 x 16 sample combs.
MultiSUB Midi 10: 10 x 10 cm UV tray, 2 x 16 sample combs.
MultiSUB Midi DUO: 10 x 7 cm + 10 x 10 cm UV tray, 2 x 16 sample combs.
Each model has additional loading guides and dams.

Specifications

Gel dimensions (W x L): 10 x 7 cm and 10 x 10 cm
Unit dimensions (W x L x H): 22 x 12.5 x 9 cm
Max. sample capacity: 10 x 7 cm tray, 50 samples
10 x 10 cm tray, 100 samples
Buffer volume: 300 ml

Description	PK	Cat. No.
MultiSUB Midi 10	1	6.228 823
MultiSUB Midi DUO	1	6.238 115



2 Gel electrophoresis tank MultiSUB Maxi

The MultiSUB Maxi is primarily designed for resolution of high numbers of samples such as from Cloning or PCR. The MultiSUB Maxi allows ultra high-resolution separations over extended runs. Tray sizes correspond to standard blotter sizes. It also allows easy sample transfer onto a membrane for further analysis. Four gel tray sizes are available: 20 x 10 cm, 20 x 15 cm, 20 x 20 cm and 20 x 25 cm. Multichannel pipette compatible, 40 combs facilitates speed loading of up to 440 samples per gel. 50 sample combs allow maximum sample capacity of 550 samples per gel. *Cleaver Scientific*

Supplied with:

MultiSUB Maxi 15: 20 x 15 cm UV Tray, 2 x 20 sample, 1 mm thick combs.
MultiSUB Maxi 20: 20 x 20 cm UV Tray, 2 x 20 sample, 1 mm thick combs.
MultiSUB Maxi DUO: 20 x 10 + 20 x 20 cm UV Tray, 2 x 20 sample, 1 mm thick combs.
MultiSUB Maxi 25: 20 x 25 cm UV Tray, 2 x 20 sample, 1 mm thick combs.
Each model has an additional casting dams and loading guides.

Specifications

Gel dimensions (w x l): 10 x 7 cm and 10 x 10 cm
Unit dimensions (w x l x h): 22 x 12.5 x 9 cm
Max. sample capacity: 20 x 10 cm tray, 200 samples
20 x 15 cm tray, 350 samples
20 x 20 cm tray, 450 samples
20 x 25 cm tray, 550 samples
Buffer volume: 1500 ml

Description	PK	Cat. No.
MultiSUB Maxi 15	1	7.673 115
MultiSUB Maxi 20	1	6.261 058
MultiSUB Maxi 25	1	9.584 671
MultiSUB Maxi DUO	1	9.584 670



Suitable accessories can be found in our online shop.

3 Power supply nanoPAC-300 Mini for gel electrophoresis tanks

The nanoPAC-300 is capable of running all Cleaver Scientific horizontal multiSUB™ systems and vertical omniPAGE mini gel systems. *Cleaver Scientific*

- Maximum constant current output of 400mA
- Simple two step feature to set a programmable change in voltage, current and time during the run
- Constant voltage up to 300 V
- Adjustable in 1 V and 1 mA increments
- Two parallel outputs
- Continuous run or timed setting up to 999 minutes
- Automatic safety shutdown
- Alarm function
- Easy-to-clean polycarbonate housing
- 3-digit LED display

Type	Rating	Supply requirements	PK	Cat. No.
	W			
nanoPAC-300P Mini	60	300 V / 400 mA	1	6.272 711



1


1 Enduro™ power supplies

Dependable performance, intelligent control, for the connection of different chamber systems. Ideal for DNA, RNA and protein electrophoresis as well as blotting.

Labnet

- Simple to program
- Select constant voltage or constant current mode
- Compact, lightweight and stackable
- Extremely quiet operation

Specifications

Output voltage range/increments:

Timer:

Programmable:

Dimensions:

Weight:

Input voltage:

Output voltage range/increments:

Timer:

Programmable:

Dimensions:

Weight:

Input voltage:

Model 300 V

2 ... 300 V/1 V

4 ... 500 mA/1 mA

90 W max/na

1 min to 99 h 59 min or continuous

No

190 x 250 x 80 mm

2.2 kg

120-230 V

Model 250 V

5 ... 250 V/1 V

10 ... 3.000 mA/10 mA

1 ... 300 W/1 W

1 min to 99 h 59 min or continuous

10 steps/program, 20 program memory

190 x 250 x 80 mm

2.5 kg

120 ... 230 V

Description	PK	Cat. No.
Enduro 300 V power supply	1	9.595 314
Enduro 250 V power supply	1	9.595 306

Additional accessories are available.

2


2 Agarose for gel electrophoresis

This agaroses are suitable for routine analysis of nucleic acids. They combine tensile strength with low electroendosmotic effects to achieve high resolving power for a wide size range of nucleic acid fragments. AG agaroses are also very environmentally friendly, being manufactured by a process which excludes organic solvents. Also available as low melting point agarose for nucleic acid recovery and enzymatic applications (Cat. No. 4.658 455) and as High Resolution PCR grade agarose for separation of small DNA fragments of up to 800 bp (Cat. No. 6.270 615). Other packing sizes on request.

Cleaver Scientific

Specifications

CAS:

Appearance:

EEO:

Gelling Point:

Melting Point:

Solubility:

Moisture:

Gel Strength:

Sulphate:

DNase, RNase, Protease,

Endonuclease:

AG | LMA | HRA

9012-36-6 | 39346-81-1 | 39346-81-1

White to off-white powder

≤ 0.13 % | ≤ 0.1 % | ≤ 0.1%

36 °C ±1.5°C (1.5 % gel) | 26-30 °C (1.5 % gel) | ≤ 33 °C (1.5 % gel)

88 °C ±1.5°C (1.5 % gel) | ≤ 65 °C (1.5 % gel) | ≤ 70 °C (1.5 % gel)

Clear, colourless solution at 1g in 100ml water

< 10 %

≥ 1200 g/cm² (1% gel) | ≥ 200 g/cm² (1% gel) | ≥ 750 g/cm² (1.5% gel)

< 0.20 % | ≤ 0.1 % | ≤ 0.1 %

None Detected

Type	Capacity g	PK	Cat. No.
CSL-AG100	100	1	9.584 695
CSL-AG500	500	1	9.584 696
CSL-AG1000	2 x 500	1	9.584 697
CSL-LMA50	50	1	4.658 455
CSL-HRA100	100	1	6.270 615

DNA Markers for Gel Electrophoresis

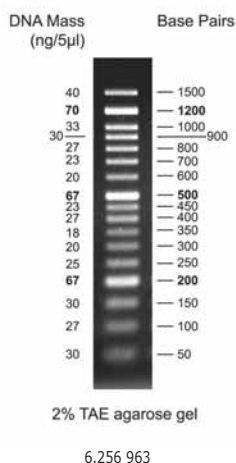
The ready-to-use DNA markers run precisely and produce a sharp, well defined ladder. They are available in six molecular weight ranges. The markers contain high intensity reference bands and may be used to perform size comparisons with DNA molecules ranging from the smallest of PCR fragments to large, linearised cosmid vectors.

Cleaver Scientific

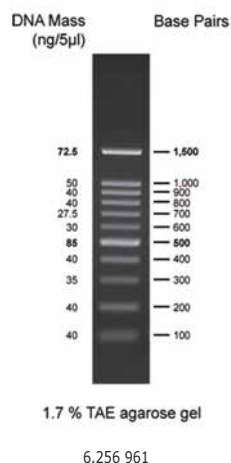
- Up to 19 bands
- Isolated from restrictive plasmids
- 6 months stable at room temperature
- 12 months shelf life at 4 °C
- 24 months storable at -20 °C
- Vials of 500 µl

Type	Size	Bands	Reference bands	PK	Cat. No.
CSL-MDNA-50BP	50 bp - 1500 bp	17	200 bp, 500 bp	1	6.256 963
CSL-MDNA-100BP	100 bp - 1500 bp	11	500 bp, 1500 bp	1	6.256 961
CSL-MDNA-100BPH	100 bp - 3000 bp	12	500 bp, 1500 bp	1	6.256 960
CSL-MDNA-BR	100 bp - 10 Kb (Broad Range)	19	500 bp, 1.5 Kb, 3 Kb	1	6.256 964
CSL-MDNA-1KBPLUS	100 bp - 10 Kb	13	1 Kb, 3 Kb	1	4.669 511
CSL-MDNA-HR	250 bp - 25 Kb (High Range)	14	1 Kb, 3 Kb	1	6.256 965

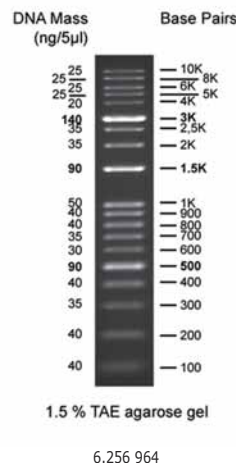
1



2



3



4 DNA stain proBLUE

Simple and fast staining of DNA fragments post agarose electrophoresis.

Cleaver Scientific

- Methylene blue stain as 10x concentrate
- Visibility of DNA as a blue band
- Binds to negatively charged DNA

Type	Capacity ml	PK	Cat. No.
proBLUE	120	10	4.661 309

4



DNA Loading Dyes

Orange G dye contains sucrose and xylene cyanol.

Cleaver Scientific

Bromophenol blue is the standard dye for electrophoresis, with a dark blue colour.

- Tracking dyes for monitoring electrophoresis runs
- The charge-to-mass ratio allows to co-migrate with small molecules in agarose and PAGE gels
- Vials of 1 ml

Type	Package contents	PK	Cat. No.
CSL-ORANGEDYE-Orange G	1 Vial	10	4.661 308
CSL-LOADDYE-bromophenolblue	10 Vials	1	6.257 263

5



6.257 263



1 UV lamps

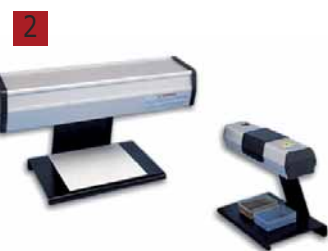
- Filtered and unfiltered(*) UV lamps with different wave lengths and power levels for a broad range of applications
- Models with wave length selector suited for multiple applications
- Electronic ballast (ECG), flicker-free, low-maintenance

Vilber Lourmat

Further models on request.

Note: please order lamp holder separately.

Type	Description	Filter size mm	Wave-length nm	Power W	PK	Cat. No.
BVL-6.L	Single wavelength	145 x 48	365	1 x 6	1	7.910 047
BVL-6.LC	wavelength selector	145 x 48	365 / 254	1 x 6	1	9.971 918
BVL-115.L	Single wavelength	295 x 66	365	1 x 15	1	9.971 936
BVL-215.G*	UV sterilization lamp	495 x 120	254	2 x 15	1	9.971 915
BVL-206.G*	UV sterilization lamp	155 x 70	254	2 x 6	1	4.675 301
BVL-215.L	Single wavelength	295 x 76	365	2 x 15	1	4.675 302



2 Lamp holder for UV lamps

Vilber Lourmat

Type	For Type	PK	Cat. No.
SVL-6	BVL-6	1	9.971 921
SVL-30	BVL-115, BVL-215	1	9.971 922



3 Handle for UV lamps

Vilber Lourmat

Type	For Type	Mounting	PK	Cat. No.
SMU	BVL-6	clip	1	9.971 938
SMA	BVL-6	handle	1	6.230 416



4 Blue- and white light LED-Transilluminators

NEW
Cleaver Scientific

Powerful LED lighting arrays for blue (470 nm) and white (broad wavelength) illumination to image fluorescent and colorimetric gels. Through LED lights no ageing of UV bulbs and because of the inbuilt white LED array a separate white light table is not necessary. Well suited for teaching labs in universities and schools. Compatible with blue light excited safe DNA stains, as well as traditional stains such as ethidium bromide.

- Magnetic filter compatible with wide range of DNA stains
- 3 level adjustable LED intensity
- Bottom up illumination provides even sample illumination
- Automatic power-off to prevent heat build-up
- High quality aluminium housing

Scope of supply:

Transilluminator, orange hinged filter, paper hood

Specifications

Wavelength:	470 nm + white light
Viewing size:	120 x 180 mm
Dimensions (W x D x H):	220 x 185 x 30 mm
Input voltage:	12 V, 2 A
Power supply:	110 ... 240 V

Type	PK	Cat. No.
proBLUEVIEW	1	4.670 749

1 Blue light LED-Transilluminators runVIEW MINI **NEW**

The Mini-Blue light Transilluminator uses harmless blue light to illuminate both traditional Ethidium bromide stained gels as well as safe stains. Slotting under any gel tank, but perfect for our MINI and MIDI sized multiSUB gel tanks. With orange filter window to visualise DNA in real time within gel tanks, perfect for quickly checking PCR fidelity and restriction digest results. The device can also be used as a stand-alone transilluminator with the gel placed directly on the illuminator.

- High intensity blue LED illuminator allows visualisation of a wide range of fluorescent gel stains
- Compatible with runSAFE, commercial safe stains and ethidium bromide

Scope of supply: Transilluminator, Filter (orange)

Specifications

Wavelength:	470 nm
Viewing size:	112 x 75 mm
Dimensions (W x D x H):	86 x 170 x 25 mm
Weight:	338 g
Power supply:	DC 12 V, 2 A

Type	PK	Cat. No.
runVIEW MINI	1	6.313 471



2 UV transilluminators

Standard features include a high/low intensity safety switch and an efficient starter that allows each of the six 8W UV tubes to energise quickly without flickering, while special filter glass minimises unwanted background light. All of these features maximise contrast and sensitivity, allowing even the faintest fluorescent gels to be viewed.

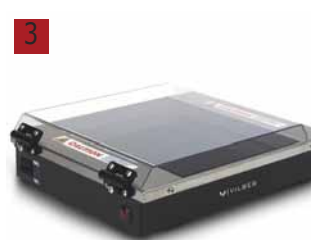
Type	Filter size mm	Wave-length nm	Tubes	Spare tubes		PK	Cat. No.
				Type	Type		
CSLUVTS254	210 x 210	254	6 x 8W	F		1	9.584 770
CSLUVTS312	210 x 210	312	6 x 8W	E		1	6.231 832
CSLUVTS365	210 x 210	365	6 x 8W	G		1	9.584 771
CSLUVTSDUO	210 x 210	254/365	6 x 8W	F / G		1	9.584 772
CSLUVTSDUO312	210 x 210	254/312	6 x 8W	F / E		1	9.584 773



3 Compact UV transilluminators

- Compact design
- Metal housing, with stainless steel filter frame and "long life" filter
- Modern technology, highest quality manufacture
- Single or dual wavelength models available
- BECXF models have intensity selector (Hi/Lo)

Type	Description	Filter size mm	Wave-length nm	No. of Tubes	Tubes		PK	Cat. No.
					W	W		
ECX-F15.M V1	Hi / Lo Intensity	150 x 150	312	4	8		1	6.260 573
BECX-F20.M V1	Hi / Lo Intensity	200 x 200	312	5	8		1	9.971 910
BECX-F26.M V1	Hi / Lo Intensity	210 x 260	312	5	8		1	9.971 911
BTCP-20.LM V1	Multi-band	200 x 200	365 / 312	5 / 4	8		1	9.971 912
BTCP-20.MC V1	Multi-band	200 x 200	254 / 312	5 / 4	8		1	9.971 913
BTCP-26.LM V1	Multi-band	210 x 260	365 / 312	5 / 4	8		1	9.971 914



Spare tubes for UV Instruments and UV Lamps

Suitable for all instruments from Vilber Lourmat.

Type	Tubes W	Wave-length nm	PK	Cat. No.
T-6.C	6	254	1	4.675 306
T-6.L	6	365	1	4.675 303
T-8.C	8	254	1	4.675 307
T-8.M	8	312	1	4.675 304
T-8.L	8	365	1	4.675 308
T-15.C	15	254	1	4.675 309
T-15.M	15	312	1	4.675 310
T-15.L	15	365	1	4.675 311

1



2



1 2 Gel Documentation System omniDOC

The omniDOC offers high performance gel documentation and analysis at a relatively low cost. *Cleaver Scientific*
A high resolution 5 mega pixel camera with slide-out UV transilluminator, and optional blue epi-illumination module and white light table, makes the omniDOC suitable for imaging most fluorescent and colorimetric gels.

OMNIDOC features:

- Pre-focused 5 mega pixel camera with auto-exposure for almost instantaneous high resolution gel imaging; CMOS sensor for improved light sensitivity
- 6mm lens, F1.2 aperture size, with manual adjustment
- Interchangeable 4 positions filter wheel with 620 nm ethidium bromide filter as standard; 520, 560, 580 nm and neutral density filter options available for runSAFE, SYBR stain and other fluorescence applications
- Viewing pane with universal amber filter for gel inspection, which may be covered by a spring-loaded panel during documentation
- Internal white LED - aids gel positioning and focusing
- Slide-out 312 nm transilluminator; uses optional plug-in white light table for coomassie, silver-stain and other colorimetric gels
- Large 210 x 260 mm filter area
- Dark room assembly with corrosion resistant ABS construction
- Safety switch prevents accidental UV exposure when opening front door panel

omniDOCSAFE: omniDOC plus blue LED Epi-illumination and 520, 560, 580 nm and neutral density filters.

omniDOCPROSAFE: omniDOC plus blue LED Epi-illumination, 520, 560, 580 nm and neutral density filters and white light table.

Type	Description	PK	Cat. No.
OMNIDOC	with 620nm (EtBr) emission filter, 312nm UV transilluminator and USB cable	1	6.263 221
OMNIDOCSAFE	as OMNIDOC plus Blue LED Epi-illumination Module, and 520, 560, 580 nm and neutral density filters	1	6.265 278
OMNIDOCPROSAFE	as OMNIDOC plus Blue LED Epi-illumination Module, and 520, 560, 580 nm and neutral density filters and white light table	1	7.982 838

3



3 Gel documentation system gelLITE-E60

NEW

Compact gel documentation system for agarose gels and stained protein gels. Suitable for *Cleaver Scientific*
fluorescent and stained agarose gels, spot and colony counting, Coomassie stained protein gels, GFP plant imaging, molecular weight analysis of DNA agarose gels and protein gels as well as autoradiography imaging. A 302 nm UV transilluminator enables imaging of large format agarose gels or stained protein gels up to 20 x 20 cm. A 5-megapixel camera gives low light sensitivity for clear resolution of closely spaced DNA bands and ensures low levels of fluorescence are detected. With intuitive genePIX acquisition software for an efficient workflow.

- High-resolution 5 megapixel camera with 16 bit image depth and 65536 grey levels
- Manually controlled camera zoom and focus
- Image of all commercially available DNA and protein stains
- GenePIX software for acquisition and analysis
- USB connection to PC

Scope of supply:

Darkroom, camera, UV transilluminator, converter screen, UV emission filter, license free acquisition and analysis software

Specifications

Resolution:	5 megapixels
Lens:	Manual zoom 6.5 - 39, F1.4
Sensor bit-depth:	12/16 bit
Greyscales:	4096/65536
Transilluminator wavelength:	302 nm
Transilluminator size:	200 x 200 mm
Dimensions (H x D x W):	620 x 375 x 400 mm
Power supply:	230 V/60 Hz

Type	PK	Cat. No.
gelLITE-E60	1	4.670 735

Further models can be found in our online shop.

1 Gel Documentation System Doc-Print CX3

1

Doc-Print CX3 is a stand-alone system with a small footprint that doesn't need a computer. The free VisionCapt software guarantees full GLP compliance. Molecular weight calculation, band quantification, colony counting, distance calculation, text annotations and image enhancement are included.

Vilber Lourmat

- Field of view: 24 x 18 cm
- Scientific grade camera - Made in Germany
- 3 megapixel resolution (extendable to 20 megapixels)
- Auto-exposure
- 16-bit - 65 536 grey levels
- Passive cooling
- USB 3 connection
- Large 12.6" touchscreen interface display
- Self-understandable user interface
- Print or save on an external drive via the USB port
- Connection of a thermal printer possible

All models include the following standard components: Imaging unit with touch display and software, camera, zoom objective, UV-/vis F-590 Filter and dark hood.



Type	PK	Cat. No.
DOC-Print CX3 - standard components	1	9.971 948
DP CX3-P - standard components + grey-level thermal printer	1	9.971 949
DP CX3-20.M - standard components + UV transilluminator	1	9.971 950
DP CX3-P-20.M - standard components + grey-level thermal printer and UV transilluminator	1	9.971 951

2 Gel documentation system UVI doc-HD6

NEW

2

PC-independent gel documentation system with a compact darkroom made of metal

Vilber Lourmat

- Large, good readable touch display (12.2")
- High resolution scientific camera with motorized 6x zoom objective
- High recording quality (6 MP, 16 bit)
- Automated image recording
- Darkroom, three position filter wheel, LED incident light, integrated UV-table (20x20 cm) with full pullout and automatic safety shutdown
- USB port for data transfer
- Free analysis software

Specifications

Resolution:	6 megapixels
Extended resolution:	10 megapixels
Lens:	6x zoom objective
Sensor bit-depth:	16 bit
Greyscales:	65535
Dynamic range:	>4.0 OD
Transilluminator wavelength:	312 nm
Transilluminator size:	200 x 200 mm
Dimensions (W x D x H):	380 x 475 x 785 mm
Weight:	33 kg

Type	PK	Cat. No.
UVI doc-HD6	1	4.667 667



1 Vacuum concentrator, Concentrator plus™

The new Concentrator plus features a new LCD display and user-friendly control panel with clearly labeled function keys.

Eppendorf AG

The new Concentrator plus from Eppendorf is available in two configurations:

- Complete system with an integrated service-free diaphragm pump
- Basic concentrator for connecting to an existing vacuum.

The Concentrator's heating technology optimises the evaporation process. No matter which configuration you choose, you're assured of quick and efficient-yet gentle-vacuum concentration of your samples (e.g. DNA/RNA, proteins). The complete system includes a vapour condenser that purifies the exhaust air by up to 85%. This serves as protection against unpleasant vapours.

Specifications

Specifications	Complete system/Basic device
Max. power consumption:	350W/150W
Dimensions (W x D x H):	33cm x 58cm x 29cm/33cm x 37cm x 23cm
Weight:	31.5 kg/16.5 kg
Vacuum:	20hPa (20mbar)
Fixed rotation speed:	1.400rpm
Tube sizes:	0.2ml - 50ml
Capacity:	max. 144 tubes 2 microplates

Description	PK	Cat. No.
Complete system with integr. membrane vacuum pump and 48 x 1.5ml / 2.0ml fixed angle rotor	1	9.776 620
Complete system with integr. membrane vacuum pump, with connection for external units	1	9.776 621
Complete system with integr. membrane vacuum pump, w/o rotor	1	9.776 622
Single unit with 48 x 1.5ml / 2.0ml fixed angle rotor	1	9.776 623



9.776 623

3



3 Electroporator Eporator®

The Eppendorf Eporator® is a compact device for the fast and controlled electroporation of bacteria, yeasts and other microorganisms. Mainly for the insertion of plasmid DNA, but also RNA, proteins and all other small molecules.

Eppendorf AG

- One-button operation
- Integrated cuvette holder
- Self-explanatory due to display-controlled operation
- Frequently used parameter settings programmable
- USB interface for data transfer and GLP-supporting documentation

Specifications

Resistance:	600 ohm
Condenser:	10 µF
Time constant:	5 ms
Dimensions (W x D x H):	19 x 27.5 x 12.5 cm
Weight:	3.2 kg
Charging voltage:	200 - 2500 V
Power supply:	230 V, 50 - 60 Hz

Type	PK	Cat. No.
Eporator	1	6.285 780

1 Electroporation System ECM® 399

The ECM® 399 is an electroporation system for the simple transformation of bacteria and yeast cells. It produces exponential decay waves and is designed to deliver the field strengths and pulse lengths required for transformations. The ECM® 399 is ideal for basic transformation in research and academic environments. It is easy to operate, cost effective, compact in size and portable. *Harvard Apparatus*

1



Applications: Transformation of bacteria, yeast, fungus.

Scope of supply: Generator ECM® 399 , PEP cuvette holder, Cuvettes 1 mm, 2 mm, 4 mm (10 each) and Cuvette Rack

Specifications

Capacity/Resistance Range:

- LV Mode: 1050 µF/150 Ohm, fixed
- HV Mode: 36 µF/150 Ohm, fixed
- Max. Voltage Output: 2500 V (Peak)
- Pulse Interval: 100 ms to 10 s
- Charge Time: max. 5 s
- Max. Pulse Length: 125 ms at 500 V (Peak) or 5 ms at 2500 V (Peak)
- Display: 16-character, liquid crystal, LCD backlit
- Interface: Digital User Interface
- Relative Humidity: 60 %
- Power supply: 100 - 240 V, 50/60 Hz

Type	PK	Cat. No.
BTX ECM 399	1	6.274 057

2 Electroporation cuvettes Plus

BTX Cuvettes Plus are designed for use in electroporation and electrofusion of bacteria, yeast, insect, plant and mammalian cells. Each sterilized Cuvettes Plus package includes a disposable cuvette and a transfer pipette, which is used for removal of the sample after electroporation. The cuvettes are molded with embedded polished aluminum electrodes, and gamma irradiated for guaranteed sterility. *Harvard Apparatus*

2



Three electrode gap sizes are available:

- 1mm for bacteria and yeast
- 2mm for all cell types
- 4mm for mammalian cells

BTX cuvette can obtain high field strengths up to 25.0 kV/cm. Round caps are leak resistant and allow for quick and easy removal. For research use only. Can be used with electroporation systems from different manufacturers (not suitable for units from Eppendorf).

Colour Cap	Volume max. µl	Volume min. µl	Gap mm	PK	Cat. No.
Grey	90	20	1.0	10	6.282 777
Blue	400	40	2.0	10	6.282 778
Yellow	800	80	4.0	10	6.282 779
Grey	90	20	1.0	50	6.282 773
Blue	400	40	2.0	50	6.282 774
Yellow	800	80	4.0	50	6.282 775



BRANDplates® - A complete premium-quality line - for every application!

Microplates for Immunoassays (non-sterile)

Diagnosis of disease, pregnancy or verification of doping substances - many analyses in the modern laboratory are performed with immunological assays in microplates. They are characterized by their high specificity and provide the opportunity to detect the lowest concentrations of defined substances in complex liquids e.g. blood serum.

immunoGrade™ (high binding)

Optimized for the immobilization of IgG, highest binding capacity for molecules with mixed hydrophilic and hydrophobic regions. The surface of choice for the majority of standard ELISAs.

hydroGrade™

Strongly hydrophilic, high affinity to hydrophilic molecules like e.g., glycoproteins and peptides, antibodies with predominantly hydrophilic regions and nucleic acids.

lipoGrade™

Strongly hydrophobic (lipophilic), immobilization of biomolecules with predominantly hydrophobic regions. An alternative to the immunoGrade™ surface for the immobilization of molecules, e.g. lipoproteins or peptides.

HydroGrade™ and lipoGrade™ can be found in the online shop.

Non-treated (sterile or non-sterile)

Non-treated PS microplates are used in the most diversified application fields, e.g. homogenous standard assays and extensive screening assays. The hydrophobic characteristics of untreated PS are often of use in performing these applications! The new BRANDplates® range contains two types of non-treated microplates:

pureGrade™ (medium binding)

Non-treated, non-sterile surface. The standard plate for most applications. Particularly applicable for homogenous assays, screening, and in the field of storage.

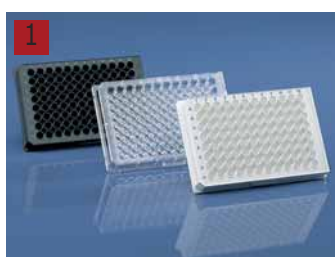
pureGrade™ S

Non-treated surface, sterile. Sterilized via β -radiation. Especially suited for bacteriological assays.

Colours, wells and shapes:

- 96- and 384-well format
- standard or transparent bottom
- transparent, white or black
- Various well bottom shapes: U-, V-, F-, C-bottom for 96-well format
- clearly distinguishable via color code: blue embossed alphanumeric coding for 96-well standard plates.
- free from endotoxins (< 0.01 EU/ml), DNase, DNA, RNase, non-cytotoxic (according to ISO 10993)
- ANSI/SLAS format
- **non-sterile products without lid, please order separately**
- **sterile products comply with ISO 11137 and AAMI guidelines. A SAL of 10^{-6} is reached. Supplied individually wrapped with lid.**

Get yourself familiar with the new range by using the BRANDplates® selection guide under www.brand.de.



1 ImmunoGrade™ (high binding)

PS, non-sterile. Optimized for the immobilization of IgG, standard ELISA assay.
384 Well platform on request.

BRAND

Description	Bottom shape/ Well volume μ l	PK	Cat. No.
96-well, transparent	U / 330	100	4.000 275
96-well, transparent	V / 360	100	4.000 276
96-well, transparent	F / 350	100	4.000 277
96-well, white	U / 330	100	4.000 279
96-well, black	U / 330	100	4.000 281
96-well, black, transparent bottom	F / 330	100	4.000 282
96-well, black, transparent bottom	F / 330	5	7.644 453



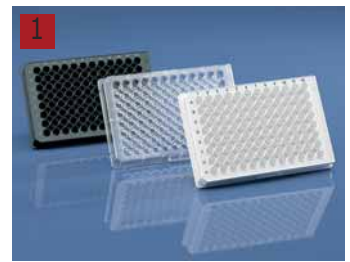
1 pureGrade™ (medium binding)

PS. Non-treated, non-sterile.
For homogenous assays, screenings, storage, etc.
Other formats (384 well or 1536 well) on request or in the webshop.

BRAND

Description	Bottom shape/ Well volume µl	PK	Cat. No.
96-well, transparent	U / 330	100	4.000 238
96-well, transparent	V / 360	100	6.233 851
96-well, transparent	F / 350	100	6.231 785
96-well, transparent	C / 350	100	4.000 239
96-well, white	U / 330	100	4.000 240
96-well, white	F / 350	100	6.233 548
96-well, black	U / 330	100	4.000 241
96-well, black	F / 350	100	6.233 756
96-well, white, transparent bottom	F / 330	100	4.000 242
96-well, black, transparent bottom	F / 330	100	4.000 243
96-well, UV-transparent*	F / 350	50	9.408 976
96-well, UV-transparent*	F / 350	50	6.272 014

*slightly hydrophilised, bottom UV-transparent foil, 25 µm wall thickness, frame PS, transmission at 240 nm is 80%, not available in USA and Japan

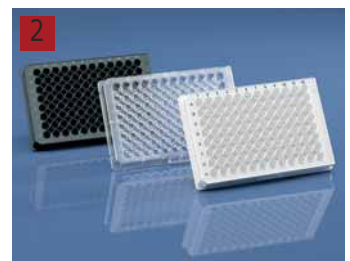
**2 pureGrade™ S, PS**

For bacteriological assays, screenings, storage, etc. Other formats (384 well or 1536 well) on request or in the webshop.

BRAND

- Non-treated
- Sterile

Description	Bottom shape/ Well volume µl	PK	Cat. No.
96-well, transparent	U / 330	50	4.000 256
96-well, transparent	V / 360	50	4.000 257
96-well, transparent	F / 350	50	6.233 912
96-well, transparent	C / 350	50	4.000 258
96-well, white	F / 350	50	4.000 259
96-well, black	F / 350	50	4.000 260
96-well, white, transparent bottom	F / 330	50	4.000 261
96-well, black, transparent bottom	F / 330	50	4.000 262

**3 Lids for BRANDplates® microplates**

To protect samples, reaction batches or cell cultures from both contamination and evaporation, compatible lids are available for all BRANDplates® microplates. The lids are made of crystal-clear polystyrene. They are optimally matched to the corresponding BRANDplates® microplates, so that plates with lids can also be stacked. The cut-corner sets the orientation of the lid. For 96-well standard plates, lids with condensation rings are also available.

BRAND

Further covers on request.

Description	Height mm	PK	Cat. No.
for 96-well standard plates with condensation rings	8.0	100	4.000 363
for 96-well standard plates	8.0	100	4.000 364
for 96-well plates with transp. bottom and for 384-well plates	4.5	50	4.000 365

**4 Microtitration plates and sealing films**

Compatible with most microtitration plate centrifuges.

BRAND

- For volumes up to 300 µl
- U-bottom wells
- Autoclavable at 121 °C (2 bar), according to DIN EN 285
- High chemical resistance (e.g. phenol, chloroform, DMSO)
- Recessed hollows between the wells minimize contamination
- Raised rings (rims) around the orifice of each well for easy sealing using self-adhesive sealing films
- Plates can be sealed with self-adhesive, alphanumerically coded, DMSO-resistant, sealing film (cross-cut)

Type	PK	Cat. No.
Microtitration plate, PP, U-Bottom, 330µl	100	9.408 970
DMSO-resistant sealing film, PP	100	9.408 983
Sealing film, self-adhesive, polyester	100	4.000 237
Sealing film, self-adhesive, polyester	100	9.409 386





1 V96 MicroWell™ Plates, PS

Clear plates with V-shaped well bottom for maximized sample recovery. The wells have raised rims and lids are supplied with rings, which prevent cross contamination. *Thermo Scientific*
Applications include: antibiotic screens, serological tests, storing and screening compounds and DNA libraries.
Material plates: Polystyrene
Total volume µl/well: 300

Description	Colour	Surface	Sterile	PK	Cat. No.
without lid	Clear	Non-treated	+	50	9.390 513
with lid	Clear	Non-treated	+	50	4.008 606
without lid	Clear	Non-treated	-	180	9.390 512



2 U96 MicroWell™/Immuno™ Plates, PS

Clear plates with excellent optical quality and round well bottom. *Thermo Scientific*
- Material plates: Polystyrene
- Total volume µl/well: 300

Choice of different surfaces: Nunclon™Δ surface optimized for cell based assays and sterile non-treated versions for bacteriological applications. MaxiSorp™ and PolySorp™ suitable for solid phase immuno assays. PolySorp™ serve to absorb hydrophobic molecules. MaxiSorp™ is hydrophilic and ideal for antibody sandwich assays.

Description	Colour	Surface	Sterile	PK	Cat. No.
with lid	Clear	Nunclon™Δ*	+	50	9.407 471
without lid	Clear	Non-treated	+	50	9.390 511
with lid	Clear	Non-treated	+	160	4.009 009
without lid	Clear	Non-treated	-	180	9.390 510
without lid	Clear	MaxiSorp™	-	60	9.390 552
without lid	Clear	PolySorp™	-	60	9.390 556
with lid	Clear	Cell culture*	+	160	4.008 768

* certified.



3 96 Well Immuno Plates, PS, flat bottom

Non sterile Immuno plates with transparent flat bottom, well suited for quantitative and qualitative solid phase immunoassays. *Thermo Scientific*

Choice of different surfaces:
PolySorp™, Immulon™ 1B and Universal Binding (UB) serve to absorb hydrophobic molecules. Medisorp™ and Immulon 2HB are slightly hydrophilic and bind a variety of biomolecules. MaxiSorp™, Immulon 4 HBX and Enhanced Bond (EB) are hydrophilic and ideal for antibody sandwich assays. MultiSorp™ is highly hydrophilic and is well suited for glycans and water-soluble proteins.

- Reliable and repeatable results in colourimetric assays
- Very good optical quality
- Alphanumerically labeled rows and columns

Surface	Capacity µl/well	working volume µl	PK	Cat. No.
Immulon 1B	330	230	50	4.008 586
Immulon 2 HB	330	280	50	4.008 613
Immulon 4 HBX	330	280	50	6.228 807
MaxiSorp™*	400	350	60	9.390 550
MaxiSorp™	400	350	60	9.390 551
PolySorp™	400	350	180	4.008 802
MaxiSorp™*	400	350	180	6.301 671
MaxiSorp™*	400	350	180	4.009 010
MediSorp™*	400	350	60	4.008 649
MultiSorp™	400	350	60	4.008 650
PolySorp™	400	350	60	9.390 555
UB	380	330	50	6.228 762
EB	380	330	50	4.008 660

* certified.

1 2 3 96 Well Immuno™ Modules

Developed for quantitative and qualitative solid phase immuno assays, e.g. ELISA techniques. *Thermo Scientific*

- Alphanumeric orientation systems
- Standard format 128 x 86 mm
- High optical quality
- Four choices for bottom: flat bottom (F), round b. (U), flat with curved b. (C) or StarWell™
- Frames and modules available separately
- Modules remain in frame when inverted
- Certified reproducibility of binding
- Free-standing modul

Choice of different surfaces:

PolySorp™, Immulon™ 1B and Universal Binding (UB) serve to absorb hydrophobic molecules. Medisorp™, and Immulon 2HB are slightly hydrophilic and bind a variety of biomolecules. MaxiSorp™, Immulon 4 HBX and Enhanced Binding (EB) are hydrophilic and ideal for antibody sandwich assays. MultiSorp™ are highly hydrophilic and are suitable for glycans and water-soluble proteins.



Type	Surface	Colour	Capacity µl/well	Sterile	PK	Cat. No.
C8	MaxiSorp™	transparent	350	-	60	7.600 270
C8	MaxiSorp™	white	350	-	60	6.223 056
C8	MaxiSorp™	transparent	380	-	60	6.201 503
C8	PolySorp™	transparent	350	-	60	6.222 763
C8	PolySorp™	white	350	-	60	4.008 839
C12	MaxiSorp™	transparent	350	-	60	4.008 808
C12	MaxiSorp™	transparent	350	-	60	4.008 817
C12	PolySorp™	transparent	350	-	60	6.222 805
F8	MaxiSorp™	transparent	400	-	120	4.009 158
F8	MaxiSorp™	transparent	400	-	60	6.051 794
F8	MaxiSorp™	transparent	400	-	640	6.307 770
F8	MaxiSorp™	dark blue	400	-	60	4.008 915
F8	PolySorp™	transparent	400	-	640	4.008 748
F8	PolySorp™	transparent	400	-	60	4.008 832
F8	MediSorp™	transparent	400	-	60	4.008 834
F8	MultiSorp™	transparent	400	-	60	4.008 841
F16	MaxiSorp™	transparent	400	-	320	6.500 038
F16	MaxiSorp™	transparent	400	-	60	7.200 083
F16	MaxiSorp™	black	400	-	60	6.076 890
F16	PolySorp™	transparent	400	-	60	6.226 552
F16	PolySorp™	transparent	400	-	320	7.631 282
F16	PolySorp™	black	400	-	60	6.300 104
U8	PolySorp™	transparent	300	-	60	4.008 833
U8	MediSorp™	transparent	300	-	60	4.008 835
U16	MaxiSorp™	transparent	300	-	320	6.080 718
Frame				-	60	6.201 611



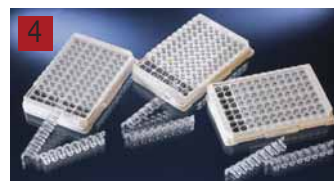
4 Modules for Immunology, C8 LockWell, PS, breakable

Transparent modules in standard 96-well frames. *Thermo Scientific*

- Standard format 128 x 86 mm
- High optical quality for reliable results
- Free-standing modules with easy handling
- Alphanumeric system for better orientation

Choice of different surfaces:

PolySorp™ serve to absorb hydrophobic molecules. Medisorp™ slightly hydrophilic and bind a variety of biomolecules. MaxiSorp™ hydrophilic and ideal for antibody sandwich assays.



Surface	Capacity µl/well	Bottom shape	PK	Cat. No.
PolySorp™	350	flat	50	4.008 789
PolySorp™	350	flat	50	6.229 875
PolySorp™	250	C-shaped	60	4.008 854
PolySorp™	250	C-shaped	60	4.008 856
PolySorp™	250	C-shaped	60	4.009 017
PolySorp™	250	C-shaped	60	6.229 764
PolySorp™	250	C-shaped	60	6.802 228
MediSorp™	250	C-shaped	60	4.008 853
MaxiSorp™	250	C-shaped	60	6.303 882
MaxiSorp™	200	C-shaped	60	4.008 857



1 96/384 Well Plates and Modules Covalink™ and Immobilizer Streptavidin, PS

Microtiter plates for immunoassays with surfaces for affinity binding (passive streptavidin and immobilizer streptavidin, nickel chelate and glutathione, BioBind). *Thermo Scientific*

- Streptavidin-biotin interaction for a broad range of biomolecules
- Highly specific binding surface
- Improvement of the signal-to-noise ratio
- 96 well plate: Working volume 100 µl/well, total volume 350-400 µl/well
- 384 well plate: Working volume 50 µl/well, total volume 120 µl/well

Type	Bottom shape	Colour	PK	Cat. No.
Plate 96-well	flat	transparent	15	4.008 819
Plate 96-well	flat	white	15	4.008 868
Plate 96-well	flat	black	15	7.632 002
Plate 384-well	flat	transparent	15	4.009 030
Solid module F8 (x12) in frame	flat	transparent	15	4.008 998
Lock-Well module C8 (x12) in frame	C-shape	transparent	15	4.008 999



2 Lids for 96-well and 384-well Plates

Lids in various versions made of clear, strong polystyrene with notches for quick orientation. Reduce water loss due to lower evaporation. 96-well lids feature individual condensation rings. *Thermo Scientific*

Height mm	With	Sterile	PK	Cat. No.
7.90	Evaporation barrier	-	100	9.407 480
7.90	Evaporation barrier	+	50	9.407 481
7.90	Evaporation barrier	+	60	6.802 229
8.34	-	+	15	4.008 599
8.34	-	-	60	6.206 034

Evaporation barrier is a rim around the inside edge of the lid.



3 Sealing Tapes for MultiWell Plates

Effectively seals all microplate formats for storage, PCR, microscopy, culture and protection. Pre-cut, plate-sized sheets. *Thermo Scientific*

- Type 1) General use, PCR, storage, photo-sensitive samples
- Type 2) Cell Culture, sterile applications
- Type 3) Microscopy, good optics, low auto-fluorescence, DMSO compatible
- Type 4) Breathable, cell culture

Type	Colour	Glue	Sterile	Material	PK	Cat. No.
1)	Silver	Silicone	-	Aluminium	100	6.250 417
2)	Clear	Acrylic	+	Polyester	800	9.407 482
3)	Clear	Acrylate	-	Polyolefin	100	6.223 248
4)	White	Acrylate	+	Rayon	50	4.008 574
1)	Silver	Acrylate	-	Aluminium	100	7.500 007
3)	Clear	Acrylate	-	Polyolefin	100	7.601 198



1 Gel electrophoresis tank OmniPage Mini

Vertical chamber especially for protein analysis in up to 4 gels.
The special manufacturing process results in a device with unique quality and durability at a very reasonable price. Easy handling and fast cooling. The dimensions are compatible with all 8 x 10 and 10 x 10 cm ready-to-use gels. High sample throughput by up to 4 gels with 20 samples each. Low buffer volume from 250 to 1200 ml.

Supplied with:

OmniPage Mini: chamber with platinum electrodes, 2 sets of glass plates with 1 mm thick bonded Spacers, electrodes, 2 x 12 sample combs.
OmniPage Mini SYS: OmniPage Mini + caster.
OmniPage Mini CBS: OmniPage Mini + caster and blotting insert.

Cleaver Scientific



Technical specifications

Gel dimensions (W x L): 7.5 x 8 cm
Unit dimensions (W x D x H): 19 x 13 x 15 cm
Max. sample capacity: 80 samples, 20 samples per gel
Buffer volume: min. 250 ml; max 1200 ml

Description	PK	Cat. No.
OmniPage Mini	1	9.584 652
OmniPage Mini SYS	1	9.584 654
OmniPage Mini CBS	1	6.229 038

2 Gel electrophoresis package omniPAGE TETRAD Mini-Set

The gel electrophoresis tank OmniPAGE Mini is suitable for parallel treatment of up to 4 gels with 20 samples each. The tank is easy to handle, especially leak proof and guarantees an efficient cooling. For self-cast gels and all major types of 8 x 10cm and 10 x 10cm precast gels.

Supplied with:

- omniPAGE Mini, 10 x 10cm Dual
- 1x CVS10DIRM Sliding Clamp PAGE insert
- 1x CVS10EXCASTER External Casting Upstand
- 1x VS10TANK Tank
- 1x VS10LID Lid
- 1x VS10DP Dummy plate
- 1x CSL-CAB set of electrophoresis cables, one black, one red
- 2x VS10PGS1 Plain glass plates with 1mm bonded spacer (pack of 2)
- 2x VS10NG Notched glass plates (pack of 2)
- 2x VS10NGS1 Notched glass plates with 1mm bonded spacer (pack of 2)
- 4x VS10-12-1 = 4x 12 sample combs, 1mm thick
- 1x VS10DCAST Casting base with casting mat

Cleaver Scientific



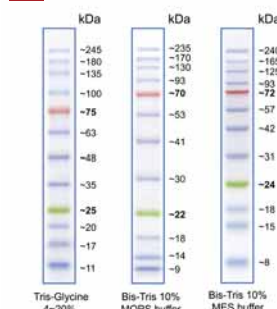
Type	PK	Cat. No.
omniPAGE TETRAD Mini-Set	1	7.930 246

3 Protein Ladders, Prestained

The marker is covalently bound to a blue colour chromophore to produce a ladder of evenly interspersed bands of uniform intensity. The coloured reference bands are used as visual indicators for the process of gel electrophoresis and the efficiency of the transfer to membranes in the Western Blot. The marker is suitable for the precise identification of the molecular weight of most cellular proteins.

- Easy identification in gels and blots
- Detectable from 2.5 µl
- 2 years stable at - 20 °C
- Vials of 500 µl

Cleaver Scientific



Type	Size	Bands	Reference bands	PK	Cat. No.
BLUE Wide Range	10 - 245 kDa	12	25, 75 kDa	1	4.661 311

Proteomics/Protein-Electrophoresis-Blotting



1 Protein gel staining kits

NEW

Ready to use kit for rapid and sensitive protein staining of 1D and 2D SDS PAGE gels.

Cleaver Scientific

It enables high contrast and optimal visualization and quantitation of proteins. After staining, proteins can be analyzed by mass spectrometry directly. The dye has optimal excitation at 302 and 470 nm, with maximum emission at approximately 610 nm. It can be excited with UV-transilluminators, 405, 445, 473-488 nm laser sources or 470 nm blue LED light source.

- High purity dye > 98 %
- Optimal signal to background ratio
- Strong, uniform and reproducible signal from 0.2 ng to 10 ng protein
- Fast three step staining protocol (220 min)
- Mass spectrometry compatible

Description	PK	Cat. No.
RUBYPROL, Reagent A 250 ml, Reagent B 250 ml	1	4.670 743

Protein staining solution

NEW

Cleaver Scientific

Enhanced Coomassie based protein stain formulated for fast and sensitive protein detection without the involvement of hazardous chemicals such as methanol, acetic acid, and other toxic agents. Protein detection limits are as low as 10 ng and visualization can be achieved in less than 1 hour. Applications suitable for native PAGE, SDSPAGE, isoelectric focusing, and 2D gels.

- Detection of protein concentration as low as 10 ng
- Protein bands visualization within 10 minutes
- Without involvement of hazardous chemicals

Type	PK	Cat. No.
BLUEPRO, 500 ml	1	4.670 744



2 Blotting paper

Recommended for blotting techniques with gels, like Southern, Northern and Western Blots, even Semidry-Blots of proteins

Hahnemühle

- Made from ultrapure cotton linters and cellulose, entirely without additives to ensure that no contamination will occur during the transfer steps
- Tested specifically for chromatographic and blotting techniques to ensure high and uniform capillary actions
- High wet strength for safe handling

Further sizes on request.

Description	Width mm	Length mm	Thickness mm	Weight g / m ²	PK	Cat. No.
medium absorbency	570	460	0.35	192	100	4.006 154
medium absorbency	600	580	0.35	192	100	4.006 155
medium absorbency	600	580	0.90	320	50	4.006 156
high absorbency	600	580	1.50	570	25	4.006 157



3 Gel blotting paper

GB 003, GB 005. High purity. Very absorbent. Easy to use. Suitable for all protein and nucleic acid blotting techniques.

Whatman

Type	Width mm	Length mm	Wall thickness mm	PK	Cat. No.
GB 003	150	100	0.8	100	6.254 192
GB 003	100	70	0.8	100	6.264 279
GB 003	200	150	0.8	100	6.242 023
GB 003	180	160	0.8	100	7.657 015
GB 003	200	200	0.8	100	9.057 077
GB 003	570	460	1.2	100	7.930 288
GB 003	100	100	0.8	50	7.010 061
GB 003	600	300	0.8	25	9.057 067
GB 003	600	580	0.8	50	9.057 078
GB 005	150	150	1.2	25	7.010 064
GB 005	200	200	1.2	25	9.057 079
GB 005	580	580	1.2	25	9.057 075

1 Transfer membrane, PVDF

Hydrophobic Polyvinylidene Fluoride (PVDF) transfer membrane with high binding capacity and low background. Ideal for use in protein binding applications such as Western blots, solid phase assays and immunoblotting procedures. BSA binding capacity up to 125 µg/cm² GVS S.p.A.

Width	Length	Pore size	PK	Cat. No.
mm	mm	µm		
200	200	0.22	5	4.678 673
200	200	0.45	25	4.678 672
200	200	0.45	5	4.678 666
300	3000	0.22	1	4.678 670
300	3000	0.45	1	4.678 667

2 Transfer membrane, supported nitrocellulose

Supported Nitrocellulose transfer membranes combine the binding characteristics of nitrocellulose membranes with the strength of nylon membranes. These membranes are used for DNA/RNA transfers requiring low background or for multiple hybridizations. For use with chemiluminescence and radiographic detection. GVS S.p.A.



Warning

H phrases: H228

Width	Length	Pore size	PK	Cat. No.
mm	mm	µm		
200	200	0.22	5	4.678 668
200	200	0.45	5	4.678 664
200	200	0.45	25	4.678 671
300	3000	0.22	1	4.678 665
300	3000	0.45	1	4.678 663

3 Transfer membrane, nitrocellulose

Pure Nitrocellulose transfer membrane for all protein or immunoblotting applications. The high sensitivity and low background ensures excellent results in all transfers. Compatible with all detection systems. BSA binding capacity up to 100µg/cm². GVS S.p.A.



Warning

H phrases: H228

Width	Length	Pore size	PK	Cat. No.
mm	mm	µm		
200	200	0.22	5	4.678 669
200	200	0.22	25	4.678 674
200	200	0.45	5	4.678 677
200	200	0.45	25	4.678 678
300	3000	0.22	1	4.678 675
300	3000	0.45	1	4.678 676

Semi Dry Blotters

These Semi Dry Blotters offer rapid transfer times for DNA, RNA and protein blotting; typically 15 to 30 minutes. All units can be used for all types of blotting: western, southern and northern via uncomplicated buffer and set up procedures and are compatible with gel thicknesses from 0.25 up to 10mm without the need for additional equipment. Each unit is compatible with their respective omniPAGE vertical gel system. Semi Dry Blotting has the added benefit of economic transfers due to very low buffer volumes - typically only a few millilitres of buffer are required per transfer. These Semi-Dry Blotters utilise a screw down lid, which secures the blot sandwich and allows complete control of pressure ensuring even transfer. The electrodes, comprising platinum coated anode and stainless steel cathode, will exhibit practically no corrosion and so provide many years of trouble free use. Uniform heat dispersion across the blot sandwich ensures stable transfer times and no heat induced sample loss or transfer distortions. Being translucent, it allows viewing of the blot sandwich to ensure correct positioning and transfer is occurring correctly. Electrode plates are fully separated to prevent arching or damage. Cleaver Scientific



9.584 753

Type	Description	Dimensions (W x D x H)	Capacity Buffer	Qty. Blots	Dimensions blots	PK	Cat. No.
		mm	ml		cm		
SD10	Mini, 10 x 10 cm	160 x 160 x 70	5	1	8 x 8,5	1	9.584 753
SD20	Maxi, 20 x 20 cm	260 x 260 x 70	20	1	16 x 17,5	1	6.229 381
				2	16 x 8,5		
				4	8 x 8,5		

1



9.584 752

Sub Blot Systems omniBLOT

The omniBlot is an stand-alone unit for the tank-blot method. Each unit consists of an OmniPAGE tank and lid, a electroblotting insert as well as cassettes and fibre pads. The versatile design of the tanks and the matching lids are compatible with the vertical PAGE or IEF systems with the appropriate optional inserts.

Cleaver Scientific

- Mini system transfers up to 4 Mini gels
- Mini Wide system transfers up to 4 Mini Wide and 8 Mini gels
- Maxi system transfers up to 4 Maxi gels, 8 Mini Wide and 16 Mini gels
- Run-times ranging between 2 and 20 hours
- Rigid cassettes eliminate the formation of shadow bands
- Colour coded cassettes prevent reverse polarity for correct orientation
- Cooling with cooling packs at high transmission intensity

Specifications

Dimensions (W x D x H):	Mini: 15 x 13 x 19 cm Mini Wide: 26 x 16 x 16 cm Maxi: 27 x 18 x 30 cm
Gel dimension:	Mini: 8 x 8.5 cm Mini Wide: 16 x 8.5 cm Maxi: 16 x 17.5 cm
Max. buffer volume:	Mini: 1200 ml Mini Wide: 2800 ml Maxi: 6400 ml
Run time:	Mini: 1-2 h Mini Wide: 1-2 h Maxi: 5-20 h
Power supply:	100 V

Type	PK	Cat. No.
omniBlot Mini Blotting System 10 x 10 cm + 4 cassettes	1	9.584 751
omniBlot Mini Wide Blotting System 20 x 10 cm + 4 cassettes	1	4.668 184
omniBlot Maxi Blotting System 20 x 20 cm + 4 cassettes	1	9.584 752

2



2 Staining Solution Ponceau S

For staining blotted proteins on nitrocellulose and PVDF membranes. Colour detection for immunoblots (Western blots). Can also be used for staining proteins on cellulose acetate membranes.

Cleaver Scientific

- Membrane staining
- Reversible colouring
- Reusable

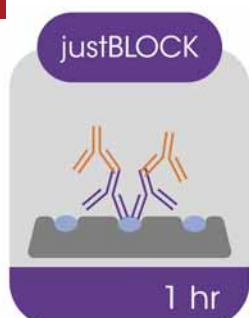


Warning

H phrases: H315|319|335

Type	Capacity ml	PK	Cat. No.
CSL-PSS Staining solution	500	1	4.661 312

3



3 Blocking solution for Western blot

NEW

An all-in-one blocking solution for Western blot analysis. In one step, blocking, primary and secondary antibodies hybridization as well as enhancing the signal.

Cleaver Scientific

- Enhance antibody signal
- Universal antibody diluent
- Effective with any ECL substrates
- Compatible with PVDF and NC membrane
- Improve protein detection

Type	PK	Cat. No.
JUSTBLOCK, 500 ml	1	4.670 746

1 Substrate kits, ECL **NEW**

ECL substrate with stable light output. The formulation provides a low background for a high signal to noise ratio.

Cleaver Scientific

Test kit includes luminol/enhancer and peroxide solutions.

LumiGO: For low picogram detection. 125 ml luminol/enhancer solution, 125 ml peroxide solution.

LumiPRO: For low femtogram detection and an very high signal intensity. 50 ml luminol/enhancer solution, 50 ml peroxide solution.

- Long signal duration
- Working solution stable for at least three days

Type	PK	Cat. No.
LumiGO	1	4.670 747
LumiPRO	1	4.670 748



PBS, phosphate buffered saline **NEW**

pH 7. In a HDPE bottle.

Reagecon

Type	PK	Cat. No.
PBS, pH 7	1	4.012 324

2 Potassium phosphate buffer, monobasic, mobile phase **NEW**

The buffered eluents are tested and certified, NIST traceable, developed, formulated and specified in accordance with United States Pharmacopoeia (USP) requirements.

Reagecon

- Guaranteed stability throughout its entire shelf life
- In 1 l HDPE bottle

Description	PK	Cat. No.
Monobasic potassium phosphate, pH 2.5	1	4.012 501
Monobasic potassium phosphate, pH 4	1	4.675 416
Monobasic potassium phosphate, pH 5	1	4.012 513
Monobasic potassium phosphate, pH 6	1	4.012 517
Monobasic potassium phosphate, pH 7	1	4.012 525
Monobasic potassium phosphate / Sodium hydroxide, pH 7	1	4.012 527
Monobasic potassium phosphate, pH 7.5	1	4.012 529
Dibasic potassium / Monobasic sodium phosphate, pH 7.5	1	4.012 531
Monobasic sodium phosphate / Di-sodium hydrogen phosphate, pH 8	1	4.012 533



3 Membrane Tweezers

Swiss made. Made of austenitic steel. Non-magnetizable. Good corrosion resistance to most chemicals, salts and acids. Flat, with round tips and rounded edges. Especially suitable for safe handling of transfer membranes.

Ideal-tek

Form	Length mm	PK	Cat. No.
thin, squared, bent tips	105	1	6.272 053
flat, round tips	115	1	9.160 131
smooth and flat tips	120	1	6.269 622



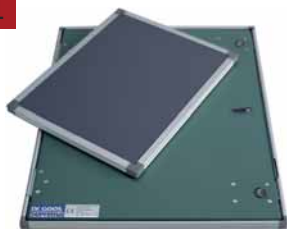
4 Storage boxes, HDPE with tightly closing LDPE lid

Suitable for cold storage rooms and refrigerators. Temperature range/withstands temperatures (without mechanical stress) from -20 to +95°C. Stackable. Acid and chemical resistant. Food safe. Colour: natural.

Capacity L	Width mm	Depth mm	Height mm	PK	Cat. No.
0.5	103	103	64	1	9.033 270
1.0	103	103	127	1	9.033 275
1.0	103	208	64	1	9.033 280
1.5	103	208	94	1	9.033 285
2.0	103	255	94	1	9.033 286
2.0	208	208	64	1	9.033 287
3.2	208	208	94	1	9.033 288



Proteomics/Blotting-Blot Imaging

1


1 X-Ray cassettes

Standard design with lead lining and snap fit lid.

- easy to open, easy to close with gentle pressure.
- firm, consistent support for films through special shaping: base pre-formed with convex profile.
- flexible, pure aluminium base (Absorption 1.2mm Al-value) film processed in frames
- Aluminium base coated in impact-resistant paint
- Anodised aluminium frame
- Elastic foam for film protection
- Specifically designed for autoradiography at 70°C

Use our reinforcement films in the blue sensitivity range with these X-Ray cassettes.

Format mm	PK	Cat. No.
180 x 240	1	9.106 580
240 x 300	1	9.106 581
200 x 400	1	9.106 582
356 x 432	1	9.106 583

2 Gel documentation system chemiPRO-302E

NEW
Cleaver Scientific

Complete solution for chemiluminescence and fluorescent Western blot imaging. With highly sensitive cooled CCD Camera with high quantum efficiency, for detection of picogram level proteins. Peltier cooling allows exposure times to be increased to detect faint chemiluminescence without adding annoying background noise. Suitable for chemiluminescence Western blots, auto-rads, DNA or RNA stained with ethidium bromide, SYPRO, SYBR and SAFE dyes on agarose gels, Coomassie blue or silver stained proteins on acrylamide gels, stain-free gels and fluorescent gels. Furthermore GFP-plant imaging, colonies or plaques detection on Agar plates, bioluminescence and 2d gels. The free of charge software allows automated imaging of multicolour blots with a simple and user friendly interface.

- Cooled, high resolution, high quantum efficiency (QE) camera
- Motor driven lens and 7-position motor-driven filter wheel
- Long-life white LED EPI lighting
- CFR21 Part 11 compliant
- With acquisition and analysis software genePIX and geneQUANT

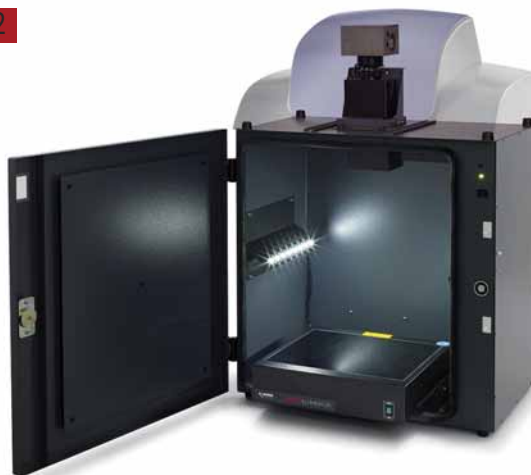
Scope of supply:

Darkroom, camera, UV transilluminator, UV emission filter, license free acquisition and analysis software

Specifications

Resolution:	4 megapixels
Effective resolution:	16 megapixels
Lens:	Zoom, f1.2
Camera cooling:	-57 °C
Sensor bit-depth:	16 bit
Greyscales:	65536
Dynamic range:	4.8
Transilluminator wavelength:	302 nm
Transilluminator size:	250 x 300 mm
Dimensions (W x D x H):	570 x 450 x 840 mm
Weight:	37 kg
Power supply:	230 V/50 Hz

Type	PK	Cat. No.
chemiPRO-302E	1	4.670 738

2


1 Centrifugal concentrators, Vivaspin 500

Membrane: polyethersulphone. Compatible with swing-out and fixed-angle rotors.
The vertical, built-in membrane guarantees minimal membrane fouling and provides rapid sample concentration. Low protein adsorption gives minimal sample loss.

Sartorius Lab Instruments

Membrane surface: 0.5cm²
Max. rcf.: 12000 x g
Hold-up volume: < 5µl

MWCO	PK	Cat. No.
da		
3000	100	9.049 864
3000	25	9.049 863
5000	25	9.049 755
5000	100	9.049 850
10000	25	9.049 756
10000	100	9.049 851
30000	25	9.049 757
30000	100	9.049 852
50000	25	9.049 758
50000	100	9.049 853
100000	25	9.049 759
100000	100	9.049 854
Starter kit (5 ea. 5K to 100K)	25	9.049 750

**2 Centrifugal concentrators, Vivaspin 2**

Membrane: polyethersulphone. This 2 ml volume unit combines the rapidity of the classic Vivaspin products with reduced internal surface and membrane areas for superior recoveries from very dilute solutions. With a choice of suitable membranes (PES, CTA, Hydrosart) Vivaspin 2 provides the highest flexibility for process optimisation. Vivaspin 2 guarantees maximum sample recovery either by reverse centrifuging into the concentrate recovery cap or by directly pipetting the concentrate from the deadstop pocket built into the bottom of the concentrator.

Sartorius Lab Instruments

Membrane surface: 1.2cm²
Max. rcf.: 8000 x g
Hold-up volume: < 10µl

MWCO	PK	Cat. No.
da		
3000	25	9.049 861
3000	100	9.049 862
5000	25	9.049 760
5000	100	9.049 777
10000	25	9.049 761
10000	100	9.049 778
30000	25	9.049 762
30000	100	9.049 779
50000	25	9.049 763
50000	100	9.049 780
100000	25	9.049 764
100000	100	9.049 781

**3 Centrifugal unit/concentrator Vivaspin 6**

Membrane: polyethersulphone. Vivaspin 6ml concentrators have been developed to offer increased volume flexibility and performance. Vivaspin 6 can process an impressive 6ml in either swing-out buckets or fixed angle rotors accepting standard 15 ml conical bottom test tubes. The Vivaspin 6 features twin vertical membranes for unparallelled filtration speeds and 100x plus concentrations.

Sartorius Lab Instruments

Membrane area: 2.5cm²
Max. centrifugal force: 8000 x g
Hold-up volume: < 10µl

MWCO	PK	Cat. No.
da		
5000	25	9.049 765
5000	100	9.049 782
10000	25	9.049 766
10000	100	9.049 783
30000	25	9.049 767
30000	100	9.049 784
50000	25	9.049 768
50000	100	9.049 785
100000	25	9.049 769
100000	100	9.049 786
0.2 µm	25	9.049 770
0.2 µm	100	9.049 787
Starter kit (5 ea. 5K to 100K)	25	9.049 753





1 Centrifugal concentrators, Vivaspin 20

Membrane: polyethersulphone. Vivaspin 20ml centrifugal concentrators have been developed to offer increased volume flexibility and performance. Vivaspin 20 handles up to 20ml in swing bucket centrifuges and 14ml in 25° fixed angle rotors accepting 50ml centrifuge tubes. Featuring twin vertical membranes for unparalleled filtration speeds the Vivaspin 20 can achieve 100x plus concentrations. Remaining volume is easy to read off the printed scale on the side of the concentrator and the modified dead stop pocket further simplifies direct pipette recovery of the final concentrate. *Sartorius Lab Instruments*

Membrane area: 6.0 cm²
Max. centrifugal force: 6000 xg
Hold-up volume: < 20 µl

MWCO	PK	Cat. No.
da		
3000	12	9.049 855
5000	12	9.049 771
10000	12	9.049 772
30000	12	9.049 773
50000	12	9.049 774
100000	12	9.049 775
300000	12	9.049 857
1000000	12	9.049 858
0.2 µm		
3000	48	9.049 776
5000	48	9.049 856
10000	48	9.049 788
30000	48	9.049 789
50000	48	9.049 790
100000	48	9.049 791
300000	48	9.049 792
1000000	48	9.049 792
0.2 µm	48	9.049 859
0.2 µm	48	9.049 860
0.2 µm	48	9.049 793
Starter kit (2 ea. 5K to 0.2 µm)	12	9.049 754



2 3 Crossflow filter units Vivaflow 50/200

Thin channel, crossflow filter units with 50cm²/200cm² filter areas for capacities between 100ml/500ml and 5L. This system provides high crossflow rates at minimum pumping pressure and does not require additional fittings for scale-up. VivaFlow 50 is easy to operate with a flow restrictor and, optionally, a pressure indicator. Modular construction with luer connections allows interlocking of units in series for easy scale-up. Recovery rates are maximised due to optimised recirculation volume and by use of low adsorption materials. Disposable. *Sartorius Lab Instruments*
For greater volumes, VivaFlow 200 is available with a filter area of 200cm² and includes pressure indicator, flow restrictor, filtrate tubing and connectors.
Membrane: polyethersulphone

Description	MWCO	Membrane	PK	Cat. No.
da				
Vivaflow 50	3.000	PES	2	6.240 542
Vivaflow 50	5.000	PES	2	9.049 742
Vivaflow 50	10.000	PES	2	9.049 743
Vivaflow 50	30.000	PES	2	9.049 744
Vivaflow 50	50.000	PES	2	9.049 745
Vivaflow 50	100.000	PES	2	9.049 746
Vivaflow 50	0,2 µm	PES	2	9.049 747
Vivaflow 200	5.000	PES	1	9.049 794
Vivaflow 200	10.000	PES	1	9.049 795
Vivaflow 200	30.000	PES	1	9.049 796
Vivaflow 200	50.000	PES	1	9.049 797
Vivaflow 200	100.000	PES	1	9.049 798
Vivaflow 200	0,2 µm	PES	1	9.049 799

Accessories available on request.



➔ More peristaltic pumps please see chapter 8.

1 Dialysis Tubing Biotech Cellulose Ester (CE)

Biologically inert and ultra-pure, Biotech CE is available in the largest selection of concise MWCOs (0.1 to 1000 kD) and sizes to provide better molecular separation for desalting, isolating ionic species and macromolecular purifications. Moderate chemical compatibility tolerates weak or dilute acids or bases and mild alcohols with only a slight change to the MWCO. Not for use with organic solvents. Use with pH 2 to 9 and temperature 4 to 37 °C. REPLIGEN

Type	Flat width mm	PK	Cat. No.
Biotech CE, 0,1-0,5 kD MWCO	10	10	7.611 951
Biotech CE, 0,1-0,5 kD MWCO	16	10	6.233 319
Biotech CE, 0,1-0,5 kD MWCO	31	10	7.651 260
Biotech CE, 0,5-1 kD MWCO	10	10	7.660 686
Biotech CE, 0,5-1 kD MWCO	24	10	6.282 267
Biotech CE, 0,5-1 kD MWCO	31	10	7.910 682
Biotech CE, 100 kD MWCO	10	10	7.673 536
Biotech CE, 100 kD MWCO	24	10	6.200 438



2 Dialysis Device Float-A-Lyzer G2

Ready-to-use dialysis device with screw cap for ultimate convenience for small volume dialysis. Easy loading and recovery. No needles, closures, knots, buoys, pontoons, or weights required. Made with Biotech CE membrane in 9 MWCO's (0.1 to 1000 kD) and 3 volume sizes (1, 5 and 10 ml). REPLIGEN

Type	Capacity ml	PK	Cat. No.
Float-A-Lyzer, 0.5-1 kD MWCO	10	12	6.253 346
Float-A-Lyzer, 8-10 kD MWCO	10	12	6.253 551
Float-A-Lyzer, 20 kD MWCO	1	12	6.256 038
Float-A-Lyzer, 20 kD MWCO	10	12	6.284 110
Float-A-Lyzer, 50 kD MWCO	10	12	6.284 111
Float-A-Lyzer, 100 kD MWCO	1	12	6.252 583
Float-A-Lyzer, 300 kD MWCO	5	12	7.672 754



3 Standard RC Dialysis Membrane Tubing, Spectra/Por®

Standard Grade Regenerated Cellulose (RC) is a clear, flexible and sturdy dialysis tubing. This tubing is ideal for a broad range of applications in which there is a significant size difference between the MW species being separated, including sample preparation, desalting, buffer exchange, pH change, protein purification. Offering a good chemical compatibility, Standard Grade RC can be used with dilute strong acids and bases, concentrated weak acids and bases, most alcohols and some mild or dilute organics, including DMSO. Standard RC can tolerate pH 2 to 12 and temperatures 4 to 121 °C. REPLIGEN



4 Dry RC Dialysis Tubing Spectra/Por® 1, 2, 3 and 4

RC dialysis tubing supplied dry with glycerol humectant for easy handling and manipulation. Soak in DI water for 30 minutes to remove glycerol. Contains trace levels of heavy metals and sulphides. REPLIGEN
Spectra/Por® 1, 3 and 4: For standard dialysis, different MWCO and flat widths
Spectra/Por® 2: Dialysis Tubing with higher permeability

Type	Flat width mm	Diam. mm	PK	Cat. No.
Spectra/Por® 1, 6 - 8 kD MWCO	10	6.4	15	9.206 645
Spectra/Por® 1, 6 - 8 kD MWCO	23	14.6	30	9.206 650
Spectra/Por® 1, 6 - 8 kD MWCO	32	20.4	30	9.206 655
Spectra/Por® 1, 6 - 8 kD MWCO	40	25.5	30	9.206 660
Spectra/Por® 1, 6 - 8 kD MWCO	50	32.0	30	9.206 665
Spectra/Por® 1, 6 - 8 kD MWCO	100	64.0	15	9.206 670
Spectra/Por® 1, 6 - 8 kD MWCO	120	76.4	15	9.206 675
Spectra/Por® 2, 12 - 14 kD MWCO	10	6.4	15	9.206 676
Spectra/Por® 2, 12 - 14 kD MWCO	25	16.0	15	9.206 678
Spectra/Por® 2, 12 - 14 kD MWCO	45	29.0	15	9.206 680
Spectra/Por® 2, 12 - 14 kD MWCO	105	67.0	15	9.206 682
Spectra/Por® 2, 12 - 14 kD MWCO	120	76.4	15	9.206 684
Spectra/Por® 3, 3,5 kD MWCO	18	11.5	15	9.206 720
Spectra/Por® 3, 3,5 kD MWCO	45	29.0	15	9.206 724
Spectra/Por® 3, 3,5 kD MWCO	54	34.0	15	9.206 725
Spectra/Por® 4, 12 - 14 kD MWCO	10	6.4	30	9.206 697
Spectra/Por® 4, 12 - 14 kD MWCO	25	16.0	30	9.206 700
Spectra/Por® 4, 12 - 14 kD MWCO	32	20.4	30	9.206 703
Spectra/Por® 4, 12 - 14 kD MWCO	45	29.0	30	9.206 706
Spectra/Por® 4, 12 - 14 kD MWCO	75	48.0	15	9.206 709



1



1 Pre-wetted RC Dialysis Tubing Spectra/Por® 6

RC dialysis tubing supplied pre-wetted with glycerol removed for convenience in 0.05 % sodium azide solution. Simply rinse away the preservative solution with DI water, load the sample and dialyze.

REPLIGEN

Type	Flat width mm	Diam. mm	PK	Cat. No.
Spectra/Por® 6, 1 kD MWCO	18	11.5	10	9.206 636
Spectra/Por® 6, 1 kD MWCO	38	24.2	10	9.206 638
Spectra/Por® 6, 1 kD MWCO	45	28.6	10	9.206 640
Spectra/Por® 6, 2 kD MWCO	18	11.5	10	9.206 620
Spectra/Por® 6, 2 kD MWCO	38	24.2	10	9.206 625
Spectra/Por® 6, 2 kD MWCO	45	28.6	10	9.206 633
Spectra/Por® 6, 3,5 kD MWCO	18	11.5	10	9.206 790
Spectra/Por® 6, 3,5 kD MWCO	45	28.6	10	9.206 792
Spectra/Por® 6, 3,5 kD MWCO	54	34.4	10	9.206 794
Spectra/Por® 6, 8 kD MWCO	12	7.6	10	9.206 779
Spectra/Por® 6, 8 kD MWCO	23	14.6	10	9.206 780
Spectra/Por® 6, 8 kD MWCO	32	20.4	10	9.206 782
Spectra/Por® 6, 8 kD MWCO	40	25.5	10	9.206 784
Spectra/Por® 6, 8 kD MWCO	50	31.8	10	9.206 786
Spectra/Por® 6, 10 kD MWCO	12	7.6	10	9.206 770
Spectra/Por® 6, 10 kD MWCO	25	15.9	10	9.206 772
Spectra/Por® 6, 10 kD MWCO	32	20.4	10	9.206 774
Spectra/Por® 6, 10 kD MWCO	45	28.6	10	9.206 776
Spectra/Por® 6, 15 kD MWCO	12	7.6	10	9.206 760
Spectra/Por® 6, 15 kD MWCO	25	15.9	10	9.206 762
Spectra/Por® 6, 15 kD MWCO	32	20.4	10	9.206 764
Spectra/Por® 6, 15 kD MWCO	45	28.6	10	9.206 766
Spectra/Por® 6, 25 kD MWCO	12	7.6	10	9.206 750
Spectra/Por® 6, 25 kD MWCO	28	17.8	10	9.206 752
Spectra/Por® 6, 25 kD MWCO	34	21.6	10	9.206 754
Spectra/Por® 6, 50 kD MWCO	12	7.6	10	9.206 740
Spectra/Por® 6, 50 kD MWCO	28	17.8	10	9.206 742
Spectra/Por® 6, 50 kD MWCO	34	21.6	10	9.206 744

2



2 Pre-treated RC Dialysis Tubing Spectra/Por® 7

RC dialysis tubing treated to remove trace levels of heavy metals and sulphide compounds. Ready-to-use Dialysis Tubing already equilibrated in water and supplied in 0.05 % sodium azide solution. Simply rinse away the preservative solution with DI water, load the sample and dialyze.

REPLIGEN

Type	Flat width mm	Diam. mm	PK	Cat. No.
Spectra/Por® 7, 1 kD MWCO	18	11.5	5	9.206 803
Spectra/Por® 7, 1 kD MWCO	38	24.2	5	9.206 804
Spectra/Por® 7, 1 kD MWCO	45	28.6	5	9.206 805
Spectra/Por® 7, 2 kD MWCO	18	11.5	5	9.206 807
Spectra/Por® 7, 2 kD MWCO	38	24.2	5	9.206 808
Spectra/Por® 7, 2 kD MWCO	45	28.6	5	9.206 809
Spectra/Por® 7, 3,5 kD MWCO	18	11.5	5	9.206 810
Spectra/Por® 7, 3,5 kD MWCO	45	28.6	5	9.206 811
Spectra/Por® 7, 3,5 kD MWCO	54	34.4	5	9.206 812
Spectra/Por® 7, 8 kD MWCO	12	7.6	5	9.206 813
Spectra/Por® 7, 8 kD MWCO	23	14.6	5	9.206 814
Spectra/Por® 7, 8 kD MWCO	32	20.4	5	9.206 815
Spectra/Por® 7, 8 kD MWCO	40	25.5	5	9.206 816
Spectra/Por® 7, 8 kD MWCO	50	31.8	5	9.206 831
Spectra/Por® 7, 10 kD MWCO	12	7.6	5	9.206 817
Spectra/Por® 7, 10 kD MWCO	25	15.9	5	9.206 818
Spectra/Por® 7, 10 kD MWCO	32	20.4	5	9.206 819
Spectra/Por® 7, 10 kD MWCO	45	28.6	5	9.206 820
Spectra/Por® 7, 15 kD MWCO	12	7.6	5	9.206 821
Spectra/Por® 7, 15 kD MWCO	25	15.9	5	9.206 822
Spectra/Por® 7, 15 kD MWCO	32	20.4	5	9.206 823
Spectra/Por® 7, 15 kD MWCO	45	28.6	5	9.206 824
Spectra/Por® 7, 25 kD MWCO	12	7.6	5	9.206 825
Spectra/Por® 7, 25 kD MWCO	28	17.8	5	9.206 826
Spectra/Por® 7, 25 kD MWCO	34	21.6	5	9.206 827
Spectra/Por® 7, 50 kD MWCO	12	7.6	5	9.206 828
Spectra/Por® 7, 50 kD MWCO	28	17.8	5	9.206 829
Spectra/Por® 7, 50 kD MWCO	34	21.6	5	9.206 830

1 Dialysis tubing closures Spectra/Por, PP



REPLIGEN

Standard and Weighted Spectra/Por Closures provide a leak-proof seal for dialysis tubing while aiding in sample buoyancy and vertical orientation. They are available in 23, 35, 55, 75 and 90 mm sealing widths and a variety of colors for easy sample identification. Closures are autoclavable.



Description	Up to Flat width mm	Colour	PK	Cat. No.
Dialysis tubing closures	23	Orange	10	6.288 668
Dialysis tubing closures	35	Orange	10	6.288 670
Dialysis tubing closures	55	Orange	10	6.288 669
Dialysis tubing closures	75	Orange	10	6.288 667
Dialysis tubing closures	90	Orange	10	6.288 666
Dialysis tubing closures	35	Blue	10	6.223 462
Dialysis tubing closures	55	Blue	10	7.637 102
Dialysis tubing closures	75	Blue	10	7.637 101
Dialysis tubing closures	35	Green	10	7.511 038
Dialysis tubing closures with weight	23	White	10	6.288 664
Dialysis tubing closures with weight	35	White	10	6.238 361
Dialysis tubing closures with weight	55	White	10	6.204 870
Dialysis tubing closures with magnet	35	Red	2	6.238 362

Clips for Biotech membranes available on request.

2 Cell and Tissue Culture Dishes, non-treated, PS, sterile **NEW**

Dishes with non-treated surface, suitable for proliferation of suspension cell and tissue.

- Easy and secure stacking
- Sterilized by gamma irradiation
- Pyrogen-free



Diam. mm	Height mm	Culture surface cm ²	PK	Cat. No.
18	12	12.0	300	4.672 533
33	13	8.5	960	4.672 534
52	18	21.2	600	4.672 535
55	14	3.3	600	4.672 536
68	15	36.3	600	4.672 537
85	17	55.0	500	4.672 538
88	22	60.8	300	4.672 539
136	22	143.0	120	4.672 540
136	22	143.0	100	4.672 541

3 Cell and Tissue Culture Dishes, treated, PS, sterile **NEW**

Dishes with treated surface, suitable for adhesion cells.

- Easy and secure stacking
- Sterilized by gamma irradiation
- Pyrogen-free



Diam. mm	Height mm	Culture surface cm ²	PK	Cat. No.
18	12	12.0	300	4.672 542
33	13	8.5	960	4.672 543
52	18	21.2	600	4.672 544
55	14	3.3	600	4.672 545
68	15	36.3	600	4.672 546
85	17	55.0	500	4.672 547
88	22	60.8	300	4.672 548
136	22	143.0	120	4.672 549
136	22	143.0	100	4.672 550

1

1

Cell and Tissue Culture Dishes, Nunc™ EasYDish™, PS, sterile

Nunc™ EasYDish™ improves the handling, stacking and transport of culture dishes. *Thermo Scientific*
 A bevelled grip ring facilitates handling even with gloves and the proprietary notch design ensures maximum ventilation with consistent sterility. A raised outer edge on the dish lid enables very stable stacking and more safety during transport. Orientation marks on the dish bottom simplify the localization of cells under the microscope.

- Standard Nunclon™Δ surface treatment to maximize adhesion for most cell types
- RNase/DNase free, human DNA free
- Non-cytotoxic, pyrogen-free
- Gamma irradiation (SAL of 10⁻⁶)
- Shelf life 5 years from manufacturing date
- With certificate of quality

Working volume	Diam.	Height	Culture surface	PK	Cat. No.
ml	mm	mm	cm ²		
3	35	13	88.0	500	4.662 328
5	60	16	21.5	280	4.662 329
12.5	100	17	56.7	150	4.662 330
12.5	100	21	56.7	240	4.662 331
35	150	21	145.0	80	4.662 332

2

2

Cell Culture Dishes, Nunclon™Δ Surface, PS, treated, sterile

Surface treated dishes for cell culture available in various sizes and formats are optically clear and suitable for microscopy. Nunclon™Δ surface modification is certified pyrogen-free and tested for both monolayer formation and cloning efficiency employing primary cells as well as repeating cell lines. Sterile. With lid. *Thermo Scientific*
 Material: Polystyrene

Working volume	Dimensions	Height	Culture surface	PK	Cat. No.
ml	mm	mm	cm ²		
3	Ø 35	10	8.8	500	9.407 393
5	Ø 60	15	21.5	400	9.407 395
12.5	Ø 100	15	56.7	150	9.407 398
12.5	Ø 100	20	56.7	240	9.407 401
35	Ø 150	20	145.0	80	9.407 399

3

3

Cell Culture Tubes Nunc™, PS, sterile

The surface of the tubes is coated with Thermo Scientific™ Nunclon™ Δ and designed for the cultivation of adherent cell cultures. With cap made of PE. *Thermo Scientific*

- Tubes with flat side provide 5.5 cm² culture surface
- Suitable for microscopy, use of cover glasses possible
- Leakproof

Working volume	Diam.	Height	Base	Cover type	PK	Cat. No.
ml	mm	mm				
3	16	110	flat side	screw cap	450	6.510 332
7	14	100	round	screw cap	600	9.407 230
7	13	100	round	push-on lid	600	4.008 816

1 Cell culture flasks, treated, PS, sterile

These cell culture flasks with treated surfaces for the cultivation of adherent cells are available with different growth areas from 12.5 to 182 cm². Available with vented or plug-seal caps made from polyethylene. Vented caps contain a 0.22 µm hydrophobic filter to allow gas exchange and minimize risk of cross-contamination. Plug Seal caps can be used in closed systems, providing a liquid and gas sheer seal, but by simply unscrewing the cap one quarter of a turn, this cap can also be used in an open system.

Features:

- Innovative angled neck design offers good pipette and cell scraper access
- Upper triangular and wider base shape provides stability
- Stackable
- Special writing area near the neck
- Engraved graduation on both flask sides
- Sterilized by gamma irradiation
- Pyrogen-free

Material: Polystyrene

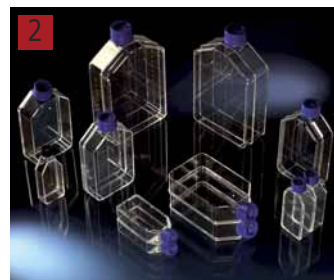


Working volume ml	Neck thread mm	Culture surface cm ²	Neck	Cover type	PK	Cat. No.
20	45	12.5	angled	standard	200	4.675 617
20	45	12.5	angled	vented	200	4.675 618
40	45	25.0	angled	standard	200	4.675 619
40	45	25.0	angled	vented	200	4.675 620
75	45	75.0	angled	standard	100	4.675 621
75	45	75.0	angled	vented	100	4.675 622
400	45	182.0	angled	standard	40	4.675 623
400	45	182.0	angled	vented	40	4.675 624
800	45	300.0	angled	standard	18	6.314 340
800	45	300.0	angled	vented	18	6.314 339

2 Cell Culture Flasks, Nunclon™Δ Surface, PS/HDPE, sterile

Nunclon™Δ cell culture flasks with surface areas from 25 to 175cm² are available with filter caps or Vent/Close caps for good gas exchange. Short, wide neck (angled or straight) allows easy access to entire growth surface. The Nunclon™Δ treatment is limited to the intended growth area. Neck areas are not treated to prevent cell attachment and growth in undesired areas. Certified pyrogen-free and tested for both monolayer formation and cloning efficiency employing primary cells as well as repeating cell lines. Sterile. Material flasks: Polystyrene
Material caps: HDPE

Thermo Scientific



Working volume ml	Culture surface cm ²	Neck	Cover type	PK	Cat. No.
7	25	Angled	Filter	160	9.390 345
7	25	Angled	Vent/Close	160	9.407 027
30	80	Straight	Filter	50	9.390 346
30	80	Straight	Vent/Close	50	9.407 077
68	175	Straight	Filter	32	9.390 348
68	175	Straight	Vent/Close	32	9.407 152

3 Cell Culture Flasks EasYFlask™, treated, PS/HDPE, sterile

Cell culture flasks with Nunclon™Δ. Surface modifications are certified pyrogen-free and tested for monolayer formation and cloning efficiency with primary and immortalized cell lines. Sterile. Bottleneck at an angle. Sterile Material flasks: Polystyrene
Material caps: HDPE

Thermo Scientific



Working volume ml	Culture surface cm ²	Surface	Neck	Cover type	PK	Cat. No.
7	25	Nunclon™	Angled	Filter	200	9.390 331
7	25	Nunclon™	Angled	Vent/Close	200	9.390 330
25	75	Nunclon™	Angled	Filter	100	9.390 333
25	75	Nunclon™	Angled	Vent/Close	100	9.390 332
55	175	Nunclon™*	Angled	Filter	30	7.510 686
55	175	Nunclon™*	Angled	Vent/Close	30	4.008 552
70	225	Nunclon™*	Angled	Filter	30	6.236 539
70	225	Nunclon™*	Angled	Vent/Close	30	4.008 625
7	25	Collagen I	Angled	Filter	60	4.009 044
25	75	Collagen I	Angled	Filter	30	6.244 028
55	175	Collagen I	Angled	Filter	30	4.009 123
7	25	Poly-D-Lysin	Angled	Filter	60	4.009 043
25	75	Poly-D-Lysin	Angled	Filter	30	4.008 945
55	175	Poly-D-Lysin	Angled	Filter	30	4.009 122

* Batch no. and cat. no. printed on each flask.



1 Cell Culture Flasks EasyFlask™/TripleFlask™, non-treated, PS/HDPE, pyrogen-free

Non-treated, sterile flasks for suspension cell cultures. White caps for easy identification.
Pyrogen-free.
Material flasks: Polystyrene
Material caps: HDPE

Thermo Scientific

Type	Working volume ml	Culture surface cm ²	Neck	PK	Cat. No.
EasyFlask™	7	25	curved	200	6.702 724
EasyFlask™	30	75	curved	100	6.222 672
EasyFlask™	55	175	curved	30	7.900 288
TripleFlask™	200	500	straight	32	7.900 289

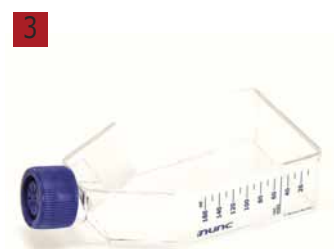


2 Cell culture flasks TripleFlask Nunclon™ Surface, PS/HDPE, sterile

Cell culture flasks with three parallel growth surfaces provide a total culture area of 500 cm² - with external dimensions of a 175 cm² standard flask. Ideal for scale-up.
Available with Vent/Close caps or filter caps for good gas exchange. Certified pyrogen-free and tested for both monolayer formation and cloning efficiency employing primary cells as well as repeating cell lines. Sterile
Material flasks: Polystyrene
Material caps: HDPE

Thermo Scientific

Working volume ml	Culture surface cm ²	Neck	Cover type	PK	Cat. No.
200	500	Straight	Filter	32	9.390 351
200	500	Straight	Vent/Close	32	9.390 350



3 Cell Culture Flasks, Nunclon™ Sphera™

Optimizing spheroid formation

- Allows cells to grow in suspension with virtually no cell attachment
- Supports many different cell types and their ability to generate spheroids
- Enables consistent, repeatable cell growth

Growing 3D cancer cultures

- Minimizes variability and supports the consistent formation of cancer spheroids that simulate the 3D structures of tumor growth, providing a better model system for studying tumor cell progression and efficacy of anticancer agents in vitro

Promoting formation of embryoid bodies (EB)

- Demonstrates superior quality for embryoid body formation of pluripotent stem cells with minimal spontaneous differentiation
- Resultant cells are able to differentiate into all three germ layers

Certifications/Compliance

- Free of animal products
- Pyrogen-free: Endotoxin tested (0.5 EU/mL)
- Biologically inert: USP biological reactivity class VI
- High level of sterility: SAL 10⁻⁶, ethylene oxide gas sterilization

Thermo Scientific

Working volume ml	Culture surface cm ²	Neck	Cover type	PK	Cat. No.
7	25	angled	filter	18	6.265 520
25	75	angled	filter	24	6.265 521

➔ CO₂ incubators please see chapter 7.

1 Cell Culture Flasks DURAN® TILT

The smart, reusable bottle system for cell culture media preparation. *DWK Life Sciences*
DURAN® TILT is perfectly designed for making work in biosafety cabinets and clean hoods safer and easier. The innovative features of the DURAN® TILT bottle changes everything. The TILT bottle has two positions: upright for filter sterilization or storage, and tilted at 45° for pipetting.

- The innovative design enables both good aseptic and ergonomic practice.
- The GL 56 mouth has a 100 % bigger opening than the standard GL 45 mouth for easier pipetting.
- The ergonomically shaped GL 56 screw cap is easy to open and close. Made from a non-cytotoxic polymer.
- Vacuum resistant glass bottle for the safe filter sterilisation of media.
- Space saving shape for fridge storage and warming media in a water bath
- Low bottle height is practical in the biosafety cabinet.
- Tilted volume indicators for convenience
- Manufactured from DURAN® borosilicate 3.3 glass for reusability and lower whole life costs.



Accessories please order separately.

Description	Capacity ml	Height with cap mm	Thread	PK	Cat. No.
Cell Culture Flasks DURAN® TILT	500	151	GL 56	1	6.270 514

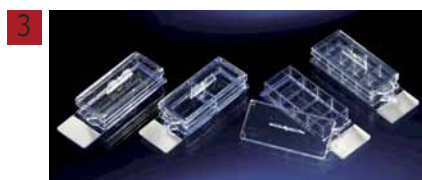
Suitable accessories can be found in our online shop.

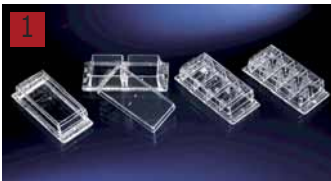
2 | 3 Microscope slide Lab-Tek™ Chamber Slide™ System, PS

Chamber slides eliminate the need for cell transfer prior to visualisation/staining. Upper structure can be removed when culturing is complete. Useful for viral and mycoplasma testing, chromosome studies, toxicity tests and immunocytology. Sterile. The chemically coated growth surface of the Lab-Tek™II-CC² Chamber Slide System mimics polylysine and provides binding sites optimal for fastidious cells (e.g. neurons). Material chamber: Polystyrene *Thermo Scientific*

- Lab-Tek™: Sealant: Non-toxic medical grade silicone.
- Lab-Tek II™: Sealant, biocompatible acrylic adhesive.
- Lab-Tek II - CC²: modified glass slide, chemically coated to mimic polylysine.

Type	No. of chambers	Material	Working volume ml	Culture surface cm ²	PK	Cat. No.
Lab-Tek™	1	Glass	2.5-4.5	9.4	96	4.675 491
Lab-Tek™	1	Permanox™	2.5-4.5	9.4	16	7.624 247
Lab-Tek™	2	Glass	1.2-2.0	4.2	96	4.675 492
Lab-Tek™	2	Permanox™	1.2-2.0	4.2	96	4.675 506
Lab-Tek™	4	Glass	0.5-0.9	1.8	96	4.675 497
Lab-Tek™	4	Permanox™	0.5-0.9	1.8	96	4.675 489
Lab-Tek™	8	Glass	0.2-0.4	0.8	96	4.675 487
Lab-Tek™	8	Permanox™	0.2-0.4	0.8	96	4.675 507
Lab-Tek™	16	Glass	0.1-0.2	0.4	96	4.675 485
Lab-Tek II™	1	Glass	2.0-4.5	8.6	96	4.675 495
Lab-Tek II™	2	Glass	1.0-2.0	4.0	96	4.675 494
Lab-Tek II™	4	Glass	0.5-1.0	1.7	96	4.675 504
Lab-Tek II™	8	Glass	0.2-0.5	0.7	96	4.675 503
Lab-Tek II - CC ²	1	modif. Glass	2.0-4.5	8.6	96	4.675 486
Lab-Tek II - CC ²	2	modif. Glass	1.0-2.0	4.0	96	4.675 499
Lab-Tek II - CC ²	4	modif. Glass	0.5-1.0	1.7	96	4.675 498
Lab-Tek II - CC ²	8	modif. Glass	0.2-0.5	0.7	96	4.675 490





1 Chambered Coverglass Lab-Tek™ und Lab-Tek™ II, PS, sterile

Excellent for confocal image analysis and optimal for high power inverted microscopic viewing. Sterile.

Thermo Scientific

Material chamber: Polystyrene
Material slide: Glass

Lab-Tek™: connection between the chamber (s) and slides from non-toxic, medical silicone.
Lab-Tek™ II: connection between the chamber (s) and slides of biocompatible acrylic adhesive.
Medium chamber is not removable.

Type	No. of chambers	Material	Working volume	Culture surface	PK	Cat. No.
			ml	cm ²		
Lab-Tek™	1	Glass	2.2-4.5	9.4	96	4.675 505
Lab-Tek™	2	Glass	1.2-2.0	4.2	96	4.675 496
Lab-Tek™	4	Glass	0.5-0.9	1.8	96	4.675 488
Lab-Tek™	8	Glass	0.2-0.4	0.8	96	4.675 508
Lab-Tek™ II	1	Glass	2.0-4.5	8.6	96	4.675 500
Lab-Tek™ II	2	Glass	1.0-2.0	4.0	96	4.675 493
Lab-Tek™ II	4	Glass	0.5-1.0	1.7	96	4.675 501
Lab-Tek™ II	8	Glass	0.2-0.5	0.7	96	4.675 502



2 Cell Culture Plates, non-treated, PS, sterile



Standard surface non-treated cell culture plates. Reduced evaporation due to raised well rims and uniform rings on the lids.

- Available with 4-, 6-, 12-, 24-, 48-, 96- or 384-wells (lid included)
- Flat well bottom
- 96-well plate also available as round bottom plate (4.672 531)
- Single position lid reduces the risk of cross-contaminations
- Wells are labeled with alphanumeric code for easy identification
- Sterilized by gamma irradiation
- Pyrogen-free
- Material: Polystyrene

Working volume	No. of wells	PK	Cat. No.
ml			
1.96	4	100	4.672 525
2.90	6	100	4.672 526
1.14	12	100	4.672 527
0.57	24	100	4.672 528
0.29	48	100	4.672 529
0.20	96	100	4.672 530
0.38	96	100	4.672 531
0.11	384	100	4.672 532



3 Multidishes, non-treated, PS, sterile

Thermo Scientific

Non-treated, sterile multidishes for suspension cell cultures are available in formats from 4 up to 48 wells. Raised well rims lower the risk of cross contamination. Excellent optical quality. Pyrogen-free. With lid.

Material dishes and lids: Polystyrene

Working volume	No. of wells	PK	Cat. No.
ml			
1	4	120	6.223 971
3	6	75	6.803 562
2	12	75	7.623 040
1	24	75	6.222 953
0.5	48	75	6.207 164

1 Cell Culture Plates, treated, PS, sterile

These standard surface treated cell culture plates for the cultivation of adherent cells exhibit a reduced evaporation due to raised well rims and uniform rings on the lids.

- Available with 4-, 6-, 12-, 24-, 48-, 96- or 384-wells (lid included)
- Flat well bottom
- 96-well plate also available as round bottom plate (6.267 171)
- Single position lid reduces the risks of cross-contaminations
- Wells are labeled with alphanumeric code for easy identification
- Sterilized by gamma irradiation
- Pyrogenfree
- Material: Polystyrene



Working volume	Culture surface	No. of wells	PK	Cat. No.
ml	cm ²			
1.96	1.96	4	100	4.672 523
2.90	9.60	6	100	6.267 166
1.14	3.85	12	100	6.267 167
0.57	1.93	24	100	6.267 168
0.29	0.84	48	100	6.267 169
0.20	0.33	96	100	6.267 170
0.20	0.58	96	100	6.267 171
0.10	0.11	384	100	4.672 524

2 Multidishes, Nunc™ cell culture treated surface, PS, sterile

4- to 48-well multidishes with Nunclon™Δ treated surface. 6-well plates also available with Poly-D-Lysine and Collagen I coating. Raised well rims lower the risk of cross contamination. Excellent optical quality. All available surface modifications are certified pyrogen-free and tested for both monolayer formation and cloning efficiency employing primary cells as well as repeating cell lines. Sterile. With lid. Material dishes and lids: Polystyrene

Thermo Scientific



Description	Working volume	Culture surface	No. of wells	PK	Cat. No.
	ml	cm ²			
Nunclon™Δ, Flat	1	1.9	4	120	6.050 151
Nunclon™Δ, Flat	5	21.8	4	100	4.009 034
Nunclon™Δ, Flat	3	9.6	6	75	9.390 401
Nunclon™Δ, Flat	3	9.6	6	85	9.390 402
Poly-D-Lysin, Flat	3	9.6	6	20	4.008 850
Collagen I, Flat	3	9.6	6	20	4.008 874
Nunclon™Δ, Flat	3	10.5	8	100	4.009 045
Nunclon™Δ, Flat	2	3.5	12	75	9.390 403
Nunclon™Δ, Flat	1	1.9	24	75	9.390 410
Nunclon™Δ, Flat	1	1.9	24	85	7.634 155
Nunclon™Δ, Flat	0.5	1.1	48	75	9.390 411
Nunclon™Δ, Flat	0.5	1.1	48	85	6.206 402



BRANDplates® - A complete premium-quality line - for every application!

Microplates for Cell Culture (sterile)

BRAND

Cell culture is increasing in popularity in the research and development area. Outside of basic research, cells are cultivated today for a number of reasons, including the production of proteins and in particular as assay systems. As cell cultures can sometimes be quite demanding regarding their environment, the disposables used for cultivation have to be of highest quality. The four different cell culture surfaces of the BRANDplates® allow the optimum combination between microplate and specific cell line.

cellGrade™

Standard plate for the cultivation of adherent cell cultures. PS-surface with different chemical groups, like e.g. carboxyl and hydroxyl groups, that are freely accessible. Surface is hydrophilic compared with non-treated PS.

cellGrade™ plus

For cultivation of fastidious cell cultures. In addition to carboxyl and hydroxyl chemical groups, free amino groups are present on the surface. The surface has a protein-like composition; cells can directly attach and spread out. Cells adhere faster, better rate of yield. Suited for serum reduced cultivation of cells.

cellGrade™ premium

Poly-D-Lysine-equivalent surface, with analogous results regarding growth performance and cell morphology. Optimal adhesion of cells to the surface reduces cell damage when washing frequently. Surface suited for serum-free and serum-reduced cultivation of cells. Good shelf life at room temperature.

inertGrade™

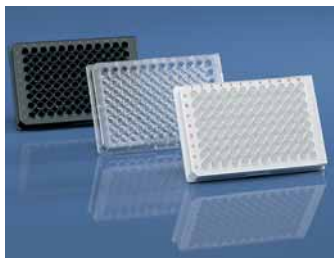
For cultivation of suspension cell cultures. Especially suited for cell cultures, when adhesion is not desired. Optimized surface characteristics reducing cell adhesion and protein adsorption, enzyme and cellular activation is minimized. Stem cells can be prevented from early differentiation.

Colours, wells and shapes:

- 96-, 384- and 1536-well format
- sterile according to Ph.Eur. and USP 29, SAL 10⁻⁶
- standard or transparent bottom
- transparent, white or black
- various well bottom shapes: U-, V-, F-, C-bottom for 96-well format
- clearly distinguishable via colour code: orange embossed alphanumeric coding for 96-well standard
- free from endotoxins (< 0.01 EU/ml), DNase, DNA, RNase, non-cytotoxic (according to ISO 10993)
- Sterile Products comply with ISO 11137 and AAMI guidelines. A SAL of 10⁻⁶ is reached. Supplied individually wrapped with lid.
- ANSI/SLAS format

You can find ordering information for all articles described above as well as other articles online.

1



1 cellGrade™

PS, sterile. For standard cell culture applications.

BRAND

Description	Bottom shape/ Well volume µl	PK	Cat. No.
96-well, transparent	U / 330	50	4.000 329
96-well, transparent	V / 360	50	4.000 330
96-well, transparent	F / 350	50	4.000 331
96-well, transparent	C / 350	50	4.000 332
96-well, white	F / 350	50	4.000 333
96-well, black	F / 350	50	4.000 334
96-well, white / transparent	F / 330	50	4.000 335
96-well, white / transparent	F / 330	5	6.272 015
96-well, black / transparent	F / 330	50	4.000 336
96-well, black / transparent	F / 330	5	6.272 016
384-well, transparent	F / 100	50	4.000 337
384-well, white	F / 100	50	4.000 338
384-well, black	F / 100	50	4.000 339
384-well, white / transparent	F / 120	50	4.000 343
384-well, white / transparent	F / 120	5	6.272 017
384-well, black / transparent	F / 120	50	4.000 344
384-well, black / transparent	F / 120	5	6.272 018
1536-well, transparent	F / 10	50	4.000 345
1536-well, white	F / 10	50	4.000 346
1536-well, black	F / 10	50	4.000 347

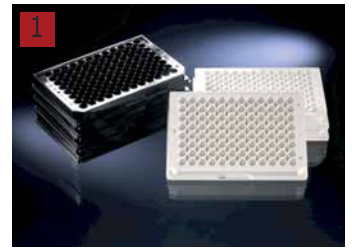
Further products can be found in our online shop.



1 F96 MicroWell™ Plates, PS

Clear, white or black plates with excellent optical clarity and flat bottom wells.
Nunclon™Δ, MaxiSorp™, PolySorp™, Collagen I, Poly-D-Lysine surface modifications suitable for cell culture assays.
Material plates: Polystyrene
Total volume µl/well: 400

Thermo Scientific



Surface	Colour	Sterile	Lid	PK	Cat. No.
Nunclon™Δ	Clear	+*	+	160	6.803 751
Nunclon™Δ	Clear	+*	+	50	9.407 473
Nunclon™Δ	White	+*	+	50	6.802 646
Nunclon™Δ	Black	+*	+	50	6.802 647
Collagen I	Clear	-**	+	20	4.008 866
Poly-D-Lysin	Clear	-**	+	20	4.008 858
Cell culture	Clear	+	-	180	4.008 767
Cell culture	Clear	+	-	50	9.407 475
Non-treated	Clear	-	-	180	6.222 441
Non-treated	Clear	-	+	160	7.603 959
Non-treated	Clear	-	-	60	9.390 514
Non-treated	Clear	+	+	160	6.237 877
Non-treated	Clear	+	-	180	4.008 715
Non-treated	Clear	+	-	50	9.390 515
Non-treated***	Clear	-	-	180	4.008 780
Non-treated***	Clear	+	+	160	6.803 101
Non-treated	White	+	+	50	6.231 848
Non-treated	White	+	+	160	6.510 546
Non-treated	White	-	-	180	6.201 514
Non-treated	Black	+	+	50	7.601 891
Non-treated	Black	-	-	180	6.228 233

* certified.

**Produced in clean environment.

***with Barcode

2 F96 Well Optical Bottom Plates, PS

- Nunclon™Δ surface for cell culture
- Non-treated plates are optimised for scintillation counting
- White or black upper structure with polymer bottom plates combine the optical clarity of virgin crystalline polystyrene with optimal surface for a wide range of HTS applications
- Working volume range: 50 - 200µl/well

Thermo Scientific



Surface	Colour	Sterile	Lid	PK	Cat. No.
Cell Culture	White	+	+	30	4.008 852
Cell Culture	Black	+	+	30	6.801 890
Non-treated	White	-	-	30	6.231 847
Non-treated	Black	-	-	30	6.901 329

3 96-well plate Nunclon™ Sphera™**Optimizing spheroid formation**

- Allows cells to grow in suspension with virtually no cell attachment
- Supports many different cell types and their ability to generate spheroids
- Enables consistent, repeatable cell growth

Thermo Scientific

Growing 3D cancer cultures

- Minimizes variability and supports the consistent formation of cancer spheroids that simulate the 3D structures of tumor growth, providing a better model system for studying tumor cell progression and efficacy of anticancer agents in vitro

Promoting formation of embryoid bodies (EB)

- Demonstrates superior quality for embryoid body formation of pluripotent stem cells with minimal spontaneous differentiation
- Resultant cells are able to differentiate into all three germ layers

Certifications/Compliance

- Free of animal products
- Pyrogen-free: Endotoxin tested (0.5 EU/mL)
- Biologically inert: USP biological reactivity class VI
- High level of sterility: SAL 10⁻⁶, ethylene oxide gas sterilization
- Shelf Life 4 years



Description	Colour	Surface	Sterile	PK	Cat. No.
round bottom	Clear	Nunclon™ Sphera™	SAL 10 ⁻⁶	1	6.264 322
flat bottom	Clear	Nunclon™ Sphera™	SAL 10 ⁻⁶	1	6.264 323



1 Cell Factories EasyFill™ mit Nunclon™Δ Surface, PS, sterile

A time and space saving vessel for large scale cell culture production. *Thermo Scientific*
Suitable for industrial scale production of vaccines, monoclonal antibodies or pharmaceuticals.
Nunclon™Δ surface modification is certified for cell culture and ensures consistent cell growth layer to layer, lot to lot.
Ready to use and easy to fill and empty with plug and play connection. Wide range of accessories available for different methods of filling, venting and harvesting (please see Cell Factories Accessories). Sterile.
Material cell factories: Polystyrene

Capacity	Culture surface	No. of chambers	PK	Cat. No.
ml	cm ²			
200	630	1	6	4.008 721
400	1260	2	6	4.008 786
800	2520	4	4	4.008 806
2000	6300	10	2	4.008 779



2 Bioreactors CELLine™

New line of membrane driven flasks for high density cell culture. The flasks are designed to enhance small scale bio-production for antibodies and proteins. Conventional *in vivo* or *in vitro* cell culture methods can be laborious, may have low cell density and require significant purification. CELLine™ flasks address these three areas of limitation observed in static tissue culture flasks. *DWK Life Sciences*

- Disposable and ready-to-use
- High cell density and high product concentration
- Reduces operation time
- Decreases use of consumables
- Cost-efficient, space saving, and stackable
- No additional equipment required for operation

Type	Culture Type	Media Compartment ml	Cell Compartment ml	PK	Cat. No.
CELLine™ 1000	Suspension	1000	15	1	4.658 779
CELLine™ 1000	Suspension	1000	15	3	4.658 780
CELLine™ 1000-AD	Adherent	1000	15	1	4.658 781
CELLine™ 1000-AD	Adherent	1000	15	3	4.658 782
CELLine™ 350	Suspension	350	5	1	4.658 777
CELLine™ 350	Suspension	350	5	5	4.658 778

Spinner Flasks Celstir® and Magna Flex™

Celstir® and Magna Flex™ spinner flasks from WHEATON® are high-quality products designed for long life, high efficiency and low maintenance. Celstir® spinner flasks are the ideal environment for culturing/growing a wide variety of cells, such as insect cells, hybridomas and many other suspension adapted cells. Magna Flex™ flasks are suitable for microcarrier cultures. Celstir® and Magna Flex™ flasks are produced from autoclavable, Type I borosilicate glass. WHEATON® spinner flasks can be used on all magnetic stirrers. *DWK Life Sciences*

Scope of supply: Flask, stirring unit with lid and lids for side arms.



3 Spinner Flask, double sidearm Celstir®

- For suspension cell culture with a magnetic stirrer *DWK Life Sciences*
- Adjustable paddle impeller and sterile design as stirrer shaft does not protrude through cap
- 1:1 headspace ratio for ideal gas exchange
- Bottom dimple to reduce cell aggregation (dimple on 125mL and larger flasks)
- Autoclavable borosilicate glass that conforms to USP Type I and ASTM E 438 Type I, Class A requirements

Capacity	Dimensions (dia. x H)	Cap size, top	Cap size, sidearms	PK	Cat. No.
ml	mm				
25	38 x 122	38-430	15-415	1	4.658 741
50	38 x 141	38-430	15-415	1	4.658 742
125	65 x 155	51-400	33-430	1	4.658 743
250	85 x 155	51-400	33-430	1	4.658 745
500	110 x 190	100-400	GL 45	1	4.658 747
1000	130 x 250	100-400	GL 45	1	4.658 749
3000	178 x 341	100-400	GL 45	1	4.658 752
6000	258 x 404	100-400	GL 45	1	4.658 753
8000	293 x 445	100-400	GL 45	1	4.658 754

Further models can be found in our online shop.

1 Automated Cell Counter EVE™

EVE™ is a benchtop automatic cell counter designed to accurately and precisely measure cell count and viability of different cell cultures. It uses the standard trypan blue technique.

NanoEn Tek Inc.

- Fine distinction of clumped cells: Accurate results with advanced analysis algorithm
- Broad range of cell sizes and types: Primary (tissue and blood) cell lines and stem cells
- User friendly: Touch screen LCD without any maintenance needed
- Data store analysis: 500 test results, transfer to PC via USB drive
- Cell size gating: Select range of cell size using gating function

EVE™ cell counting slides contain two enclosed chambers which can measure two different samples or perform replicates of the same sample.

Scope of supply: Automated Cell Counter EVE™, one box of Cell Counting Slides (50 slides/100 counts), USB Drive (2 GB), User Manual and Quick Manual.



Description	PK	Cat. No.
Automated Cell Counter EVE™	1	6.284 817

2 Automated cell Counter EVE™ Plus

EVE™ Plus is a benchtop automatic cell counter designed to accurately and precisely measure cell count and viability of different cell cultures. It uses the standard trypan blue technique.

NanoEn Tek Inc.

- Fine distinction of clumped cells: Accurate results with advanced analysis algorithm
- Touch screen interface
- Auto save function up to 500 results
- Data transfer via Wi-Fi
- Acoustic signal after each count

Specifications:

Manual counting time:	1 second or less
Auto focus counting time:	10 seconds or less
Measuring range:	1 x 10 ⁴ ~ 2 x 10 ⁷ cells/ml
Zählbarer Zellgrößenbereich:	5 ~ 60 µm

Type	PK	Cat. No.
Automated cell Counter EVE™ Plus	1	4.669 246



Accessories for automated Cell Counter EVE™

NanoEn Tek Inc.

Description	PK	Cat. No.
EVE™ Cell counting slides incl. 1 x 1.5 ml trypan blue (0.4 %) for 100 counts	50	6.284 818
Test beads for EVE™ cell counter 1 x 1 ml concentration 1.0 x 10 ⁶	1	6.284 819





1 Cell Scrapers, sterile

NEW

Available in two blade designs, scraper and lifter. Material blades TPE and handle ABS.
 - Particularly thin, swivelling, flexible blades
 - Sterilized by gamma irradiation
 - Individually wrapped
 - Pyrogen-free

Description	Length mm	PK	Cat. No.
Blade position scraper, 20 mm	250	100	4.672 560
Blade position scraper, 30 mm	390	100	4.672 562
Blade position lifter, 20 mm	250	100	4.672 561
Blade position lifter, 30 mm	390	100	4.672 563



2 Cell Scrapers Rotatable®, sterile

NEW

Free rotating blade to twist easily to the desired direction. Easy changes of the blade angle by slight pressure on the handle. Material blades PE and handle ABS.

- Small raised knobs on the handle for better grip
 - Sterilized by gamma irradiation
 - Individually wrapped
 - DNase/RNase-free
 - Pyrogen-free

Description	Length mm	PK	Cat. No.
Scraper, 12.5 mm	230	150	4.672 556
Scraper, 12.5 mm	300	150	4.672 557
Scraper, 19.5 mm	230	150	4.672 558
Scraper, 19.5 mm	300	150	4.672 559



3 Cell Scrapers, sterile

Thermo Scientific

Available in two different lengths with adjustable blade for optimal application flexibility. Pyrogen-free. Sterile.

Width mm	Length cm	Height mm	For bottles cm ²	PK	Cat. No.
15.5	23	7.5	25 - 80	50	6.222 130
17.5	32	16.0	75 - 175	250	9.390 356



4 Cell lifters, PE, sterile

NEW

Flat blade cell lifter for manual harvesting of cells.

- Special blade design minimizes cell damage
 - Sterilized by gamma irradiation
 - Individually packed
 - DNase/RNase-free
 - Pyrogen-free

Length mm	PK	Cat. No.
23.4	100	4.672 555



5 Cell lifters, with blade or hook, PE, sterile

NEW

Cell lifter with flat blade on one end and exchangeable J-hook or narrow blade on the other end. For manual cell harvesting, also for multiwell plates or microcentrifuge tubes.

- Special blade design minimizes cell damage
 - Sterilized by gamma irradiation
 - Individually packed
 - DNase/RNase-free
 - Pyrogen-free

Description	Colour	PK	Cat. No.
J-Hook, 9.0 mm	green	100	4.672 553
Narrow Blade, 2.5 mm	green	100	4.672 554

1 LLG-Cell strainers, Nylon, sterile

Cell strainers are especially suited for the generation of homogenous single cell suspensions from tissue or primary cell lysates

- Available in 3 mesh sizes, 40 µm: 70 µm, and 100 µm
- Colour coded mesh size
- Designed to fit into 50 ml tubes
- Individually packaged
- Handle and mantle surface for improved aseptic handling
- Nylon mesh
- Pyrogen-free

Mesh size µm	Colour code	PK	Cat. No.
40	blue	50	6.268 093
70	white	50	6.268 092
100	yellow	50	6.268 091

1



2 Cell strainers Flowmi™



Scienceware® Flowmi™ Cell Strainers provide fast and efficient filtering of small volume samples (up to 1000µl) prior to FLOW or FACS analysis. Removes cell aggregates and creates uniform single cell suspensions.

Bel-Art Products

- Flowmi™ fits most 1000 µl tips
- Compact tray holds 50 Flowmi™ Cell Strainers
- Sliding cover for easy, one-handed use
- Sterile, packaged in a re-sealable bag

Mesh size µm	PK	Cat. No.
40	50	6.261 977
70	50	6.268 917

2



Freezing Aid for Cell Cultures, FreezerCell™

FreezerCell™ can be used for a variety of cell types, including stem cells, primary cells, cell lines and yeasts. The FreezerCell™ does not require any additives and only needs to be placed in an ultra deep freezer and the cooling runs at -1°C per minute. Fill the freezing aid with the cryotubes and freeze for approx. 3 hours at -80 °C. Then the samples are ready to transfer to a nitrogen tank. This gentle method ensures a high survival rate of the cells during the freezing process.

- No pre-cooling necessary
- Consistent temperature distribution, even with partial loading
- Lid can be opened easily

Type	Dimensions (W x D x H) mm	PK	Cat. No.
Hexagon shape for 12 tubes	108 x 108 x 100	1	4.665 863
Square shape for 12 tubes	117 x 117 x 100	1	4.665 865

3



4.665 863

4



4.665 865

5 Nalgene Freezing container Mr. Frosty, PC

With 120mm diameter screw cap in blue HDPE, vial holder made of white HDPE. Suitable for 18 x 1.2/2.0ml cryovials. Foam interior. Cooling rate 1°C/min. Tubes can be easily removed. Each aperture has a moulded number for identification. Stackable.

Thermo Scientific

For tubes ml	Diam. mm	Height mm	No. of tubes	PK	Cat. No.
1.0-2.0	117	86	18	1	9.400 945
3.6	117	151	12	1	9.400 990
4.5-5.0	117	151	12	1	9.400 991

5



1 Semi-Micro Osmometer K-7400S

The K-7400S Semi-Micro Osmometer enables the measurement of osmolality and freezing point of aqueous solutions.

KNAUER

Determination of the total concentration of all dissolved particles in a solution. All dissolved components of a liquid are collected and will be displayed in a separate value. This makes it particularly suitable for quality control and research laboratories. The standalone device can optionally be equipped with a printer. Furthermore, the device can be controlled via a PC using the EuroOsmo 7400 software (please order separately).

- Sample volume of only 50 µl
- LCD display
- User-friendly menu guidance
- Fast, easy and automatic measurements
- High reproducibility
- Peltier cooler

Scope of supply: Osmometer with measuring head, incl. sample vessels and calibration standards

Specifications

Sample volume:	50...150 µl
Osmolality range:	0...2000 mOsmol/kg
Measurement duration:	approx. 2 min.
Measurement precision	
SD:	≤ 4 mOsmol/kg (0...400 mOsmol/kg)
RSD:	≤ 1 % (400...2000 mOsmol/kg)
Linearity:	±1 % (0...1500 mOsmol/kg) ±1.5 % (0...2000 mOsmol/kg)
Display:	LCD
Ambient conditions:	10...35 °C, 20...80 % relative humidity (non-condensing)
Dimensions (W x D x H):	160 x 340 x 182 mm
Weight:	5.3 kg
Power supply:	100-240 V, 50/60 Hz, 70 W

Type	PK	Cat. No.
Semi-Micro Osmometer K-7400S	1	6.287 298



2 Osmolality standards

Osmolality Standards for calibration and control, compatible with all types of osmometers. Extensive range: 50 to 3000 mOsmol/kg H₂O, ISO 17025 certified. Values from 100 to 700 mOsmol/kg H₂O according to European Pharmacopoeia 2.2.35 and US Pharmacopoeia 785. 12 ampoules of 5 ml each.

Reagecon



Type	Description	PK	Cat. No.
RE-OSM-50	50 mOsmol/kg H ₂ O	12	6.286 326
RE-OSM-100	100 mOsmol/kg H ₂ O	12	6.286 324
RE-OSM-200	200 mOsmol/kg H ₂ O	12	6.286 325
RE-OSM-290	290 mOsmol/kg H ₂ O	12	6.280 786
RE-OSM-300	300 mOsmol/kg H ₂ O	12	6.284 310
RE-OSM-400	400 mOsmol/kg H ₂ O	12	7.970 554
RE-OSM-500	500 mOsmol/kg H ₂ O	12	6.270 201
RE-OSM-600	600 mOsmol/kg H ₂ O	12	6.286 327
RE-OSM-700	700 mOsmol/kg H ₂ O	12	6.286 328
RE-OSM-850	850 mOsmol/kg H ₂ O	12	6.286 334
RE-OSM-900	900 mOsmol/kg H ₂ O	12	6.286 335
RE-OSM-1000	1000 mOsmol/kg H ₂ O	12	6.286 329
RE-OSM-1500	1500 mOsmol/kg H ₂ O	12	6.286 330
RE-OSM-2000	2000 mOsmol/kg H ₂ O	12	6.286 331
RE-OSM-2500	2500 mOsmol/kg H ₂ O	12	6.286 332
RE-OSM-3000	3000 mOsmol/kg H ₂ O	12	6.286 333

1 LLG-Serological pipettes, PS, sterile

Serological pipettes from LLG are ideally suited for sterile serological and cell culture applications. Easy to read graduation scales facilitate volume measurement and dosing. All LLG serological pipettes are plugged, sterile, pyrogen-free and have an increased volume capacity through extra graduations.

- Also available as short-pipettes (5 ml, 10 ml and 25 ml) or wide-mouth pipette (10 ml)
- 1 ml, 5 ml, 10 ml, 25 ml and 50 ml pipettes contain a bi-directional secondary graduation scale for precise dosing
- Colour coded ringmark for easy volume identification
- Single packed in easy-to-open plastic/paper packaging



Volume ml	Grad. ml	Colour code	Negative graduations	PK	Cat. No.
1	1/100	yellow	0,3	500	9.380 440
2	1/50	green	0,6	500	9.380 441
5	1/10	blue	3	200	7.930 401
10	1/10	orange	3	200	6.268 240
10	1/10	orange (wide mouth)	3	200	9.380 442
25	2/10	red	8	150	7.930 403
50	5/10	purple	10	100	9.380 443
5	1/10	blue (short form)	3	200	6.265 881
10	2/10	orange (short form)	10	150	6.265 882
25	5/10	red (short form)	9	100	6.265 883

2 Serological pipettes, PS, bulk package, sterile

- Single packed in bulk package
- Increased volume capacity through extra graduations
- Colour coded for easy volume identification
- Plugged, filters/plugs made of PET
- Pyrogen-free
- DNase-/RNase-free
- Free of human DNA
- Sterile

Thermo Scientific



Plastic/Plastic-Peel packaging

Capacity ml	Grad. ml	additional scale ml	Tolerance ± ml	Colour code	PK	Cat. No.
1	1/100	0.3	0.02	yellow	1000	9.380 464
2	1/100	0.3	0.04	black	500	9.380 465
5	1/10	2	0.10	blue	200	9.380 466
10	1/10	3	0.20	orange	200	9.380 467
25	2/10	10	0.50	green	200	9.380 468
50	2/10	10	0.75	purple	100	9.380 469

3 Graduated pipettes for tissue culture, clear glass, amber stain graduation

EX (TD) calibrated. Short form. Main point ring graduation. Specially for tissue culture and working on cleanroom benches. With durable amber stain graduation. Zero to the tip, cotton plugged (8mm outer diameter). With mouth piece for cotton plug.

Hirschmann



Volume ml	Grad. ml	Overall length ± 3 mm	PK	Cat. No.
1	0.1	230	1	6.080 498
2	0.1	230	1	6.090 340
5	0.1	230	1	6.080 523
10	0.1	230	1	6.510 172
25	0.2	230	1	6.510 335



1 2 LLG-Electrical pipette *Plus*



Ergonomic and precise - the cordless and lightweight LLG-Electrical pipette *Plus* enables fast and exact pipetting with glass and plastic pipettes.

- UV resistant housing
- Fatigue-proof pipetting due to ergonomically shaped handle
- Suitable for left and right handers
- Exchangeable filters protect the device mechanism from contamination
- LED display with speed display: High, Low or Gravity mode (for free liquid flow without drive operation)
- 5 different coloured autoclavable nose pieces and labelling area enables customisation of the pipette
- Extremely quiet and powerful drive
- Low-Battery LED indicator



Scope of supply: Charger (5 V micro USB), Li-Ion battery, 5 coloured nose pieces, 3 membrane filters, adapter for 1 ml pipettes, benchtop rack, magnetic wall mounting

Specifications

Membrane filters:	PTFE/Ø 25 mm /0.45 µm
Capacity:	1 to 100 ml, glass and plastic pipettes
Pipette attachment:	Polypropylene, autoclavable
Dimensions:	15 x 152 x 41 mm
Weight:	approx. 200 g
Power supply:	rechargeable Li-Ion battery, 8 h continuous operation
Warranty:	1 year

Description	PK	Cat. No.
LLG-Electrical pipette <i>Plus</i>	1	9.281 041
Membrane filter, 0.45µm, PTFE, non-sterile	5	9.281 005
Replacement accu	1	6.267 647



3 4 Disposable Erlenmeyer Flasks Nalgene™ with vented closure, Type 4115, 4116, PETG, sterile

With blue vented closure, the chance for cross contamination is reduced. Ideal for shaker and suspension cell culture, media preparation or storage. Made of light, crystal clear PETG. Molded-in graduations. Leak-proof HDPE closure has a hydrophobic 0.2µm PTFE membrane that allows sterile air exchange. Flasks offer a 5-year shelf life, a 10⁻⁶ SAL, are non-pyrogenic and non-cytotoxic. Available with flat or baffled bottom. Individually packaged for easy storage and handling.

Thermo Scientific



Type	Description	Capacity ml	Cover type	PK	Cat. No.
4115	Flat Bottom	125	38-430	24	6.234 530
4115	Flat Bottom	250	38-430	12	6.231 087
4115	Flat Bottom	500	45-430	12	9.141 304
4115	Flat Bottom	1000	45-430	6	9.141 305
4115	Flat Bottom	2000	45-430	4	9.141 306
4115	Flat Bottom	2800	70	4	9.141 307
4116	Baffled Bottom	125	38-430	24	9.141 308
4116	Baffled Bottom	250	38-430	12	9.141 309
4116	Baffled Bottom	500	45-430	12	9.141 310
4116	Baffled Bottom	1000	45-430	6	9.141 311
4116	Baffled Bottom	2000	45-430	4	9.141 312
4116	Baffled Bottom	2800	70	4	9.141 313



5 Bottle InVitro™ Biotainer™ Nalgene™, Type 3030, 3120, 3233, 3405, 3410, 3423, PC, sterile

Light blue, with PP screw cap with silicone seal. Providing safe storage from -100 to 99 °C. With printed graduations in ml. With ribbed hand-grips (except 125 ml and 5000 ml). Meets USP 87, 88 and are tested for pyrogenicity.

Thermo Scientific

Type	Capacity ml	Cover type	PK	Cat. No.
3030	125	38 mm	50	4.675 587
3120	1000	48 mm	35	4.675 588
3233	2000	48 mm	20	4.675 589
3405	5000	48 mm	6	4.675 591
3405	5000	48 mm*	6	4.675 590
3410	10000	48 mm	2	4.675 593
3410	10000	48 mm*	2	4.675 592
3423	20000	48 mm	3	4.675 594

* with PE-handle.

1 InVitro™ Biotainer™-Bottle Nalgene™, Type 3025, 3005, 3110, 3230, 3415, PETG, sterile

With PE screw cap with silicone seal. Ready to use. With printed graduations in ml. *Thermo Scientific*
With ribbed hand-grips (except 125 ml and 5000 ml). Materials meet current USP VI, are non-cytotoxic and pyrogen-free.



Type	Capacity ml	Cover type	PK	Cat. No.
3025	125	38 mm	100	4.675 530
3005	500	38 mm	70	4.675 529
3110	1000	48 mm	35	9.102 974
3230	2000	48 mm	20	9.102 977
3415	5000	48 mm	6	4.675 531
3415	5000	48 mm*	6	6.233 835

* with PE handle.

2 Square Media Bottles, PET, sterile **NEW**

For safe storage and transportation of cell culture media. The bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation. The bottle neck (32 mm) provides easy filling. *ISOLAB*

- Thick walls and crush-resistant corners
- Square shape
- Caps with large ridges, made of PE
- Embossed volume graduations



Nominal capacity ml	Dimensions (W x D x H) mm	PK	Cat. No.
125	53 x 53 x 105	36	4.678 038
250	59 x 59 x 147	32	4.678 039
500	77 x 77 x 174	32	4.678 040
1000	93 x 93 x 214	24	4.678 041

3 Square Media Bottles Nalgene™ Typ 2019, PETG, sterile

With white HDPE screw closure. Reduced permeability to CO₂/O₂ which reduces pH-shift. *Thermo Scientific*
Bottles and closures are radiation-sterilised and pyrogen-free to eliminate costly washing, depyrogenation and autoclaving steps. Heatshrink band around closure and neck provides tamper-evident seal. Packed in shrink-wrapped trays. 2L size has molded-in handgrips and a 53-mm (53B) white closure. Bottles are sterile to 10⁻⁶ SAL, non-pyrogenic, non-cytotoxic and comply with USP Class VI guidelines. Sterile. Transparent. Leakproof. Graduated.



Type	Capacity ml	Dimensions mm	Cover type	PK	Cat. No.
2019	30	64 x 38 x 38	diam. 20 mm	96	4.675 522
2019	60	82 x 41 x 41	diam. 24 mm	96	4.675 523
2019	125	110 x 54 x 54	diam. 38 mm/design 430	48	4.675 524
2019	250	146 x 61 x 61	diam. 38 mm/design 430	48	4.675 525
2019	500	177 x 74 x 74	diam. 38 mm/design 430	24	4.675 526
2019	1000	220 x 94 x 94	diam. 38 mm/design 430	24	4.675 527
2019	2000	271 x 116 x 116	diam. 53 mm/design 53B	12	4.675 528



1 Media Bottles Nalgene™, Type 382019, PETG, sterile

Suited for biopharmaceutical processing and storage of critical reagents and bulk intermediates such as vaccine and protein therapeutic preparations. Manufactured in a certified ISO 14644-1 Class 7 cleanroom. Containers are lot certified to comply with particulate limits specified in USP <788>, EP 2.9.19, and JP 14th ed. Part 1, Section 24. Packaging is designed for cleanroom applications. Bottle and closure are secured with a tamper-resistant heat-shrink band and packaged in heat-sealed bags to support cleanroom operations. USP Class VI, EP Modified Abnormal Toxicity, and USP <661> physicochemical tests compliant. Bottles meet the requirements for USP Class VI, EP Modified Abnormal Toxicity Test, are non-cytotoxic, pyrogen-free, non-hemolytic, and comply with USP <661> physicochemical guidelines. Resins are free of animal derived components (ADCF). Leakproof.

Thermo Scientific

Type	Capacity ml	Cover type	PK	Cat. No.
382019	30	diam. 20 mm /design 415	72	4.675 515
382019	60	diam. 24 mm /design 415	72	4.675 516
382019	125	diam. 38 mm /design 430	48	4.675 517
382019	250	diam. 38 mm /design 430	48	4.675 518
382019	500	diam. 38 mm /design 430	24	4.675 519
382019	1000	diam. 38 mm /design 430	24	4.675 520
382019	2000	diam. 53 mm /design 53B	12	4.675 521



2 Square Media Bottles Nalgene™ Type 2015, PC, with screw cap, PP



Thermo Scientific

PC bottle with leakproof PP screw cap. With moulded graduations and pouring rim. Ideal for storing aqueous solutions and for the short-term storage of cell culture media. Autoclavable.

Capacity ml	Screw cap diam. mm	Width mm	Depth mm	Height with cap mm	PK	Cat. No.
30	20	38	38	64	12	9.103 284
60	24	41	41	83	12	9.103 285
125	38-430*	54	54	110	6	9.103 286
250	38-430*	57	57	146	6	9.103 287
500	38-430*	74	74	177	4	9.103 288
1000	38-430*	94	94	220	4	9.103 289
2000	53B	116	116	271	1	9.103 077

* with high form thread.



3 Filling and Venting Closures Nalgene™ with 3 ports, Type 2162, PP



Thermo Scientific

With TPE gasket and port caps, Nalgene 50 platinum-cured silicone tubing. All plastic screw closures for sterile liquid transfer of tissue media, biological reagents, pure water and chemicals to and from Nalgene-carboys. For applications such as bio-reactors and fermenters. Suitable for all large Nalgene carboys or bottles with screw closures of 53mm (53B) or 83mm (83B). Includes two Nalgene 550 platinum-cured silicone tubing for drop tube and splash guard. Can be used with Nalgene carboy bottles with properly set up peristaltic pumps. Autoclavable.

Type	Dimensions (dia. x H) mm	For tubing bore mm	Cover type mm	PK	Cat. No.
2162	66,7 x 68,6	6,3	53	1	7.048 080
2162	102 x 98	12,7	83	1	7.048 081
2162	102 x 98	6,3	83	1	7.048 082

Centrifuges Cellspin® III

Centrifuge series with a large speed range for special requirements of cytology or general laboratory tasks.

THARMAC GmbH

- Very precise setting options
- Automatic rotor detection
- Clear control panel
- Pulse centrifugation
- Automatic lid lock and emergency release
- Automatic unbalance shutdown
- Very solid metal housing and centrifuge chamber made of stainless steel
- Without coal dust emissions
- Maintenance-free according to DGUV 100-500
- CE and IVD certified

Specifications

Number of memory slots:	100
Timer:	0.1 ... 99.5 min
Dimensions (W x D x H):	405 x 500 x 325 mm
Weight (without rotor):	32 kg
Power supply:	230 V, 50/60 Hz

1 Cyto-centrifuges Cellspin® III CYTO



The specialist in cytology with a large selection of open and closed rotors.

THARMAC GmbH

- Compatible with Shandon™ Cytospin™
- Quickchange® for rapid rotor change
- For cytorotors with 4, 8 and 12 positions

Specifications

Max. speed:	200 ... 2000 rpm
Max. capacity:	0.1 ... 5 ml



Type	Description	PK	Cat. No.
Cellspin® III CYTO	open, fixed 4-positions-rotor	1	4.672 261
Cellspin® III CYTO	open, removable 4-positions-rotor	1	4.672 262
Cellspin® III CYTO	closed, removable 4-positions-rotor	1	4.672 263
Cellspin® III CYTO	open, fixed 8-positions-rotor	1	4.672 264
Cellspin® III CYTO	open, removable 8-positions-rotor	1	4.672 265
Cellspin® III CYTO	closed, removable 8-positions-rotor	1	4.672 266
Cellspin® III CYTO	open, fixed 12-positions-rotor	1	4.672 267
Cellspin® III CYTO	open, removable 12-positions-rotor	1	4.672 268
Cellspin® III CYTO	closed, removable 12-positions-rotor	1	4.672 269
Cellspin® III CYTO	open, removable 12-positions-EASY-rotor	1	4.672 270
Cellspin® III CYTO	closed, removable 12-positions-EASY-rotor	1	4.672 271

Further models can be found in our online shop.

2 Cyto-centrifuge Cellspin® III UNI



For cytology and general laboratory applications with a wide range of rotors.

THARMAC GmbH

- No reprogramming required
- Compatible with Shandon™ Cytospin™
- Speed adjustment to max. 2000 rpm when using cytorotors
- For swing-out, angle and hematocrit rotors and cytorotors

Please order rotors separately.

Specifications

Max. speed:	15000 rpm
Standard laboratory applications:	4 x 200 ml
Cytology:	0.1 ... 5 ml

Type	PK	Cat. No.
Cellspin® III UNI	1	4.672 272





1 **Cytocentrifuges Cellspin® III LAB**

NEW

Versatile basic centrifuge for laboratory applications with fine speed gradation and a large selection of rotors.

THARMAC GmbH

Please order rotors separately.

Specifications

Max. speed: 15000 rpm
Max. load: 4 x 200 ml

Type	PK	Cat. No.
Cellspin® III LAB	1	4.672 273



4.672 282

Accessories for Centrifuges Cellspin® III

NEW

THARMAC GmbH

Description	PK	Cat. No.
EASY Single Cellfunnel, disposable, with white filter card	40	4.672 274
EASY Single Cellfunnel, disposable, with white filter card	200	4.672 275
Open, fixed 4-position rotor	1	4.672 276
Open, fixed 8-position rotor	1	4.672 277
Open, fixed 12-position rotor	1	4.672 278
Open, removable 4-position rotor	*	1 4.672 279
Open, removable 8-position rotor	*	1 4.672 280
Open, removable 12-position rotor	*	1 4.672 281
Open, removable 12-position EASY rotor	*	1 4.672 282
Closed, removable 4-position rotor	*	1 4.672 283
Closed, removable 8-position rotor	*	1 4.672 284
Closed, removable 12-position rotor	*	1 4.672 285
Closed, removable 12-position EASY rotor	*	1 4.672 286
Adapter for removable rotors	1	4.672 287

*Adapter required (Cat. No. 4.672 287)



4.672 284

Clips for Centrifuges Cellspin® III

NEW

THARMAC GmbH

Description	PK	Cat. No.
CellClip for Cellspin® cyto rotors	1	4.660 912
Clip, stainless steel for EASY rotors	1	4.660 915



4.660 912



4.660 915



6 **Accessories for Cytocentrifuges Cellspin®, Single Cellfunnel®**

THARMAC GmbH

Also suitable for Shandon™ Cytospin™.

Description	PK	Cat. No.
Single Cellfunnel®, reusable, for Cat. No. 4.660 917, 4.660 920	12	4.660 916
Filter cards for Cat. No. 4.660 916	200	4.660 917
Cytoslides, uncoated, 1 circle	100	4.660 918
Cytoslides, coated, 1 circle	100	4.660 919
Filter cards, thin, brown for samples ≤0,4 ml	200	4.660 920
Single Cellfunnel®, disposable with white filter card	100	4.660 923
Single Cellfunnel®, disposable with white filter card	500	4.660 924

1 Aspirator LLG-uniVACUUSYS



LLG-uniVACUUSYS Vacuum Aspiration System **with integrated vacuum pump and vacuum controller** is ideally suited for aspirating liquids in Life Science applications, e.g. the removal of media from cell cultures, aspiration of supernatants after centrifugation, or the removal of wash solutions from Immuno assay plates. The set vacuum is automatically re-adjusted in case of deviations.

- Integrated vacuum pump with vacuum control
- Easy to use
- Self-closing connectors for quick installation and prevention of liquid or aerosol escape
- **Liquid level sensor**, prevents liquid overflow
- Autoclavable waste collection bottle and nozzle

Scope of supply: Vacuum Aspiration System with integrated vacuum pump, 4 liter waste collection bottle, single channel needles and 8-channel needle aspirator handles, single channel and 8-channel adaptor for 200 µl pipette tips, single channel adaptor for 1000 µl pipette, tubing and quick-connectors

Specifications

Vacuum range:	0 ... 600 mbar (adjustable)
Aspiration rate:	1 ... 15 ml/s
Noise emission:	<50 dB(A)
Dimensions (W x D x H):	180 x 320 x 530 mm
Weight:	3.4 kg
Power supply:	100 ... 240 V, 50/60 Hz
Warranty:	3 years

Type	Plug type	PK	Cat. No.
LLG-uniVACUUSYS	EU	1	6.263 585
LLG-uniVACUUSYS	UK	1	6.263 586



Aspirator systems FTA-1/FTA-2i

Designed for routine aspiration of the supernatant alcohol/buffer from the walls of microtubes during DNA/RNA purification and other macromolecule reprecipitation techniques. Grant

- Fitted with hydrophobic microbiological filter
- The hydrophobic microbiological suction filter eliminates risk of contamination from the trap flask. Efficiency up to 99.9 %, holds particles bigger than 0.027 micron, which are smaller than agents of Hepatitis A, B and C.
- Polyethylene tube connects collecting tip to the trapping flask
- Built-in micro-compressor creates negative pressure in trapping flask for removal of liquid from microtubes

Specifications

Aspiration rate:	up to 10 l/min
Flow rate:	72 ml/min with collecting tip 666 ml/min without collecting tip
Power supply:	120 ... 230 VAC, 50/60 Hz

2 Aspirator FTA-1

Scope of supply: Aspirator system with integrated pump, trap flask, aspiration tip and tube holders for 2 tubes Grant

Specifications

Volume Trap flask:	1 l
Vacuum range:	500 mbar
Dimensions (W x D x H):	160 x 210 x 340 mm
Weight:	1.7 kg

Type	PK	Cat. No.
FTA-1	1	9.721 058





1 Aspirator FTA-2i

NEW
Scope of supply: Aspirator system with integrated pump and trap flask

Grant

Specifications

Volume Trap flask:	2 l
Vacuum range:	200 ... 800 mbar (adjustable)
Dimensions (W x D x H):	185 x 290 x 390 mm
Weight:	1.85 kg

Type	PK	Cat. No.
FTA-2i	1	6.311 061



4.671 980

Adapter sets for Aspirator FTA-1/FTA-2i

NEW

Grant

Scope of supply:
HAS-1: Handheld vacuum controller, 1-channel adapter (with ejector) for 200 µl tips, 1-channel adapter with 125 mm stainless steel pin, 1-channel adapter with 40 mm stainless steel pin, 8-channel adapter (with ejector) for 200 µl tips, 8-channel adapter with 35 mm stainless steel pin, SH-6 stand

MA-8: Tube adaptor, 8 channel aspiration tip, 8 channel tip holder

Type	PK	Cat. No.
HAS-1	1	4.671 980
MA-8	1	9.721 077



3 EcoVac safety suction systems

schuett-biotec



For safe and comfortable removal of liquid excess. EcoVac increases the safety standard, when working with infectious material. Completely autoclavable. Screw-cap of safety bottle incl. 2 self-locking fittings. When tubing is removed, they close automatically and the bottle will be sealed hermetically. Safety bottle made of impact and chemical-resistant polypropylene, with screw-cap incl. 2 self-locking fittings, ventilation system, safety filter and 5m of silicone tubing.

EcoVac vacuum pump (optional):

Quiet with low vibration. Throughput 4L/min., 300mbar ult. vacuum, with illuminated on/off switch and 1m connecting cable. Overall dimensions: 80mm x 60mm x 160mm (W x H x D). 230V 50/60Hz.

Foot-switch (optional): For short-time repeated use of EcoVac.

Replacement covers and other spare parts on request.

Supplied with: EcoVac system (1.2.4 or 5), safety bottle (breakproof and chemically stable) with screw cap and 2 self-locking fittings, silicone tubing 2 x 1.5m (autoclavable), safety filter, 2 angled fittings for tubing connection, 1 aeration insert

Type	Capacity Litres	PK	Cat. No.
EcoVac 1 System	1	1	6.287 611
EcoVac 2 System	2	1	9.777 000
EcoVac 4 System	4	1	9.777 001
EcoVac 5 System	5	1	6.287 612
Spare bottle 1 incl. Screw-cap with 2 self-locking fittings	*	1	6.287 613
Spare bottle 2 incl. Screw-cap with 2 self-locking fittings	*	1	9.777 007
Spare bottle 4 incl. Screw-cap with 2 self-locking fittings	*	1	9.777 010
Spare bottle 5 incl. Screw-cap with 2 self-locking fittings	*	1	6.287 614
Vacuum pump, incl. 1m cable		1	9.777 005
Foot switch		1	9.777 008
Safety filter 0.2 µm pore size, Ø 62 mm		2	9.777 009

* without angled fittings, please order separately

Fluid aspiration systems BioChem-VacuuCenter BVC basic/control/professional

VACUUBRAND



The compact BioChem-VacuuCenter offers the perfect solution for safe, sensitive and efficient aspiration of supernatants or filtration in all application areas.

- The BVC basic is designed for connection to an existing external vacuum source like a diaphragm pump or a vacuum network
- The BVC control and professional serve for efficient and convenient aspiration of supernatants. The vacuum level and thus the suction force is sensitively adjustable by the electronic touch panel and allows a delicate and reproducible operation. The chemically-resistant diaphragm vacuum pump is automatically turned on and off as needed, which reduces the low noise level even further.
- The BVC professional, with 4L PP bottle and self-closing quick couplings minimises risks in transporting hazardous waste and contamination of the workplace.
- All systems are available in two complete equipment options with different collection flasks and ready to accept a second aspiration hand controller (VHC) to support two users. The 2L borosilicate glass bottle (all types with "G" in the description) with a protective coating has a very high chemical resistance. For larger amounts of liquids the 4L bottle of unbreakable polypropylene (PP) is used.

Type	Dimensions (W x D x H) mm	Pump	Weight kg	Plug type	PK	Cat. No.
		Model				
BVC basic	200 x 250 x 490	-	2.8	CEE	1	9.882 225
BVC basic G	180 x 230 x 430	-	2.8	CEE	1	9.882 226
BVC control	194 x 408 x 500	ME 1C	7.3	CEE	1	9.882 227
BVC control	194 x 408 x 500	ME 1C	7.3	UK	1	4.670 410
BVC control G	194 x 408 x 430	ME 1C	7.7	CEE	1	9.882 228
BVC control G	194 x 408 x 430	ME 1C	7.7	UK	1	4.670 413
BVC professional	194 x 408 x 500	ME 1C	7.3	CEE	1	9.882 229
BVC professional	194 x 408 x 500	ME 1C	7.3	UK	1	4.670 415
BVC professional G	194 x 408 x 430	ME 1C	7.7	CEE	1	9.882 230
BVC professional G	194 x 408 x 430	ME 1C	7.7	UK	1	4.670 417

Country-specific power cord versions available on request.

3 Accessories for Biochem-VacuuCenter BVC basic/control/professional

VACUUBRAND

Description	PK	Cat. No.
VHCpro Vacuu Hand Control handset	1	6.260 677
Stand for VHCpro suction handset	1	6.260 678
VHCpro Adapter for pipette tips with tip ejector	1	4.652 758
VHCpro 8-channel tip adapter with ejector	1	6.266 573
BVC Shuttle, mobile underframe	1	6.266 574
Kit for second VHCpro to the bottle of a BVC professional	1	6.254 294
Kit for second VHCpro to the bottle of a BVC basic or BVC control	1	9.882 983

For connection of a second hand controller please order additionally to the adapter set the handset 6.260 677



9.882 228



9.882 229





1 Filter units, PES membrane, sterile

These bottle-top filter units are ideally suited for the separation or purification of samples which are contained in large volumes. The units are available with either 0.22µm or 0.45µm pore sizes and 3 different volumes (250, 500 and 1000ml).

Features:

- Bottle-top filter and reservoir bottle are included
- Light weight and stable wall construction
- Large knurls on the reservoir bottle cap for easy screwing
- Wide bottle mouth for efficient pouring out
- Volume graduation
- Hose connector fits multiple diameters
- Pyrogen-free

Membrane material: Polyethersulfone (PES)

Capacity ml	Pore size µm	Neck thread mm	PK	Cat. No.
250	0.22	45	12	6.267 180
250	0.45	45	12	6.267 181
500	0.22	45	12	6.267 182
500	0.45	45	12	6.267 183
1000	0.22	45	12	6.267 184
1000	0.45	45	12	6.267 185



2 Filter units Nalgene™ Rapid-Flow™, PES Membrane, sterile

Ideal for biological and pharmaceutical sterile filtration. PES membrane features low protein binding, low level of extractables and a high flow rate. Now available in three pore sizes: *Thermo Scientific*

The best filter units with 0.20µm and 0.45µm pore size and new to the protection of valuable cell cultures from mycoplasma with 0.10µm pore size. Filter top and filtrate bottle are graduated. Blue color-coded collar with cellulosic vent plug side arm and quick-disconnect tubing adapter. Leakproof, sterile screw closure included for storage of sterile filtrate. Sterile, single packed. Certificate of Quality included in each full case. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units, bottle tops and receivers for easy identification and lot traceability.

Type	Volume upper/lower part ml	Membrane diam. mm	Pore size µm	Thread GL	PK	Cat. No.
565	150/150	50	0.10	45	1	9.046 022
568	250/250	50	0.10	45	1	9.046 024
566	500/500	75	0.10	45	1	9.046 023
565	150/150	50	0.20	45	1	6.302 336
568	250/250	50	0.20	45	1	6.228 218
566	500/500	75	0.20	45	1	6.227 381
569	500/500	90	0.20	45	1	6.225 298
567	1000/1000	90	0.20	45	1	6.229 041
165	150/150	50	0.45	45	1	7.047 785
168	250/250	50	0.45	45	1	7.047 791
166	500/500	75	0.45	45	1	7.047 787
169	500/500	90	0.45	45	1	7.047 793
167	1000/1000	90	0.45	45	1	7.047 789



3 Bottle Top Filters Nalgene™ Rapid-Flow™, PES Membrane, sterile

Filters securely screw onto glass media bottles with 33 mm or 45 mm neck sizes. *Thermo Scientific*
Allows direct filtration of liquid into sterile glass media bottles.

Tight and secure thread connection for vacuum filtration, vacuum tubing to be connected onto tubing adapter of side-arm. Graduated. Certificate of quality included in each full case. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units for easy identification and lot traceability.

Type	Capacity ml	Membrane diam. mm	Pore size µm	Neck thread GL	PK	Cat. No.
596	150	50	0.20	33	12	4.675 537
596	150	50	0.20	45	12	4.675 532
595	500	75	0.20	33	12	4.675 533
595	500	75	0.20	45	12	4.675 535
597	1000	90	0.20	33	12	4.675 540
597	1000	90	0.20	45	12	4.675 541
296	150	50	0.45	33	12	4.675 538
296	150	50	0.45	45	12	4.675 539
295	500	75	0.45	33	12	4.675 534
295	500	75	0.45	45	12	4.675 536

1 Filter Units, Cellulose Nitrate Membrane, sterile

White, cellulose nitrate membrane. Colour code: green. Gamma-irradiated sterile. *Thermo Scientific*
 Highest throughput rate for water and aqueous solutions, low extractables content.
 Surfactant-free. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units, bottle tops and receivers for easy identification and lot traceability.



Warning

H phrases: H228

Type	Volume upper/lower part ml	Membrane diam. mm	Pore size µm	Thread GL	Grid	PK	Cat. No.
121	115/115	50	0.20	45	without	72	4.675 600
121	115/115	50	0.45	45	black	72	4.675 542
125	150/150	50	0.20	45	without	12	4.675 543
125	150/150	50	0.45	45	black	12	4.675 544
125	150/150	50	0.80	45	without	12	4.675 545
126	250/250	50	0.20	45	without	12	4.675 546
126	250/250	50	0.45	45	black	12	4.675 547
126	250/250	50	0.80	45	without	12	4.675 548
450	500/500	75	0.20	45	without	12	4.675 549
450	500/500	75	0.45	45	black	12	4.675 550
450	500/500	75	0.80	45	without	12	4.675 551
127	500/1000	75	0.20	45	without	12	4.675 552
127	500/1000	75	0.45	45	black	12	4.675 553
127	500/1000	75	0.80	45	without	12	4.675 554

1



2 Filter Units Nalgene™ Rapid-Flow™, Nylon Membrane, sterile

Single-use, disposable filter units for sterile filtration of media and other reagents, and for other highly sensitive cell culture lines. With polystyrene (PS) upper and lower chambers and nylon membrane. Colour code: red. For cell culture. Gamma-irradiated sterile. Extremely low in extractable substances, no wetting agents. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units, bottle tops and receivers for easy identification and lot traceability. *Thermo Scientific*

Type	Volume upper/lower part ml	Membrane diam. mm	Pore size µm	Thread GL	PK	Cat. No.
150	150/150	50	0.20	45	1	9.046 055
150	150/150	50	0.45	45	1	9.046 056
153	250/250	50	0.20	45	1	9.046 061
153	250/250	50	0.45	45	1	9.046 062
151	500/500	75	0.20	45	1	9.046 064
151	500/500	75	0.45	45	1	9.046 065
163	500/500	90	0.20	45	1	9.045 978
154	500/1000	75	0.20	45	1	9.046 067
154	500/1000	75	0.45	45	1	9.046 068
164	1000/1000	90	0.20	45	1	9.045 979

2

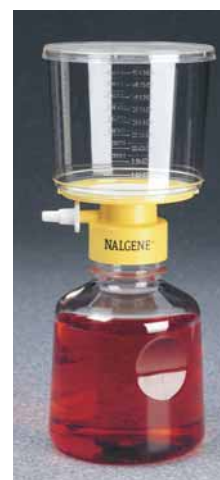


3 Filter units Nalgene™ Rapid-Flow™, SFCA Membrane, sterile

Single-use, disposable filter units for sterile filtration of media and other reagents, and for other highly sensitive cell culture lines. With polystyrene (PS) upper and lower chambers and surfactant-free, cellulose acetate membranes. Colour code: yellow collar. For cell culture. Gamma-irradiated sterile. Low protein binding, with high throughput rate for proteinaceous solutions and minimal extractables content. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units bottle tops and receivers for easy identification and lot traceability. *Thermo Scientific*

Type	Volume upper/lower part ml	Membrane diam. mm	Pore size µm	Thread GL	PK	Cat. No.
122	115/115	50	0.20	45	72	4.675 556
122	115/115	50	0.45	45	72	4.675 555
155	150/150	50	0.20	45	12	4.675 575
155	150/150	50	0.45	45	12	4.675 576
157	250/250	50	0.20	45	12	4.675 577
157	250/250	50	0.45	45	12	4.675 578
156	500/500	75	0.20	45	12	4.675 579
156	500/500	75	0.45	45	12	4.675 580
158	500/1000	75	0.20	45	12	4.675 581
158	500/1000	75	0.45	45	12	4.675 582
162	500/500	90	0.20	45	12	4.675 573
162	500/500	90	0.45	45	12	4.675 574
161	1000/1000	90	0.20	45	12	4.675 571
161	1000/1000	90	0.45	45	12	4.675 572

3





1 Filter Units Nalgene™, PSU, without membrane

Graduated reusable filtration unit bodies with upper manifolds and lower receivers made of unbreakable polysulphone (PSU). Nominal filtration surface 11cm². With membrane support plate. Without membrane. For filter membrane from 47mm to 50mm.

Thermo Scientific

Volume upper/lower part ml	PK	Cat. No.
250/250	1	9.046 151
500/500	1	9.046 152
500/1000	1	9.046 153



2 Bottle Top Filters Nalgene™ Rapid-Flow™, SFCA Membrane, sterile

Tissue culture filters for screw fitting onto bottles with 33mm or 45mm neck diameters. With surfactant-free, cellulose acetate membrane (SFCA) and polystyrene (PS) housing. Gamma-irradiated sterile. Pyrogen-free. Non cytotoxic. Low-pressure filtration can be carried out directly into a suitable sterile bottle. Caution: Only use sterile bottles authorised for use in low pressure applications. Always wear protective equipment for low pressure procedures. The membrane is characterised by its low protein binding, good throughput rates and minimal clogging with negligible protein loss. Permanent, moulded graduations. Quick-disconnection tubing adaptor with cellulosic vent plug for tubing with an internal diameter of 6mm to 9mm. Lot number, catalogue number, membrane type, pore size and expiration date are printed on filter units for easy identification and lot traceability.

Thermo Scientific

Type	Capacity ml	Membrane diam. mm	Pore size µm	Neck thread GL	PK	Cat. No.
290	150	50	0.20	33	12	4.675 561
290	150	50	0.45	33	12	4.675 562
290	150	50	0.20	45	12	4.675 563
290	150	50	0.45	45	12	4.675 564
291	500	75	0.20	33	12	4.675 565
291	500	75	0.45	33	12	4.675 566
291	500	75	0.20	45	12	4.675 567
291	500	75	0.45	45	12	4.675 568
292	1000	90	0.20	33	12	4.675 569
292	1000	90	0.20	45	12	4.675 570



3 Filter Storage Bottles Nalgene™ Rapid-Flow™, PS, sterile

Easy-to-use ergonomic design. Can be used to store sterilised filtrate. Radiation-sterilised to save you time and minimize contamination. Also handy as presterilised, single-use storage containers. 1-1/2-turn threaded screw closure guarantees a leakproof seal and eliminates pH shift in receivers. Certified. Pyrogen-free, non cytotoxic. Sterile, graduated and leakproof.

Thermo Scientific

Type	Capacity ml	Thread GL	PK	Cat. No.
455	150	45	24	4.675 557
455	250	45	24	4.675 558
455	500	45	12	4.675 559
455	1000	45	12	4.675 560



4 Disposable Syringes HSW HENKE-JECT®, 2-part, sterile

Disposable syringes with PP barrel, and PE piston. Luer-Slip or Luer-Lock nozzle.

Henke-Sass Wolf

- Sterile, individually blister strip packed
- Wipe-resistant scale
- Transparent cylinder
- Pyrogen-free, non-toxic and PVC-free

Capacity ml	Nozzle type	PK	Cat. No.
30	Luer-Slip	50	9.410 025
50	Luer-Slip	30	9.410 050
30	Luer-Lock	50	6.250 019
50	Luer-Lock	30	6.286 307

➔ Further syringes can be found in chapter 14.
➔ Syringe filters can be found in chapter 6.

1 Laminar Flow Clean Benches, Type Airstream®

The new generation of ESCO Airstream horizontal and vertical laminar flow benches offer optimal product protection by achieving ISO Class 5 conditions inside the cabinet.

ESCO

Features:

- Energy-efficient DC ECM motors
- Stable and self-compensating airflow
- Sentinel Gold microprocessor control
- Control panel to easily monitor the operating parameters
- Standby mode reduces power consumption while maintaining the ISO class 5 conditions inside the work bench
- Visual and audible alarms
- Side windows made of safety glass
- Standard working space height vertical/horizontal benches: 689 mm/573 mm
- Additional working space heights on request.
- ULPA filter with long service life and protection mesh
- Pre-filter EU3
- ISOCIDE antimicrobial coating on all painted surfaces minimizes contamination
- Apparatus for UV lamp with timer (UV lamp and protective cover must be ordered separately)

Options on request:

Stands, electrical sockets (4.662 021), front covers with UV lamp, IQ/OQ

Please order stands separately.

Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Description	PK	Cat. No.
LHG-3AG-F8	0.9 m	1035 x 784 x 1270	855 x 596 x 573	horizontal	1	6.285 840
LHG-4AG-F8	1.2 m	1340 x 784 x 1270	1160 x 596 x 573	horizontal	1	4.658 999
LHG-5AG-F8	1.5 m	1645 x 784 x 1270	1405 x 596 x 573	horizontal	1	4.659 000
LHG-6AG-F8	1.8 m	1950 x 784 x 1270	1770 x 596 x 573	horizontal	1	4.659 001
LVG-3AG-F8	0.9 m	1035 x 784 x 1270	917 x 688 x 689	vertical	1	6.285 841
LVG-4AG-F8	1.2 m	1340 x 784 x 1270	1222 x 688 x 689	vertical	1	6.286 357
LVG-5AG-F8	1.5 m	1645 x 784 x 1270	1527 x 688 x 689	vertical	1	4.659 002
LVG-6AG-F8	1.8 m	1950 x 784 x 1270	1832 x 688 x 689	vertical	1	4.659 003



2 Microbiological Safety Cabinet, class II Type Airstream®

ESCO

- Class II according to DIN 12469
- Ergonomically angled and frameless front sash
- A large easy-to-read digital display and ergonomically sized touchpad
- Tempered glass side walls (S-Series with stainless steel side walls)
- Esco triple-wall design with negative pressure prevents the possibility of contamination from leaks
- ISOCIDE™ antimicrobial coating on all painted surfaces minimises contamination
- Quickstart Mode
- Sentinel-Microprocessor maintains steady blower speed
- RS232 serial interface port
- More options on request, e.g. prefilter at intake socket

Model variations:

Model type E and S: Single ULPA-Filter/H14

Model type G: Dual ULPA-Filter/H14

Options on request:

Electrical outlet, support stand, prefilter, service fixture, UV lamp, IV bar, single piece work surface for E-Series, Q/OQ or KI DISCUS test

Please order support stand separately.

Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
AC2-2E8	0.6 m	730 x 810 x 1400	610 x 580 x 660	1	6.284 857
AC2-3E8	0.9 m	1035 x 810 x 1400	915 x 580 x 660	1	6.270 726
AC2-4E8	1.2 m	1340 x 810 x 1400	1220 x 580 x 660	1	4.659 007
AC2-5E8	1.5 m	1645 x 810 x 1400	1525 x 580 x 660	1	4.659 008
AC2-6E8	1.8 m	1950 x 810 x 1400	1830 x 580 x 660	1	4.658 786
AC2-4G8	1.2 m	1340 x 810 x 1400	1220 x 580 x 660	1	4.658 784
AC2-6G8	1.8 m	1950 x 810 x 1400	1830 x 580 x 660	1	4.659 009
AC2-2S8	0.6 m	730 x 810 x 1400	610 x 580 x 660	1	4.676 195
AC2-3S8	0.9 m	1035 x 810 x 1400	915 x 580 x 660	1	4.676 196
AC2-4S8	1.2 m	1340 x 810 x 1400	1220 x 580 x 660	1	4.676 197
AC2-5S8	1.5 m	1645 x 810 x 1400	1525 x 580 x 660	1	4.676 198
AC2-6S8	1.8 m	1950 x 810 x 1400	1830 x 580 x 660	1	4.676 199

Suitable accessories can be found in our online shop.



1

1

Microbiological Safety Cabinet, class II, acc. to DIN 12469, Type Airstream® Plus

ESCO

- Certified according to EN 12469 by TÜV-Nord, Germany
- Ergonomically angled and motorized front sash for one handed operation (aerosol tight gasket)
- Dual Energy efficient DC ECM motor
- Sentinel-Gold-controller maintains steady blower speed
- Tempered glass side panels with E-Series, stainless steel side walls with S-Series
- LED lamp
- Esco triple-wall design with negative pressure prevents the possibility of contamination from leaks
- Multi-piece work surface removal simplifies cleaning for E-Series, single piece work surface with sink for S-Series
- ULPA-Filter/H14
- Esco ISOCIDE antimicrobial coating on all painted surfaces minimizes contamination
- Quickstart Mode
- RS232 serial interface port

Options on request:

Electrical outlet, support stand, prefilter, service fixture, UV lamp, IV bar, single piece work surface for E-Series, IQ/OQ or KI DISCUS test, RS485 serial interface port for using Voyager Software

Please order support stand separately.

Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
AC2-3E8-TU	0.9 m	1035 x 823 x 1400	915 x 580 x 654	1	4.676 202
AC2-4E8-TU	1.2 m	1340 x 823 x 1400	1220 x 580 x 654	1	4.659 010
AC2-5E8-TU	1.5 m	1645 x 823 x 1400	1525 x 580 x 654	1	4.659 012
AC2-6E8-TU	1.8 m	1950 x 823 x 1400	1830 x 580 x 654	1	4.659 014
AC2-3S8-TU	0.9 m	1035 x 823 x 1400	915 x 580 x 654	1	4.676 203
AC2-4S8-TU	1.2 m	1340 x 823 x 1400	1220 x 580 x 654	1	4.659 011
AC2-5S8-TU	1.5 m	1645 x 823 x 1400	1525 x 580 x 654	1	4.659 013
AC2-6S8-TU	1.8 m	1950 x 823 x 1400	1830 x 580 x 654	1	4.659 015

2


Microbiological Safety Cabinets, Class II, Type NordicSafe®

ESCO

One of the silent Biological Safety Solutions from Esco. Class II according to DIN EN 12469.

- Dual-ULPA filter
- Noise emission <51 dBA
- Best comfort and safety at a favourable price
- Esco triple-wall design with negative pressure prevents the possibility of contamination from leaks
- Ergonomically angled and motorized front sash for one hand operation
- A large easy-to-read digital display and ergonomically sized touchpad
- Tempered glass side panels
- Sentinel-Gold-controller maintains steady blower speed
- Sleep mode with 50% reduced power to save energy, to maintain safety
- Esco ISOCIDE™ antimicrobial coating on all painted surfaces minimizes contamination
- Certified according to EN 12469 by TÜV-Nord, Germany

Options on request:

Electrical outlet, support stand, prefilter, service fixture, UV lamp, IV bar, IQ/OQ or KI-Discus-Test

Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
NordicSafe® ES-NC2-4L8	1.2 m	1200 x 812 x 1410	1130 x 584 x 670	1	4.658 785
NordicSafe® ES-NC2-6L8	1.8 m	1800 x 812 x 1410	1720 x 584 x 670	1	4.659 006

1 Cytotoxic Safety Cabinets Type Cytoculture

1

The Esco Cytoculture Cytotoxic Safety Cabinet provides the highest level of patient, pharmacist and environmental protection in cytotoxic/antineoplastic drug processing. The unique demands of handling and preparing cytotoxic drugs for use in chemotherapy require a specialized cabinet. As cytotoxic drugs cannot be inactivated by chemical decontamination, Class II biosafety cabinets should not be used. With this in mind Esco has developed a highly specialized range of cabinets designed especially for handling these potentially dangerous drugs.

ESCO

- 3-fold filter system
- With V-shaped Hepa filter
- Sentinel™ microprocessor controller supervises all functions
- Motorized sash simplifies transfer of materials into the work zone
- Tested according to DIN 12980, EN 12469, ISO 14644.1 Class 3, EN-1822

Options on request:

Electrical outlet, service fixture, UV lamp, IV bar, carbon filter



Type	Size	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	PK	Cat. No.
CYT-4A1	1.2 m	1420 x 780 x 2190	1270 x 603 x 670	1	4.659 004
CYT-6A1	1.8 m	2030 x 780 x 2190	1870 x 603 x 670	1	4.659 005

2 Biological safety cabinets Herasafe™ 2030i, class II

NEW

2

For demanding cell culture applications and other sensitive work requiring assured safety for product, personnel and environment.

Thermo Scientific

- Interior made of stainless steel, with LED lights
- GUI touchscreen interface
- SmartFlow plus auto compensation
- Cross beam UV in side walls
- Electronic front sash window
- Hinged front window for easy cleaning and disinfection of the interior
- Sloped front window allows fatigue free working
- Padded, ergonomically adjustable armrests (optional)
- 2 x Smart Ports for feeding trough vacuum tubes and cables
- One touch auto start/stop function
- Cloud ready data output
- USB data outputs
- EN 12469



Description	External dimensions (W x D x H) mm	Power consumption		Weight kg	PK	Cat. No.
		W				
0.9 m with 2 x sockets in the rear wall	1000 x 800 x 1536	133		170	1	4.672 619
1.2 m with 2 x sockets in the rear wall	1300 x 800 x 1536	153		200	1	6.311 675
1.5 m with 4 x sockets in the rear wall	1600 x 800 x 1536	217		230	1	4.672 620
1.8 m with 4 x sockets in the rear wall	1900 x 800 x 1536	251		280	1	4.672 621

1


1 Biosafety cabinets Maxisafe™ 2030i

NEW

Thermo Scientific

For CMR substances (carcinogenic, mutagenic, reprotoxic) and other work requiring assured safety for product, personnel and environment. Each device has an integrated WLAN function and can be connected immediately.

- Interior made of stainless steel, with LED lights
- GUI touchscreen interface
- SmartFlow plus auto compensation
- Cross beam UV in side walls
- Padded, ergonomically adjustable armrests (optional)
- 2 x Smart Ports for feeding trough vacuum tubes and cables
- Cloud ready data output
- EN 12469 and DIN 12980

Description	External dimensions (W x D x H) mm	Weight kg	Power consumption W	PK	Cat. No.
0.9 m with 2 x sockets in the rear wall	1000 x 870 x 1536	200	230	1	4.672 622
1.2 m with 2 x sockets in the rear wall	1300 x 870 x 1536	240	240	1	6.292 170
1.5 m with 4 x sockets in the rear wall	1600 x 870 x 1536	280	390	1	6.292 172
1.8 m with 4 x sockets in the rear wall	1900 x 870 x 1536	330	390	1	6.292 174

2

2 MSC-Advantage™ Class II Biosafety Cabinets

Thermo Scientific

Thermo Scientific biological safety cabinets combine smart design and extraordinary value with best-in-class energy efficiency, reliability and usability. The MSC-Advantage is designed to meet the stringent safety requirements of EN 12469:2000 and EN 61010-1:2001, and carries the NF Mark as well as the test report from the Health Protection Agency (HPA) from Porton Down, UK.

- 60% less energy consumption than competing AC motor-driven cabinets
- 60% less heat emission than competing AC motor-driven cabinets
- Extremely low noise level (54 or 59 dB(A)) for a more comfortable work environment
- Largest work surface area of any cabinet (more workspace for your research)
- Cleaning position of window (patented feature that allows user to clean the entire window)
- Sloped front window for improved ergonomics (more comfortable working position)
- Motor operates at reduced speed when front window is closed (keeps interior cleaner for faster set up each day and eliminates noise into the lab when not in use)
- Low overall height to fit into labs with shorter ceilings
- Supply/exhaust air filter: HEPA H 14 EN 1822, 99.999% at 0.3 µm particle size
- Additional exhaust filter option (AEF): HEPA H 14 EN 1822, 99.999% at 0.3 µm particle size
- Voltage: 230 V, 50/60 Hz



Description	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
MSC Advantage 0.9	1000 x 800 x 1522	900 x 630 x 780	170	1	4.010 047
MSC Advantage 1.2	1300 x 798 x 1550	1200 x 495 x 780	240	1	6.235 767
MSC Advantage 1.5	1600 x 800 x 1522	1500 x 630 x 780	230	1	4.010 048
MSC Advantage 1.8	1900 x 798 x 1550	1800 x 495 x 780	340	1	4.010 033

Suitable accessories can be found in our online shop.

1360

1 LLG-Microbiological Media, dehydrated**Media for bacteria****Luria Bertani (Miller):**

- Standard high salt content media for *E. coli* cultivation
- Ideal for plasmid preparation
- Available also as granulated media

Luria Bertani (Lennox):

- Standard medium with low salt content for the cultivation of *E. coli*
- Ideal for cultivating recombinant *E. coli* strains

Terrific Broth:

- Rich content media for the high density cultivation of *E. coli*
- Ideal for protein expression and plasmid preparation
- Available also as granulated media

2xYT Broth:

- Nutritive medium for the cultivation of recombinant *E. coli* strains and for the growth of filamentous bacteriophages

Media for yeasts**YPD-Broth:**

- Standard medium for the cultivation of *Saccharomyces cerevisiae* and other yeasts

Agar**Bact. Agar.:**

- High quality agar used for the preparation of culture media and other bacteriological applications

Luria Bertani Agar (Miller):

- Standard Agar based on Luria Bertani (Miller) media with high salt content
- Ideal for growth and maintaining especially of *E. coli* strains used in molecular microbiology procedures

Luria Bertani Agar (Lennox):

- Standard Agar based on Luria Bertani (Lennox) media with low salt content
- Ideal for growth and maintaining especially of recombinant *E. coli* strains

Media components**Yeast Extract:**

- Concentrate of the water-soluble portion of autolyzed *Saccharomyces cerevisiae* cells
- Non-animal product, used widely for non-animal formulations of bacterial, fungal, mammalian and insect cell culture.

Tryptone:

- Pancreatic digest, tryptone from casein
- Excellent nutrient for use in culture media for producing antibiotics, toxins, enzymes and other biological products

Casein Peptone:

- Pancreatic digest, peptone from casein
- Ideal for use in fermentation applications and microbiological culture media

The safety data sheets of these products are available under www.llg-labware.com/en/zertifikate.

**2** LLG-Microbiological Media

For numerous micro- and molecular biological applications.

The safety data sheets of these products are available under www.llg-labware.com/en/zertifikate.

Description	Capacity g	PK	Cat. No.
Luria Bertani (Miller), Powder	500	1	6.271 000
Luria Bertani (Lennox), Powder	500	1	6.271 010
Terrific Broth, Powder	500	1	6.271 007
2xYT Broth, Powder	500	1	6.271 001
Bact. Agar, Powder	500	1	6.271 003
Luria Bertani Agar (Miller), Powder	500	1	6.271 009
Luria Bertani Agar (Lennox), Powder	500	1	6.271 008
YPD Broth, Powder	500	1	6.271 002
Yeast Extract, Powder	500	1	6.271 004
Tryptone, Powder	500	1	6.271 005
Casein Peptone, Powder	500	1	6.271 011
Tryptic Soya Agar (Caso-Agar), Powder	500	1	6.271 006
Gelysate Agar-PCA w/o. Sugars, Powder	500	1	6.271 013
Trypticasein Soy Broth (TSB-media), Powder	500	1	6.271 018





1 Microbiological rapid tests Lovibond® Dipslides

The Lovibond® Dipslides are designed to test liquids as well as surfaces. These dual-sided Dipslides are available in a wide range of different media types. They are ideal for use in many applications including evaporative cooling towers, closed water circuits, cutting fluids, food testing, and many more.

Lovibond®

Description	PK	Cat. No.
TTC/TTC for total viable count (TVC)	10	6.282 520
TTC/MALT for Yeast, Moulds, Fungi, TVC	10	6.282 521
TTC/ROSE for Yeast, Moulds, Fungi, TVC	10	6.282 522
TTC/MAC for coliforms, TVC	10	6.282 523
TTC/E.COLI for E. coli/coliforms, TVC	10	6.282 524
PDM/MAC for Pseudomonas species, coliforms	10	6.282 525
TTC/PDM for Pseudomonas species, TVC	10	6.282 526
SRB for Sulphate reducing bacteria	10	6.282 527
NRB for Nitrite reducing bacteria	10	6.282 528
R2A/R2A - TTC for testing of potable water	10	6.282 529



2 Incubator Lovibond® DI 10

Designed for the reliable incubation of dipslides in laboratories and field work.

Lovibond®

- Low voltage, in-car operation possible
- Holds up to 12 dipslides or 10 quanti-discs
- Excellent temperature stability
- Programmable incubation period setting
- LCD Temperature display with up/down push button control
- Rapid heating times for fast testing
- External status LEDs

Scope of supply: Incubator incl. external 12 V universal power supply, set of leads (UK, EU, US), 12 V in-car power adapter

Temperature range: ambient +5 ... +40 °C (±0.5 °C)
 Dimensions (W x D x H): 246 x 215 x 162 mm
 Weight: 1.7 kg
 Power supply: 110/220-240 V or 12 V

Type	PK	Cat. No.
Lovibond® DI 10	1	6.291 192
Dipslide-Holder	1	6.274 399



3 Culture Plates 3M™ Petrifilm™

- Ready to use
- 90 % less material volume
- Validated methods
- Time and energy saving
- Increased productivity and reliability
- Low operating costs
- Fast and reliable evaluation

3M Deutschland

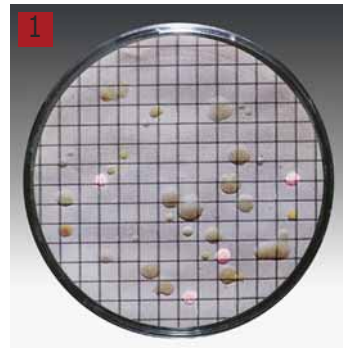
Description	PK	Cat. No.
Total bacteria count aerobic bacteria	100	6.237 738
Total bacteria count aerobic bacteria	1000	6.236 670
Rapid test coliforms	50	6.245 052
Total bacteria count coliforms	50	6.269 820
Total bacteria count coliforms	1000	6.235 875
Bacteria count <i>E.coli</i>	50	6.269 819
Bacteria count <i>E.coli</i> and coliforms	50	6.257 512
Bacteria count <i>E.coli</i> and coliforms	500	6.257 513
Bacteria count Enterobacteriaceae	50	6.251 171
Bacteria count Enterobacteriaceae	1000	6.257 509
Bacteria count <i>S. aureus</i>	20	7.658 234
Bacteria count <i>S. aureus</i>	50	6.257 510
Bacteria count <i>S. aureus</i>	500	6.257 511
Rapid test Yeast and Fungi	50	6.282 104
Bacteria count Yeast and Fungi	100	7.657 837
Bacteria count Yeast and Fungi	1000	6.257 514

➔ Petrifilm™ Reader can be found in our online shop.

1 Nutrient pads

Sterile, dehydrated culture media pads in petri dishes. Once they are moistened with 3.0 ml to 3.5 ml of sterile and demineralised (or distilled) water they are ready-to-use immediately. All Nutrient Pad sets are supplied with the appropriate membrane filters, which are also individually sterile packed. Shelf life of the NPS 18 to 24 months at room temperature. Alternative nutrient media are available on request.

Sartorius Lab Instruments



Danger

H phrases: H228

Diam. mm	Pore size µm	Type	For	Colour	PK	Cat. No.
50	0.45	Azide	Enterococci	green / green	100	9.055 006
50	0.45	Caso	Colony count	green / green	100	9.055 017
50	0.45	Standard TTC	Colony count	green / green	100	9.055 010
50	0.45	Tergitol TTC	E. coli + Coliforms	white / green	100	9.055 011
50	0.45	Chapman	Staphylococci	white / green	100	9.055 032
50	0.45	ECD	E. coli	white / green	100	9.055 025
50	0.45	VLB S7-S	Pediococci + Lactobacilli	white / green	100	9.055 014
50	0.45	Caso	Colony count	green / green	100	9.055 018
50	0.45	M-FC	E. coli + Coliforms	white / green	100	9.055 022
50	0.45	Tomato juice	Leuconostocoenos	green / green	100	9.055 026
50	0.65	Sabouraud	Yeast + mould	grey / green	100	9.055 023
50	0.65	Lysin	wild yeasts	grey / white	100	9.055 015
50	0.45	Cetrimide	Pseudomonas	white / green	100	9.055 031
50	0.65	Schaufus Pottinger	Yeast + mould	white / green	100	9.055 034
50	0.45	Yeast extract	Colony count	green / green	100	9.055 037
50	1.20	Schaufus Pottinger	Yeasts + moulds	white / green	100	9.055 028
50	0.45	Weman	Mesophilic slime-forming bacteria	green / green	100	9.055 019
50	0.45	Bismuth sulphite	Salmonellae	green / green	100	9.055 012

2 Microsart® Media, prefill dishes

Microsart® media are dishes pre-filled with different types of agar medium, sterile-packaged and ready to use.

Sartorius Lab Instruments



Description	PK	Cat. No.
Microsart ADDmedia TSA	1	6.289 297
Microsart ADDmedia Sabouraud	1	6.289 298
Microsart ADDmedia R2A	1	6.289 299

Absorbent medium pads

The absorbent pads are wetted with the appropriate liquid culture medium before a membrane filter is placed on them. They are pre-sterilized in plastic magazines.

Sartorius Lab Instruments

- 47 mm with approx. 3 ml absorption capacity
- 50 mm with approx. 3.5 ml absorption capacity
- Thickness 1.4 mm

Description	Diam. mm	PK	Cat. No.
10 magazines of 100 pads, incl. one dispenser	47	1000	7.076 653
100 pads in petri dishes	50	100	7.910 351



1



1

Automatic spiral plater and diluter easySpiral® Dilute

NEW

A 2-in-1 unit for automatic plating with the possibility of combined serial dilution series. The instrument allows up to 5 serial 1/10 dilutions of a sample to be prepared and then automatically plated onto a Petri dish. Patented circular application: 3 dilutions on a 90 mm Petri dish, 6 dilutions on a 150 mm Petri dish. The countable range is between 30 and 1×10^{12} CFU/mL on a single Petri dish.

interscience

- Times (for different sample viscosities) and volumes are also programmable via USB
- Traceability through Excel™ Export, Data Matrix label
- Intensive cleaning
- Patented overflow technology cleaning system
- 8 bar pump pressure
- 2 fully autoclavable bottles (diluent and disinfectant) and connectors

Specifications

Petri dish size:	55 ... 150 mm
Syringe capacity:	1000 µl
Volume dispensed:	10 ... 1000 µl
Counting range:	30 ... 1×10^{12} CFU/ml
Full cycle time:	134 seconds
Preset pipetting volumes:	50, 100 und 200 µl
Plating modes:	exponential, circles, uniform, pour plate
Cleaning autonomy:	1000 cycles (2 l bottles)
Dimensions (W x D x H):	400 x 415 x 290 mm
Weight:	16.4 kg
Power supply:	100-240 V /50-60 Hz

Type	Dimensions (W x D x H) mm	Weight kg	Supply requirements V	PK	Cat. No.
easySpiral® Dilute	400 x 415 x 290	16.4	100 ... 240 V / 50 ... 60 Hz	1	7.649 479

2



2

LLG-Petri dishes, soda-lime glass

Ext. diam. mm	Height mm	PK	Cat. No.
40	12	1	9.170 570
60	15	1	9.170 571
80	15	1	9.170 572
90	15	1	9.170 575
100	10	1	9.170 573
100	15	1	9.170 574
100	20	1	9.170 576
120	20	1	9.170 577
150	25	1	9.170 578
180	30	1	9.170 579
200	30	1	9.170 580
200	50	1	9.170 581
40	12	10	6.291 543
60	15	10	6.291 544
80	15	10	6.291 545
90	15	10	6.291 548
100	10	10	6.291 546
100	15	10	6.291 547
100	20	10	6.291 549
120	20	10	6.291 550
150	25	10	6.291 551
180	30	10	6.291 552
200	30	10	6.291 553
200	50	10	6.291 554

3



3

Petri dishes, Soda-lime glass

Steriplan®. Hydrolytical class 3.

DWK Life Sciences

Ext. diam. mm	Height mm	PK	Cat. No.
40	12	1	9.170 401
60	15	1	9.170 417
80	15	1	9.170 432
90	15	1	6.236 335
100	15	1	9.170 442
100	20	1	9.170 443
120	20	1	9.170 448
150	25	1	9.170 451
180	30	1	9.170 456
200	30	1	9.170 460
200	45	1	9.170 461

1 Petri dishes, DUROPLAN®, borosilicate glass 3.3

DURAN®. With lid. Petri dishes are manufactured in a special production process which results in an even media dispersion and a uniform cell growth. Bottom and lid are absolute planar and free from bubbles and cords.
Glass Type I/neutral glass as per USP, EP and JP. Autoclavable. DIN 13132.

DWK Life Sciences

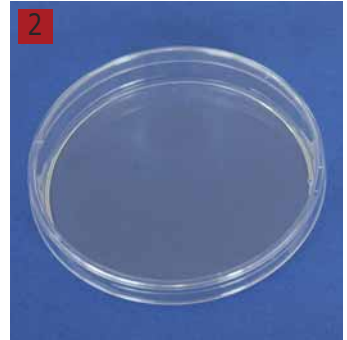


Ext. diam. mm	Height mm	PK	Cat. No.
60	20	1	9.170 141
80	20	1	9.170 143
100	15	1	9.170 146
100	20	1	9.170 148
120	20	1	9.170 151
150	30	1	9.170 153

2 LLG-Petridishes, PS

Made of high quality optical clear polystyrene. Produced under aseptic conditions in an ISO 6 cleanroom. Contact plate with counting grid.

- With a smooth surface for an optimal distribution of the transport medium
- Stable thickness to prevent any deformations while using
- Stackable
- With or without vents
- Aseptic (90 mm diam.) or beta irradiated sterile versions (all sizes)
- Packed in sleeves á 10 dishes or 20 dishes (90 mm diam. dishes)

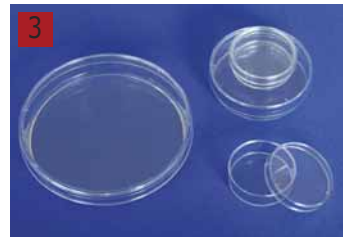


Ext. diam. mm	Description	Height approx. mm	PK	Cat. No.
90	with triple vents, aseptic	16	480	6.285 823
90	without vents, aseptic	16	480	6.285 824
90	with triple vents, sterile	16	480	6.285 816
90	without vents, sterile	16	480	6.285 817
60	with triple vents, sterile	14	1080	4.678 371
60	without vents, sterile	14	1080	4.678 372
55	contact plate, sterile	17	1000	6.285 821
150	with triple vents, sterile	19	180	6.285 822

3 Petri dishes, PS

Non-sterile. For bacteriology. With or without vents. In light or heavy duty versions.

Greiner Bio-One

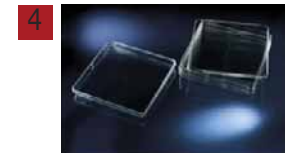


Ext. diam. mm	Height mm	Vents	Version	PK	Cat. No.
35	10	With	Light	740	9.408 035
60	15	With	Light	600	9.408 040
94	16	Without	Light	480	9.408 094
94	16	Without	Heavy	480	9.408 047
94	16	With	Light	480	9.408 095
94	16	With	Heavy	480	9.408 045
100	20	With	Light	360	6.510 005
145	20	With	Light	120	6.052 085

4 Biological test dish

Thermo Scientific™ Nunc™ Square BioAssay Dishes Available on GSA/VA Contract for Federal Government customers only. Screen large numbers of colonies for cloning experiments, culturing bacteria, fungi and agar diffusion assays using Thermo Scientific™ Nunc™ Square BioAssay dishes.

Thermo Scientific



Description	Working volume	Culture surface	Sterile	Dimensions (W x D x H) mm	PK	Cat. No.
	ml	cm ²				
Standard high, with lid	225	500.0	+	245 x 245 x 25	16	6.076 793
Low profile, with lid	215	478.0	+	241 x 241 x 20	20	6.401 626

Petri dish holder

Constructed in steel wire, as outlined below. Suitable for dish diameters of 100mm, Internal diameter approx. 102mm, Internal height approx. 230mm. For approx. 10 petri dishes.



Description	PK	Cat. No.
Electropolished, grade 1.4301 stainless steel	1	9.908 127
White nylon-coated	1	9.908 128

9.908 127



1 PARAFILM® M sealing film

Can be stretched up to 200 % and clings around irregular shapes and surfaces. Parafilm® M is resistant to many polar substances such as saline solutions, inorganic acids and alkaline solutions for up to 48 hours (After this time it may become brittle). Parafilm® M conforms to general FDA requirements if used below 55 °C.

Melting temperature: 60 °C
Continued use temperature: -45°C to +50 °C
Stretching ability: 200 %

Type	Width mm	Length m	PK	Cat. No.
PARAFILM® M	50	75	1	9.170 003
PARAFILM® M	100	38	1	9.170 002
PARAFILM® M	100	75	1	9.170 005
PARAFILM® M	500	15	1	9.170 004



2 3 Inoculating Turntable

Manually operated turntable guarantees smooth and easy rotation in both directions. Also enables easy and fast allocation of bacteria across petri dish surface. Double-sided construction accommodates petri dishes from 60 to 150 mm diameter by inverting the turntable. Ball bearings provide smooth and effortless spinning, ensuring rapid inoculation steps and extended operation life. Light weight but robust body manufactured from aluminum with non-skid feet. The silicone pad holds the petri dishes firmly and always keeps the dish centered during inoculation steps. The non-skid pad can easily be removed for fast and efficient cleaning.

ISOLAB



Description	PK	Cat. No.
Inoculating Turntable	1	6.286 850



4 Petri dish turntables, schütt Petriturn

For uniform inoculation of petri dishes. Easy-to-use. Made in Germany.

schütt petriturn-M

With manually operated, heavy turntable for smooth and long-lasting rotation. Double-sided construction accommodates two sizes of petri dish (90mm or 150mm diameter), by inverting the turntable.

schütt petriturn-E

Electrically driven (100 - 240 V, 50/60 Hz), constant speed rotation. Easy operation of the rotary table contact-free start via IR sensor (adjustable rotation time from 3 to 120 sec.), in continuous operation or optionally in foot switch mode. Infinitely adjustable speed from 10 to 120 rpm. For Petri dishes up to Ø 100 mm (Ø 150 mm optional). Compact housing made of stainless steel.



9.520 201

Type	Dimensions mm	PK	Cat. No.
schuett petriturn-M, manually driven	(Dia. x H) 160 x 45	1	9.520 201
schuett petriturn-E, electrically driven	(Dia. x H) 160 x 70	1	9.520 200
Foot pedal for schuett petriturn-E		1	9.520 203
Turntable adapter for Petri dishes up to 150mm diameter		1	9.520 204
Glass inoculation spreader	(W x D) 180 x 58	1	9.520 206
Stainless steel inoculation spreader	(W x D) 145 x 40	1	9.520 205

LLG-spatulas, sterile

Ideal for the uniform spreading of cell cultures and liquids.

- Smooth , rounded surfaces for uniform spreading without scratching the agar surface
- Ethylene oxide sterilized
- Sterile, 10 per bag or individually packed

Description	Width mm	Length mm	Material	Package contents	PK	Cat. No.
LLG - Spatula, L-shaped, blue, sterile	38	156	ABS	50 x 10	500	6.265 638
LLG - Spatula, L-shaped, blue, sterile	38	156	ABS	individually packed	500	6.265 639
LLG - Spatula, T-shaped, blue, sterile	34	140	ABS	50 x 10	500	6.265 640
LLG - Spatula, T-shaped, blue, sterile	34	140	ABS	individually packed	500	6.265 641
LLG - Spatula, triangle-shaped, blue, sterile	30	208	PP	10 x 10	100	6.313 631

1



6.265 638

2



6.265 640

3



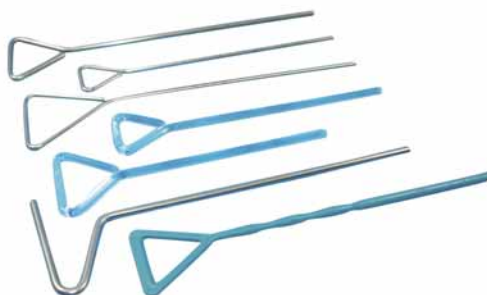
6.265 641

4 LLG-Drigalski spatulas and Inoculation hooks

For easy plating.

Description	Diam. mm	Width mm	Length mm	Material	PK	Cat. No.
LLG-Drigalski spatulas	4	40.0	190	Stainless steel 18/10	1	9.197 490
LLG-Drigalski spatulas	3	24.5	150	Wironit, CrNi 18/12, straight	1	9.197 496
LLG-Drigalski spatulas	3	45.0	190	Wironit, CrNi 18/12, angular 10°	1	9.197 497
LLG-Drigalski spatulas	5	30.0	150	Borosilicate glass 3.3	1	9.197 499
LLG-Drigalski spatulas, individually packed	4	51.5	174	PS, sterile	100	6.251 768
LLG-Inoculation hook	5	40.5	145	Glass	1	9.520 206
LLG-Inoculation hook	4	57.0	185	Stainless steel	1	9.520 205

4



5 Toothpick in dispenser

Toothpick in dispenser, loose with 2 tips, pack of 1000 per dispenser.

5



Description	Package contents	PK	Cat. No.
Toothpick in dispenser, 80 x 2mm, Birch wood	20 x 1000	20000	6.270 862
Toothpick in dispenser, 65 x 2mm, Bambus	20 x 1000	20000	6.270 863

1



6.085 021

Cotton Swabs

Single or double cotton bud. Wooden, PP or paper applicator.

Heinz Herenz

WA 1-I, WA 1 D: Calibrated wooden rod with minimum diameter tolerances.

WA 1s, WA 1s PL, WA 1s 2x, WA 1s 25x, WA 2 PLs: Single, double or 25 pieces packed in peel-pack, EO-sterilized.

WA 7, WA 7 PL: Double cotton bud.

WA P: Flexible, bendable

2



7.615 467

3



7.632 230

Type	Length mm	Head size mm	Material	PK	Cat. No.
WA 1-I	150	4-5 x 12	wood	2000	6.085 021
WA 1 D	150	5-5,5 x 12	wood	1000	6.085 144
WA 1 PP	150	5-5,5 x 12	PP	100	7.623 633
WA 1s	150	5-5,5 x 12	wood, single, sterile	100	6.901 126
WA 1s PL	150	5-5,5 x 12	PP, single, sterile	100	7.627 765
WA 1s 2x	150	5-5,5 x 12	wood, double, sterile	100	6.228 506
WA 1s 25x	150	5-5,5 x 12	wood, 25 pcs, sterile	25	6.240 992
WA 2	150	10 x 35	wood	500	7.618 075
WA 2	300	10 x 35	wood	500	6.287 329
WA 2	150	9 x 30	wood, thin	500	7.618 074
WA 2 PL	150	10 x 35	PP	1000	7.625 078
WA 2 PLs	150	10 x 35	PP, single, sterile	500	6.236 096
WA 3	400	15-20 x 50-60	wood	100	7.628 273
WA 7	80	4-5 x 12	wood, double bud	100	6.257 221
WA 7 PL	80	4-5 x 12	PP, double bud	2000	7.615 467
WA P	150	2,8 x 12	paper	2000	7.632 230

4



4 Cotton Applicator

Ideal for sampling in laboratories

Böttger

9.413 160: non-sterile, according to EN ISO 13485

9.413 161: sterile, according to EN ISO 13485 and conforming to 93/42/EEC, enclosure V for medical products, sterilised with ETO gas

Length mm	Wall thickness mm	Head size	Sterile	Material	Package	PK	Cat. No.
150	2.2	Ø 4 to 5.5 mm	no	Wood	bag	100	9.413 160
150	2.2	Ø 4 to 5.5 mm	yes	Wood	single, Peel-Pack	100	9.413 161

5



5 LLG-Inoculation loops, PS, sterile

Made of flexible polystyrene. With ultra-smooth loops for problem-free planting and streaking of cultures. Free of lubricants, oils and electrostatic charges, enabling consistent and complete liquid transfer. Ergonomic design of the loops for optimal grip and an easy orientation of the loop head. Needle end shape is perfect for picking off individual isolated colonies and suitable for making stab inoculations into agar slants or tubes of solid culture medium.

Package: 10 bags of 10 pieces

Type	Capacity µl	PK	Cat. No.
Needle / loop	1	100	9.160 041
Needle / loop	10	100	9.160 042
Loop / loop	1 / 10	100	9.160 043

6



6 LLG-Inoculation Loops, sterile

Uniform surface wetting and complete transfer of the liquid. The inoculation loops are available as more rigid versions (PS) or flexible versions (HIPS). Smooth edges ensure gentle agar treatment.

- With ethylene oxide sterilized
- Color coded
- Hexagonal handle for easy handling

Capacity µl	Length mm	Material	Colour	Package contents	PK	Cat. No.
1	173	PS	transparent	50 bags of 20 pieces	1000	6.290 917
10	173	PS	green	50 bags of 20 pieces	1000	6.290 918
1	173	HIPS	yellow	50 bags of 20 pieces	1000	6.290 919
10	173	HIPS	white	50 bags of 20 pieces	1000	6.290 920

1 Inoculating loops and needles, PS

Radiation-sterilised. Semi-quantitative standard for sample handling, e.g. for diseases of the urinary tract. Surface treated to increase drop adhesion. Reduced contamination risks as product is disposable and does not require flaming.

Thermo Scientific



Type	Capacity µl	PK	Cat. No.
Blue loop	10	4000	4.675 484
Colorless loop	1	4000	4.675 483
Yellow needle	--	4000	4.675 482

Other colours on request

2 3 4 Inoculation loops "metal" and loop stands

Inoculation loops made from stainless steel, special stainless steel wire or platinum-iridium wire (90/10).

schuett-biotec

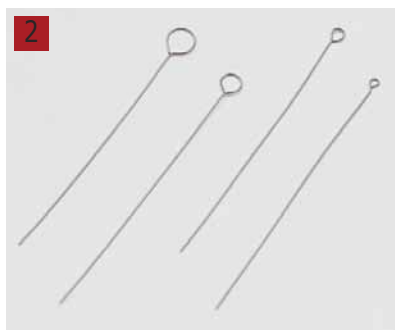
Can be heated to red heat.

Length: 60mm. Wire diameter: 0.5mm.

Inoculation loop holder according to Kolle for 0.3 to 0.7mm wire diameter. Stainless steel with handle. Fixed by union nut.

Inoculation loop stand robust and sturdy made of plastic (autoclavable). Accomodate up to 6 inoculation loop holders at any one time.

Type	Description	Loop diam. mm	PK	Cat. No.
P-I 1	Platinum-iridium	1	1	9.520 180
P-I 2	Platinum-iridium	2	1	9.520 181
P-I 3	Platinum-iridium	3	1	9.520 182
P-I 5	Platinum-iridium	5	1	9.520 184
E 1	Stainless steel, special wire	1	10	9.520 170
E 2	Stainless steel, special wire	2	10	9.520 171
E 3	Stainless steel, special wire	3	10	9.520 172
E 5	Stainless steel, special wire	5	10	9.520 174
W-1.5	Stainless steel	1.5	10	9.520 185
W-2.5	Stainless steel	2.5	10	9.520 186
W-4.0	Stainless steel	4.0	10	6.233 696
Inoculation loop holder	160 mm long		1	9.520 178
Inoculation loop stand R (round)	(Diam. x H) 80 x 50mm		1	9.520 190
Inoculation loop stand L (long)	(L x W x H) 180 x 50 x 50mm		1	9.520 191



5 Stand for inoculation loop holders

Also suitable for ERGO-BRUSH brush holders.

NEW

Hammacher



Type	PK	Cat. No.
ERGO BRUSH holder	1	4.661 331

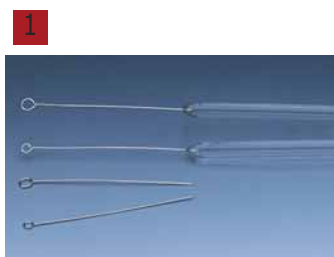
6 Inoculation loops Wironit

Wironit. CrNi 18/12.

Hammacher

Diam. mm	Length mm	PK	Cat. No.
1.5	50	1	9.160 057
2.0	50	1	9.160 056
2.5	50	1	9.160 058
4.0	50	1	9.160 055
1.5	60	1	9.160 061
2.5	60	1	9.160 062
4.0	60	1	9.160 063





1 Inoculation loops, platinum-iridium

Platinum-iridium wire 90/10.
0.5mm thick.

Type	Diam. mm	PK	Cat. No.
without glass rod	3	1	9.160 050
without glass rod	2	1	9.160 052
fused into glass rod	3	1	9.160 053
fused into glass rod	2	1	9.160 054



2 Platinum-iridium wire

Platinum-iridium 90/10 wire available in different diameters.
Sold per cm.

Diam. mm	PK	Cat. No.
0.2	1	9.160 702
0.3	1	9.160 703
0.4	1	9.160 704
0.5	1	9.160 705
0.6	1	9.160 706
0.8	1	9.160 708
1.0	1	9.160 710



3 Culture media bottles DURAN®, glass, cylindrical

Rimless. For use with Kapsenberg caps. Glass Type I/neutral glass as per USP, EP and JP.
Autoclavable.

DWK Life Sciences

Capacity ml	Diam. mm	Neck diam. mm	Height mm	PK	Cat. No.
50	40	18	107	1	9.010 050
100	40	18	150	1	9.010 060
200	50	18	175	1	9.010 070



4 Kapsenberg caps

Aluminium. For the closure of culture tubes, bottles and flasks.

DWK Life Sciences

For neck diam. mm	PK	Cat. No.
16	1	9.010 116
18	1	9.010 118



5 Culture media bottles, glass, DURAN®

Beaded rim. Glass Type I/neutral glass as per USP, EP and JP.
Autoclavable.

DWK Life Sciences

Capacity ml	Diam. mm	Neck diam. mm	Height mm	PK	Cat. No.
100	50	29	115	1	9.010 224
300	70	42	168	1	9.010 239
500	83	42	207	1	9.010 244
1000	105	46	237	1	9.010 254
2500	150	50	315	1	9.010 266
5000	185	54	390	1	9.010 273



6 Culture flasks, DURAN®, Roux type

DURAN®. Roux type. With fire-polished, offset neck.
Glass Type I/neutral glass as per USP, EP and JP.
Autoclavable.

DWK Life Sciences

Capacity ml	Width mm	Length mm	Height mm	PK	Cat. No.
1200	123	275	56	1	9.010 512

1 Culture flasks, glass DURAN®, straight neck

DURAN®. Erlenmeyer. Straight neck. Suitable for metal caps. Glass Type I/neutral glass as per USP, EP and JP. With retrace code (Batch Identification). Certificate available via the Internet. Autoclavable.

DWK Life Sciences

Capacity	Diam.	Neck diam.	Height	PK	Cat. No.
ml	mm	mm	mm		
100	64	38	114	1	9.010 472
200	79	38	138	1	9.010 473
250	85	38	149	1	9.010 474
300	87	38	161	1	9.010 475
500	105	38	183	1	9.010 476
1000	131	38	229	1	9.010 477
2000	166	38	302	1	9.010 478



2 Culture flasks, borosilicate glass 3.3

Erlenmeyer. With 3 side baffles. Neck straight or with beaded rim.

Capacity	Diam.	Neck diam.	Height	Beaded rim	PK	Cat. No.
ml	mm	mm	mm			
100	64	38	112	without	1	9.010 120
250	85	38	145	without	1	9.010 121
500	105	38	183	without	1	9.010 122
1000	131	38	232	without	1	9.010 123
2000	166	38	305	without	1	6.236 466
250	85	34	140	with	1	9.010 125
300	87	34	156	with	1	9.010 126
500	105	34	175	with	1	9.010 127
1000	131	42	220	with	1	9.010 128

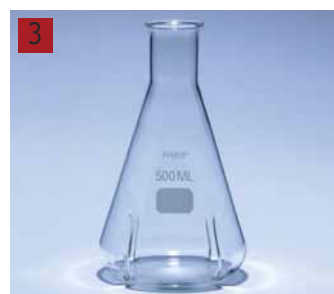


3 Baffled flasks, Pyrex® borosilicate glass

- Manufactured from Pyrex® borosilicate glass
- Exhibits 4 baffle indents to provide optimal and consistent agitation

Scilabware

Capacity	Diam.	Neck diam.	Height	PK	Cat. No.
ml	mm	mm	mm		
250	82	32	138	5	9.141 171
500	101	36	186	5	9.141 172
1000	129	43	222	2	9.141 173
2000	161	49	282	1	9.141 174



4 Baffled flasks DURAN®

With GL 45 thread

DWK Life Sciences

- Oxygen introduction is often a limiting factor for cell growth.
- Baffled flasks cause a turbulent flow, increase the gas exchange surface and produce a higher oxygen transfer.
- Automated one-step production enables a reproducible and comparable result.
- Complete with membrane screw cap (gas exchange).

Capacity	Bottom diam.	Neck diam.	Height	PK	Cat. No.
ml	mm	mm	mm		
250	85	30	145	1	9.141 260
500	105	30	149	1	9.141 261
1000	136	30	221	1	9.141 263



Fernbach baffled flasks, Pyrex®

For use in preparation of cultures.

Scilabware

- Large surface area to volume ratio
- Three laterally integrated baffles, to provide optimal and consistent agitation
- Available in 2 versions: with Delong neck, for use with culture flask caps or with PP screw cap, GL45

Description	Capacity	Diam.	Neck diam.	Height	PK	Cat. No.
	ml	mm	mm	mm		
Delong neck	2800	210	38	230	2	9.141 169
Screw cap	2800	210	45	230	2	9.141 170



9.141 169



1 Erlenmeyer flasks with baffles, PC



Thermo Scientific

Transparent. With baffles indented into the base which increases mixing when trypsinizing and aerating in processes such as cell culture and fermentation. Autoclavable. 500 ml and 1000 ml flasks have a straight neck, suitable for 38 mm standard caps of stainless steel, aluminium or plastic.

Capacity ml	PK	Cat. No.
250	12	4.675 585
500	12	4.675 586
1000	6	4.675 583
2000	4	4.675 584



2 LLG-Cellulose stoppers, Steristoppers®



Cellulose, 100% biodegradable and fully compostable autoclavable. Steristoppers® have been proved as an excellent sealing for microbiological samples and tissue cultures in test tubes and Erlenmeyer flasks. They are in constant use in many European microbiological laboratories.

- Autoclavable
- Filters bacteria
- Sterilisable
- Air permeable

Type	For inter. diam. mm	Bottom diam. mm	Top diam. mm	Length mm	PK	Cat. No.
No. 5 S	5,5 - 6,5	6	8,5	30	1000	9.231 205
No. 7	8,5 - 9,5	8	9,5	31	1000	9.231 207
No. 9	10,5 - 11,5	10	12,0	28	2000	9.231 209
No. 9 P	9,0 - 10,5	9	13,0	29	1000	6.801 854
No. 10	9,5 - 11,5	9	14,0	31	1000	9.231 210
No. 12	11,5 - 13,5	11	16,0	32	1000	9.231 211
No. 13	12,5 - 14,5	13	17,0	35	1000	9.231 212
No. 13 H	12,5 - 13,5	10	15,0	30	1000	7.628 015
No. 13.5	13,5 - 14,5	13	19,0	33	1000	9.231 213
No. 14	13,0 - 14,5	12	16,0	40	1000	9.231 214
No. 14,5	14,0 - 16,0	13	17,0	35	1000	9.231 216
No. 15	13,5 - 15,5	14	18,0	39	500	9.231 215
No. 15 D	13,5 - 16,0	12	19,0	36	5000	6.258 570
No. 18	17,5 - 18,5	17	21,0	38	500	9.231 218
No. 20	20,5 - 22,0	20	23,0	42	400	9.231 220
No. 22 long	22,0 - 24,0	24	26,0	49	500	9.231 224
No. 23.5 P	25,0 - 27,0	25	30,0	40	500	9.231 225
No. 26	26,0 - 27,0	23	28,0	42	500	9.231 226
No. 27	27,0 - 32,5	25	35,0	53	1000	7.210 063
No. 29	29,5 - 31,0	30	34,0	62	250	9.231 229
No. 32	32,5 - 35,0	32	36,0	64	100	9.231 232
No. 32 P	32,0 - 33,0	30	49,0	54	150	9.231 233
No. 32 W	32,5 - 35,0	31	36,0	65	800	9.231 231
No. 34	33,5 - 36,5	33	38,0	63	150	9.231 234
No. 36	35,5 - 39,5	36	40,0	58	600	7.600 688
No. 37	37,5 - 41,5	39	46,0	59	100	9.231 237
No. 38	40,0 - 43,5	38	48,0	60	100	9.231 238
No. 40 P	42,0 - 46,5	40	50,0	53	100	9.231 240
No. 45 P	47,0 - 48,0	45	60,0	66	75	9.231 245

P = correct fit, D = thin, W = soft, S = pointed, H = tougher version



1 Sterile stoppers SILICOSEN® and BIO-SILICO®

SILICOSEN® and BIO-SILICO® are specially processed culture plugs in sterile rubber with continuous bubbles for preparation, filling and sterilisation of culture media. Their uniform pore structure and good air permeability make them excellent for the cultivation of aerobic microorganisms.

The choice between SILICOSEN® and BIO-SILICO® culture stoppers depends on the requirements of the application. SILICOSEN® culture stoppers have low water evaporation which makes them particularly suitable for long term cultures. BIO-SILICO® culture stoppers have high air permeability, similar to cotton plugs. Both types are chemically resistant, temperature resistant, liquid repellent and reusable.



2 Sterile stoppers SILICOSEN® S-Type



Hirschmann

Superb permeability. Suitable for aerobic bacterium cultures and shaking cultures.

Type	Top diam. mm	Bottom diam. mm	Cylinder length mm	Cone length mm	Joint size (NS)	PK	Cat. No.
S-28	28	17	18	27	17/26	1	9.231 178
S-35	35	24	20	30	24/33	1	9.231 185
S-40	39	28	20	30	28/38	1	9.231 190



3 Sterile stoppers SILICOSEN® T-Type



Hirschmann

Moisture evaporation is minimal, thus there is less drying of the culture medium.
Colour: natural.

Type	Cylinder length mm	Cone length mm	Joint size (NS)	PK	Cat. No.
T-10	13	17	6/9	1	9.231 010
T-12	14	17	9/11	1	9.231 012
T-15	15	20	11/14	1	9.231 015
T-17	10	30	13/16	1	9.231 017
T-19	12	30	15/18	1	9.231 019
T-22	15	30	18/21	1	9.231 022
T-24	21	31	20/23	1	9.231 024
T-28	20	35	20/23	1	9.231 028
T-32	23	32	22/30	1	9.231 032
T-38	30	35	26/35	1	9.231 038
T-42	35	50	30/40	1	9.231 042
T-52	40	60	40/50	1	9.231 052
T-66	40	60	54/63	1	9.231 066
T-76	40	60	64/74	1	9.231 076



4 Sterile stoppers SILICOSEN® C-Type



Hirschmann

Superb permeability and fits tight onto the media container due to sealing lip, where importance is placed on mounting quality. Suitable for shaking cultures.

Type	d1 mm	I1 mm	d2 mm	d3 mm	Joint size (NS)	PK	Cat. No.
C-20	16	28	12	20	15/20	1	9.231 120
C-30	26	28	18	30	20/30	1	9.231 130
C-40	36	28	27	40	30/40	1	9.231 140
C-55	50	28	34	55	40/50	1	9.231 150
C-65	57	42	65	28	42/52	1	9.231 160



1



1 Sterile stoppers BIO-SILICO® N-Type

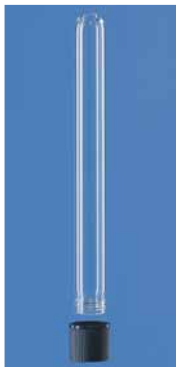
Hirschmann



Cell size is uniform, which provides stable and good permeability. Optimum product for shaking cultures-durability and operability are excellent.

Type	Top diam. mm	Bottom diam. mm	Cylinder length mm	Cone length mm	Joint size (NS)	PK	Cat. No.
N-12	13	9	13	17	9/11	1	9.231 100
N-15	16	11	14	22	11/14	1	9.231 101
N-17	19	13	15	25	13/16	1	9.231 102
N-19	21	15	16	28	15/18	1	9.231 103
N-22	24	18	18	30	18/21	1	9.231 104
N-24	26	20	20	32	20/23	1	9.231 105
N-28	30	21	20	34	21/26	1	9.231 109
N-32	34	22	24	36	22/30	1	9.231 106
N-42	44	30	32	46	30/40	1	9.231 107
N-52	54	40	36	50	40/50	1	9.231 108

2



2 Culture tubes, soda glass, not graduated

Rimless or with PP screw cap and white TPE elastomer seal. Autoclavable at 121 °C (2 bar), according to DIN EN 285.

BRAND

Description	Capacity ml	Ext. diam. mm	Height mm	Wall thickness mm	Max. rcf x g	PK	Cat. No.
thread GL 14	6.5	12	100	1.0	3000	100	9.010 032
thread GL 18	10.0	16	100	1.0	3000	100	9.010 036
thread GL 18	20.0	16	160	1.0	1800	100	9.010 037
thread GL 18	30.0	18	180	1.0	1100	100	7.019 348
rimless	3.0	10	75	0.6	3000	250	9.010 040
rimless	5.5	12	75	0.6	3000	250	9.010 041
rimless	7.5	12	100	0.6	3000	144	6.312 970
rimless	13.0	16	100	0.7	2600	78	9.010 043
rimless	18.0	16	125	0.7	1800	105	9.010 044
rimless	22.0	16	160	0.7	1500	100	9.010 045
rimless	30.0	18	180	0.7	900	121	9.010 039

3



3 Disposable culture tube, Soda-lime-glass

From Soda-lime-glass. Straight rim.

DWK Life Sciences

Capacity ml	Outer diam. mm	Height mm	Wall thickness mm	PK	Cat. No.
4	9,75	75	0,80	814	4.652 793
4	10,00	75	0,60	250	6.701 755
5	11,75	75	0,80	550	4.652 794
6	11,75	75	0,55	250	6.286 586
7	12,25	75	0,55	500	7.072 127
6	12,25	75	0,80	500	6.235 314
8	11,75	100	0,80	550	6.257 184
9	12,25	100	0,80	500	7.079 811
14	15,50	100	0,80	250	7.200 457
15	15,75	100	0,90	250	7.614 741
18	12,25	120	0,80	250	7.072 274
8	10,00	150	0,80	250	6.263 370
19	15,50	150	0,80	250	7.613 424
22	15,50	160	0,80	250	6.072 878

4



4 Disposable culture tube, Borosilicate glass

Straight rim.

DWK Life Sciences

Capacity ml	Outer diam. mm	Height mm	PK	Cat. No.
1	6	50	1000	6.202 371
4	10	75	1000	6.073 292
6	12	75	1000	6.202 825
10	13	100	1000	6.072 378
15	16	100	1000	6.084 955
24	16	150	1000	6.257 491
28	18	150	500	6.251 868

1 Disposable culture tubes, soda-lime glass, with screw cap

From Soda-lime glass. With DIN thread and PP screw cap DWK Life Sciences

Capacity ml	Outer diam. mm	Height mm	Wall thickness mm	DIN-Thread GL	PK	Cat. No.
6	12	100	1	14	100	7.021 547
12	16	100	1	18	100	7.021 548
22	16	160	1	18	100	7.021 549
32	18	180	1	18	100	7.021 550



2 Culture tubes, Borosilicate glass 3.3, screw cap

For culture growth, transport and storage. Heavy walled, thickness 1.1mm. schuett-biotec
Wide neck for easy inoculation and cleaning. Complete with aluminium or plastic screw cap and rubber sealing gasket. Autoclavable.

Diam. mm	Nominal capacity ml	Length mm	PK	Cat. No.
16	15	98	100	9.010 612
16	20	150	100	9.190 600
16	15	98	100	9.010 613
16	20	150	100	9.190 605
25	50	150	100	9.010 620

Spare screw caps on request.



3 Tubes, glass, DURAN®, culture, screw cap

DIN thread. Complete with red PBT screw cap with PTFE-faced sealing wad. Thus, it is DWK Life
suitable for the cultivation of microorganisms. Glass Type I/neutral glass as per USP, EP and JP. Autoclavable.

Diam. mm	Height mm	Neck thread GL	PK	Cat. No.
12	100	14	50	9.010 012
13	100	14	50	9.010 013
16	150	18	50	9.010 014
16	160	18	50	9.010 016
18	180	18	50	9.010 018
20	150	18	50	9.010 019



4 Culture tubes, glass DURAN®, small, rimless

To DIN 38411. Rimless. Suitable for use with Kapsenberg caps. DWK Life Sciences
Glass Type I/neutral glass as per USP, EP and JP. Autoclavable. Please order cap separately.

Diam. mm	Height mm	Wall thickness mm	PK	Cat. No.
16	160	1.0 to 1.2	100	9.010 046
18	180	1.0 to 1.2	100	9.010 048

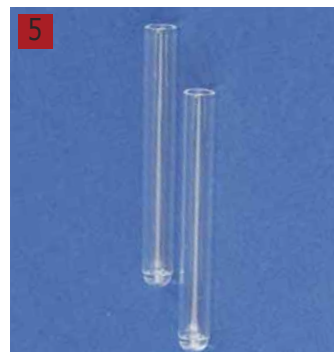


5 Test tubes, Durham, soda lime glass

Durham test tubes are mainly used in microbiology to detect gas produced by micro organisms. Marienfeld
These special tubes are placed upside down in bigger test tubes.

- Made of soda lime glass
- With straight rim and with round bottom
- Ungraduated

Diam. mm	Wall thickness mm	Height mm	PK	Cat. No.
6	0.7	35	250	6.266 183
6	0.7	50	350	6.266 184



➔ Kapsenberg caps - please see page 1370.



Metal caps			
For culture flasks and culture medium bottles.			DWK Life Sciences
For neck diam. mm	Material	PK	Cat. No.
38	Stainless steel	1	9.010 481 1
38	Aluminium, anodised blue	1	9.010 482 2



3 Metal caps, Erlenmeyer, Aluminium			
Anodised in a choice of colours. Special caps for sterile, but not hermetically sealing, closure of culture flasks and media bottles with straight, rimmed or rimless necks as indicated. With nichrome steel springs that clamp onto the outer wall of the container. Cleaning advice available on request.			schuett-biotec
For neck diam. mm	Colour	PK	Cat. No.
37/39	silver	10	9.231 456
37/39	blue	10	9.231 457
37/39	red	10	9.231 458



4 Metal caps, Labocap without handle				
			schuett-biotec	
For neck diam. mm	Colour	Handle	PK	Cat. No.
9/10	blue	without	100	9.231 421
12/13	blue	without	100	9.231 422
14/15	blue	without	100	9.231 423
15/16	blue	without	100	9.231 424
17/18	blue	without	100	9.231 425
19/20	blue	without	100	9.231 426
21/23	blue	without	100	9.231 427
24/26	blue	without	100	9.231 428
28/30	blue	without	100	9.231 429
9/10	red	without	100	9.231 441
12/13	red	without	100	9.231 442
14/15	red	without	100	9.231 443
15/16	red	without	100	9.231 444
17/18	red	without	100	9.231 445
19/20	red	without	100	9.231 446
21/23	red	without	100	9.231 447
24/26	red	without	100	9.231 448
28/30	red	without	100	9.231 449
12/13	yellow	without	100	9.231 460
15/16	yellow	without	100	9.231 461
17/18	yellow	without	100	9.231 462
19/20	yellow	without	100	9.231 339
12/13	green	without	100	9.231 463
15/16	green	without	100	9.231 464
17/18	green	without	100	9.231 465
19/20	green	without	100	9.231 340
09/10	silver	without	100	9.231 369
12/13	silver	without	100	9.231 372
14/15	silver	without	100	9.231 374
15/16	silver	without	100	9.231 375
17/18	silver	without	100	9.231 377
19/20	silver	without	100	9.231 379
21/23	silver	without	100	9.231 381
24/26	silver	without	100	9.231 385
28/30	silver	without	100	9.231 388
12/13	black	without	100	9.231 334
15/16	black	without	100	9.231 466
17/18	black	without	100	9.231 337
19/20	black	without	100	9.231 341
12/13	violet	without	100	9.231 335
15/16	violet	without	100	9.231 336
17/18	violet	without	100	9.231 338
19/20	violet	without	100	9.231 342

1 Metal caps, Labocap with handle, Aluminium

Anodised in a choice of colours. For sterile, but not hermetically sealing, closure of containers. With nichrome steel springs that clamp onto the outer wall of the container. Autoclavable. Cleaning advice available on request.

schuett-biotec

For neck diam. mm	Colour	Handle	PK	Cat. No.
15/16	silver	with	100	9.231 345
17/18	silver	with	100	9.231 347
15/16	blue	with	100	9.231 403
17/18	blue	with	100	9.231 404
15/16	red	with	100	9.231 413
17/18	red	with	100	9.231 414
15/16	yellow	with	100	9.231 326
17/18	yellow	with	100	9.231 330
15/16	green	with	100	9.231 327
17/18	green	with	100	9.231 331
15/16	black	with	100	9.231 328
17/18	black	with	100	9.231 332
15/16	violet	with	100	9.231 329
17/18	violet	with	100	9.231 333



2 Aluminium caps, pure aluminium

Matt finish. Without internal clips. Loose-fit caps for sterile, but not hermetically sealing, closure of culture flasks and other containers. Can also be used as open specimen holders. Autoclavable.

schuett-biotec

Int. diam. mm	Height mm	PK	Cat. No.
11	25	100	9.230 821
12	25	100	9.230 822
13	25	100	9.230 823
14	25	100	9.230 824
15	25	100	9.230 825
16	30	100	9.230 826
17	30	100	9.230 827
18	30	100	9.230 828
20	30	100	9.230 829
22	30	100	9.230 830
28	30	100	9.230 831
32	30	100	9.230 832
39	30	10	9.230 833
44	40	10	9.230 834
48	40	10	9.230 835
55	40	10	9.230 836
58	40	10	9.230 837



Anaerobic jars, stainless steel

For the cultivation of anaerobic and microaerophilic microorganisms in a defined and rapidly generated gas atmosphere. *schuett-biotec*
 The requested atmosphere may be reached under ideal conditions by two methods. Either by using chemical gas packs (anaerobe systems) or by manually evacuating the jars with a vacuum pump and flushing with gas afterwards (e.g. with nitrogen), in this case no chemical accessories are needed (except anaerobic jar eco and crystal eco). The jars are made of robust stainless steel or transparent PC. The lids are made of UV-resistant plastic or transparent polycarbonate with two corner valves incl. tube clips for vacuum hoses (5 mm i.d.) and with manometer for exact control of the vacuum or overpressure from -1 to 0.2 bar (except anaerobic jar eco and crystal eco). The optional racks are made of stainless steel providing holders for comfortable operation of the anaerobe systems.

Methods for reaching anaerobic conditions: 3 x times evacuating and filling gas, flushing with gas for 5 minutes and chemical gas production (GasPacks) for Anaerobic jars "small", "standard", "large" and "crystal". For Anaerobic jar "eco" flushing with gas for 5 minutes (Using GasPack-Kits).

Customized: Other equipment available upon request. Examples: customized lids, e.g. made of special or heat-resistant materials e.g. stainless steel, heat-resistant pressure gauges (up to 100 °C), also without cocks/manometer available.

Type	To hold dishes	Capacity	Int. diam.	Int. height	PK	Cat. No.
	quantity	l	mm	mm		
small*	10 (60-100 mm diam.)	2	120	170	1	9.520 051 1
standard*	15 (60-100 mm diam.)	3	120	270	1	9.520 056 2
large*	15 (60-150 mm diam.)	6	175	260	1	9.520 050 3
eco**	15 (60-100 mm diam.)	3	120	270	1	9.520 057 4
crystal***	15 (60-100 mm diam.)	3	120	270	1	9.520 058 5
crystal eco****	15 (60-100 mm diam.)	3	120	270	1	6.287 615 6

*Stainless steel jar with UV-resistant plastic lid (2 valves, 1 manometer)

**Stainless steel jar with UV-resistant plastic lid (ventilation screw)

***Transparent polycarbonate jar and lid (2 valves, 1 manometer)

****Polycarbonate jar with UV-resistant plastic lid (ventilation screw)



Accessories for anaerobic jars

schuett-biotec

Type	To hold dishes	PK	Cat. No.
	quantity		
Rack "small" (for all Anaerobic jars)	10 (60 to 100mm dia.)	1	9.520 059
Rack "standard" (for "standard", "large", "eco", "crystal")	15 (60 to 100mm dia.)	1	9.520 053
Rack "150" (for "large")	15 (up to 150mm dia.)	1	9.520 060
Rack "3 x 60" (for "large")	45 (60mm dia.)	1	9.520 061
Rack "micro" (for "large")	for multiwell plates	1	9.520 062
Test tube holder (for all Anaerobic jars)	for 9 test tubes (18mm dia.)	1	9.520 063
GAS-Pack-Kit "anaerobic" (1 x 3.5 l)		10	9.520 064
GAS-Pack-Kit "CO2" (1 x 2.5 l)		10	9.520 065
GAS-Pack-Kit "microaerophil" (1 x 3.5 l)		10	9.520 066
Anaerobiose Indicator (test strip)		100	9.520 067

Bioreactors RTS-1/RTS-1C



Grant

Compact and efficient bioreactors providing patented Reverse-Spin® type agitation and logging of microbial growth, in 50 ml tubes, in real time. For applications such as bacterial cultivation with real time growth kinetics, strain screening, temperature stress and fluctuation experiments media screening and optimization, synthetic and systems biology, inhibition and toxicity tests and strain quality control.

- 3D graphical representation of OD or growth rate over time over unit
- Easy-to-read LCD screen displaying temperature, RPM and time
- Programmable cycling/profiling of cultivation parameters such as temperature, RPM, Reverse-Spin® frequency
- Active cooling and temperature profiling via software (RTS-1C only)
- Minimum PC requirements: Intel/AMD Processor, 1 GB RAM, Windows XP (not guaranteed)/Vista/7/8/8.1/10, 2.0 USB port

Specifications

Theoretically possible measurement range in OD₈₅₀, at 10 ml working volume*

Rod shaped bacteria:	0 ... 25 (0 ... 45.6 OD ₆₀₀ equivalent**)
Yeast:	0 ... 50 (0 ... 75 OD ₆₀₀ equivalent)
E.coli BL21 Factory calibration measurement range, in OD ₈₅₀	
at 10 ... 20 ml volume:	0 ... 10 OD (0 ... 19 OD ₆₀₀ equivalent)
at 20 ... 30 ml volume:	0 ... 8 OD (0 ... 15.2 OD ₆₀₀ equivalent)
Measurement wavelength (λ):	850 ±15 nm
Factory calibration measurement precision:	±0.3 OD ₈₅₀
Mass transfer coefficient kLa (h ⁻¹):	up to 350 ±26 h ⁻¹ at 5 ml
Bottom control range point RTS-1 // RTS-1C:	Ambient +5 // Ambient -15
Top control range point:	70 °C
Temperature stability:	±0.1 °C
Real time measurement:	1 ... 60 min
Revers spin time:	1 ... 60 s (increment 1 s)
Speed:	50 ... 2000 rpm (increment 10 rpm)
Precision:	±15 rpm
Dimensions (W x D x H):	130 x 212 x 200 mm
Power supply:	120 ... 230 V, 50/60 Hz

Type	Temp. range °C	Weight kg	PK	Cat. No.
RTS-1 EU	25 ... 70 (increment 0.1 °C)	1.7	1	4.671 974
RTS-1C EU	4 ... 70 (increment 0.1 °C)	2.2	1	4.671 975

*Highest kLa (h⁻¹) is achieved at 5 ml working volume which is optimal for aerobic cultivation

**OD₈₅₀ to OD₆₀₀ vary between strains and phases of growth

Further accessories can be found in our online shop.

1



4.671 975

Loop steriliser SteriMax basic/smart

For rapid sterilisation of inoculation loops using infrared technology. Instantly ready for use without warm-up. Sterilisation at 750 to 1000 °C. Suitable for all laboratories, anaerobic working environments and laminar flow cabinets.

WLD-TEC

- Instantly ready to work without any unnecessary warm-up
- Heating tube made of special quartz glass
- Simple cleaning of the device and the heating tube
- Sterilisation tube closed on one side to prevent contamination
- With timer
- Easy to clean
- No danger of combustion on the housing (Cool-Touch)
- Efficient use of energy
- Tested and certified for photobiological safety in accordance with EN 62471 by the BG ETEM - Risk-free for skin and eyes
- Robust housing made of stainless steel and safety glass

Specifications

Temperatur range:	750 ... 1000 °C
Power consumption:	600 W
Dimensions (W x D x H):	110 x 180 x 170 mm
Weight:	1.8 kg
Power supply:	220 - 240 V, 50/60 Hz
IP code:	IP 20

1 Loop steriliser SteriMax basic

- Can be operated directly on the touch panel of the device or via optional foot pedal
- Fast and efficient, the sterilisation process takes only 10 seconds



 WLD-TEC

Scope of supply: SteriMax basic, mains cable, 1 x Inoculation loop Ø 3 mm, 1 x Inoculation loop holder, power cable

Type	PK	Cat. No.
SteriMax basic	1	4.670 727

2 Loop Steriliser SteriMax smart

- Auto-Start through touchless IR-Sensor technology
- Touch operation
- Adjustable sterilisation and cool-down timers for two users

WLD-TEC

Scope of supply: SteriMax smart, 2 x quartz glass heating tubes, inoculation loop holder, inoculation loop (diam. 3 mm), holding device for 3 inoculation loops, power cable

Type	PK	Cat. No.
Loop Sterilizer SteriMax smart	1	6.261 507

1



2



1 Loop Sterilizer schuett solaris

Sterilisation with light. Sterilisation of inoculating loops, tweezers and small instruments within seconds.

schuett-biotec

- Sturdy and maintenance-free
- No gas, no open flame - Works with standard electrical power
- Intuitive, easy to use
- Instant, ready-to-use, no warm-up time, no waiting
- Sterilization temperature: 900 to 1300°C
- Touch-free START, with IR- sensor and adjustable timer (5 to 7 seconds)
- For use in Laminar Flow Cabinets
- Ideal for mobile operation in the field

The schuett solaris is the perfect solution if an open flame should be avoided or gas cartridges etc. are not available. Used with standard electrical power. Reaches the safe working temperature of 900 to 1300°C within a split second. No excess heat, no energy consumption between work cycles. START is generated by an infra-red sensor, which allows for efficient one-handed operation. Pathogenic material is kept inside the sterilization chamber. No spreading, no splashing. Working angle adjustment (4-steps).

Scope of supply: schuett solaris inoculation loop sterilizer, 2 x quartz glass tubes, 1 x inoculation loop holder with inoculation loop (sample)

Specifications

Dimensions (W x D x H): 152 x 195 x 210mm
Weight: approx. 2500g

Type	PK	Cat. No.
Loop Sterilizer schuett solaris, 230 V	1	9.018 741
Quartz tube with bottom, outer diam. 17mm, length 100 mm	2	9.018 742



2 Sterilisers STERI

The STERI second sterilisers permit instant disinfection and sterilization of all small instruments directly at the workplace. Especially suitable for laminar flow cabinets.

Simon Keller AG

Biological investigations and tests prove that the 250 °C temperature maintained in the glass bead container guarantees complete destruction of all micro-organisms and spores within a few seconds. The one part of the instrument which is inserted into the STERI glass beads is sterilized. The STERI 250 and 350 are two versions of the same quality apparatus, with a stainless steel container, high-performance heating element, reduced heating time, high precision thermostat, temperature limiter and built-in thermometer.

- For perfect hygiene directly at the workplace
- A guaranteed Swiss quality product

STERI 250: Steriliser incl. plain metal cover, glass-cup and glassbeads (150 g). Suitable for small & medium sized instruments (scissors, tweezers, forceps, knives, blades, spatulas, etc.).

STERI 350: Steriliser incl. plain metal cover and glassbeads (300 g). Especially suitable for medium sized and longer instruments.



Type	Filling quantity g	External dimensions (W x D x H) mm	Plug type	PK	Cat. No.
STERI 250	150	125 x 140 x 145	EU	1	6.286 282
STERI 250	150	125 x 140 x 145	CH	1	6.285 884
STERI 250	150	125 x 140 x 145	UK	1	6.286 283
STERI 350	300	125 x 140 x 205	EU	1	6.286 284
STERI 350	300	125 x 140 x 205	CH	1	6.285 885
STERI 350	300	125 x 140 x 205	UK	1	6.286 285

Accessories for Sterilisers STERI

Simon Keller AG

Description	For	PK	Cat. No.
Instrument lid, stainless steel	STERI 250/350	1	6.285 887
Instrument lid, stainless steel, isolated	STERI 250/350	1	6.285 892
Glass beads	STERI 25	1	6.285 888
Glass beads	STERI 250	2	6.285 889
Glass beads	STERI 350	1	6.285 890
Glass cup	STERI 250/350	1	6.285 891





1 Flame sterilizer schuett easyflame

Mobile device for scarfing and flame-sterilising. With piezoelectric-ignition and gas supply control to create a soft or sharp flame. Infinite adjustment of the flame. Highest operational safety. In short-term use, the flame is activated as long as the push button is pressed. For continuous operation with lock key.

schuett-biotec

schuett easyflame to use with propane/butane gas

1. Suitable with gas cartridges with 7/16" connection thread, e.g. CG 1750, Express 444, AT 2000.
2. Adapters for CV 360 or CP 250 gas cartridges optional.

schuett easyflame^{plus} for connecting natural gas and propane/butane gas with gas safety hoses

1. Natural gas hose for central gas supply for easy plugging the device (hose barb included)
2. Propane/butane gas hose with fitting (1/4"-left-hand thread) for the use of gas cartridge adapters or gas cylinders with pressure reducer. Matching adapters C 206 and CV 300/470 (already equipped with gas safety hose, 0.5m and reducer). Gas safety tubing in other lengths on request.

Specifications

Dimensions (W x D x H): 260 x 90 x 60mm
Weight: approx. 350g

Type	PK	Cat. No.
schuett easyflame for propane/butane gas	1	9.018 794
Adapter CV 360 (only for 9.018 794), for butane gas cartridges CV 360	1	6.260 874
Adapter CP 250 (only for 9.018 794), for butane gas cartridges CP 250	1	6.266 817
schuett easyflame ^{plus} for natural gas and propane/butane gas	1	6.266 818
Adapter C 206 (only for 6.266 818), for propane/butane gas cartridges C 206	1	6.244 006
Adapter CV 300/470 (only for 6.266 818), for propane/butane gas cartridges CV 300 / 470	1	6.240 475



2 Gas burner powerjet

NEW
WLD-TEC

Mobile handheld laboratory gas burner with piezoelectric ignition for liquid gas cartridges. Suitable for flame sterilisations in the microbiological or biotechnical field, where no central gas supply is available.

- For gas cartridges with 7/16" x 28 UNEF thread, e.g. CG1750
- Ignition at keystroke
- Size of the flame infinitely adjustable
- Gas supply only when bar is pressed
- With a locking device for long term flaming
- Safe handling due to one-handed operation

Scope of supply: Laboratory gas burner with gas cartridge adapter (7/16" x 28 UNEF thread)

Specifications

Weight: 300 g
Gas consumption: 120 g/h
Flame temperature: 1350 °C
Warranty: 2 years

Type	PK	Cat. No.
powerjet	1	7.970 147



3 Bunsen burner, portable Labogaz® 206

For operation with gas cartridge C 206 GLS (Cat.-No.: 9.018 520). DVGW-authorized.

Weight: 380g without cartridge
Height: 200mm with cartridge
Consumption: 55g/h

Type	PK	Cat. No.
Labogaz® 206	1	9.018 510



4 Bunsen burner, portable, Labogaz® 470

For operation with gas cartridges CV 300 Plus (Cat.-No.: 6.243 905) or CV 470 Plus (Cat.-No.: 9.018 512).

Weight: 380 g without cartridge
Height: 190 mm with cartridge CV 300 Plus
240 mm with cartridge CV 470 Plus
Consumption: 55 g/h

Type	PK	Cat. No.
Labogaz® 470	1	9.018 511

Gas cartridges

C 206 GLS pierceable cartridge

Piercing cartridge with integrated gas lock system according to EN 417: 2012. For bunsen burner without safety valve. For bunsen burners Labogaz® 206 and Soudogaz blow torches.

CV470 Plus and CV 300 Plus valve cartridge

With safety valve. For bunsen burner Labogaz® 470.

CV 360 valve cartridge

With safety valve. For gas-safety burner schuett phoenix (Cat.-No. 9.018 761).

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6.243 905

Safety valve allows removal of partially used valve gas cartridges.



H phrases: H220

Type	Description	Height mm	Capacity g	PK	Cat. No.
C 206 GLS	Gas ratio 80/20 Butane/Propane	90	190	1	9.018 520
C 206 GLS	Gas ratio 80/20 Butane/Propane (large pack)	90	190	36	6.261 010
CV 300 Plus	Gas ratio 80/20 Butane/Propane	105	240	1	6.243 905
CV 470 Plus	Gas ratio 80/20 Butane/Propane	140	450	1	9.018 512
CV 470 Plus	Gas ratio 80/20 Butane/Propane (large pack)	140	450	12	6.261 011
CV 360	Butane	140	52	1	9.018 519

Suitable accessories can be found in our online shop.

2 Safety Bunsen Burners Flame¹⁰⁰

The safe alternative for all traditional Bunsen or alcohol burners.

WLD-TEC

Multi-Use: The Flame¹⁰⁰ is ideally suited for all flame related applications in the laboratory. The precision flame allows graduated heating of dental tools as well as safe sterilization of microbiological instruments. Flame size and intensity can be adjusted infinitely.

Easy operation: The safety Bunsen burner Flame¹⁰⁰ activates immediately with the push of a button. No match or a pilot flame are required.

Optionally, the Flame¹⁰⁰ can also be operated by a foot pedal or an external infrared motion sensor. The Flame¹⁰⁰ is suitable for stationary natural gas and propane/butane gas supplies as well as gas cartridges or gas cylinders. Numerous adapter systems are optionally available.

Reliable safety: The proven Safety Control System (SCS) is also incorporated in the Flame¹⁰⁰. All potential hazards are constantly monitored and, if necessary, protective measures, such as shutting off the gas supply, are activated. In addition to the ignition and flame control function and the overheating protection the safety package also features the continuous burner head control BHC. BHC unflinchingly identifies burner head clogging by liquids or solid substances. Approved by DIN-DVGW, approval no. NG2211AS0167. 2 years warranty.

Description	PK	Cat. No.
Safety Bunsen burners Flame ¹⁰⁰	1	6.261 226

2



1



6.232 207

Safety Laboratory Gas Burners Fuego SCS series

WLD-TEC

Suitable for all flame related applications in the laboratory. The low profile body facilitates ergonomic operation; the streamlined design reduces air flow disturbances in a Cleanroom workbench. The Fuego SCS series can be operated with foot pedal, button function or touch free IR-Sensor. Made of stainless steel, with fireproof controls.

- SCS Safety Control System with gas safety cut off: Ignition and flame control, temperature monitor, automatic unit switch off, residual heat display, burner head assembly monitor.
- BHC Burner Head Control.
- Removable burner head.
- Tilt mechanism right/left.
- Turbo flame.
- Holding device for 3 inoculation loop holders.
- Operation with stationary natural gas and propane/butane gas supplies, cartridge gas or gas cylinders.
- Approved by DIN-DVGW, approval no. NG2211AS0167.
- Warranty: 2 years.

Fuego SCS basic/ Fuego SCS basic RF: With stainless steel foot pedal. The foot pedal regulates the burning time either by continuous foot pressure or by start-stop function. Instrument with ON/OFF button function. Basic model without IR-Sensor and without graphic display.

Fuego SCS basic RF: Features as Fuego SCS basic but enables wireless operation due to modern radio foot pedal.

2



6.231 770

Fuego SCS/Fuego SCS pro: with Double-Click IR-sensor, button function and foot pedal operation. (foot pedal optional). Double-Click IR-sensor: This adjustable safety function ensures that the burner can only be ignited by activating the IR-Sensor twice. Adjustable IR-sensor reaction distance: 5mm to 50mm.

Illuminated graphic display: The animated, self-explanatory and language-less symbol display facilitates a rapid selection of all functions. 6 standard-programs with count down display: 1sec to 2hrs selectable.

The first safety laboratory gas burner with comfort package: Cooling time reminder for inoculation loops, temperature regulation for heating media, gas consumption display for gas cartridges, flexible and individual by selecting user account, acoustic signals as operating aids.

Additional safety assistance: Zero-pressure shut off for a pressureless gas hose. Graphical installation instructions facilitate the initial start-up.

Fuego SCS pro: Features as Fuego SCS, plus battery operation (9hrs), 2 rechargeable batteries (Mignon AA), fast charge function (3hrs) and safety tilt sensor.

Additional accessories are available on request.

Specifications

Dimensions (W x D x H): 103 x 130 x 49mm
 Power supply: 100-240V 50/60Hz, max. 0.3A; 9 V DC, 1.3 A
 Weight: 700g

Type	PK	Cat. No.
Fuego SCS basic	1	6.232 207 1
Fuego SCS basic RF	1	6.255 678
Fuego SCS	1	6.231 770 2
Fuego SCS pro	1	9.018 584

We can supply this
 manufacturer's
 whole
 product range !



Safety Laboratory Gas Burners *gasprofi 1* SCS micro

Safe gas burner for sterilizing, heating and other flame related applications. In the event of unforeseen extinction, the flame is automatically re-ignited. If the flame extinguishes and does not re-ignite, the burner automatically closes the gas supply.

WLD-TEC

- Safety Control System (SCS) with ignition and flame control function and over temperature protection
- All outer components made of stainless steel
- Dismountable burner head
- Space-saving
- Low working height
- Operation with stationary natural gas and propane/butane gas supplies, cartridge gas or gas cylinders
- Energy saving
- Tilt adjustment
- Approved by DIN-DVGW, approval no. NG2211AS1067
- 2 years guarantee

gasprofi 1 SCS micro *school* edition

- Optimal safety in schools
- Button function
- 2 standard programs for button (function knob) and foot pedal
- Optional operation via foot pedal or external DoubleClick IR sensor

gasprofi 1 SCS micro

- Optimal in clean room workstations and in laboratories
- DoubleClick IR sensor, button function and stainless steel foot pedal
- 5 standard programs for IR sensor, button (function knob) and foot pedal
- IR sensor with adjustable operating distance
- Burner head control (BHC) and residual heat indicator
- Holding device for 3 inoculation loop holders

Specifications

Dimensions (W x D x H): 85 x 86 x 49 mm
 Weight: 700 g
 Power supply: 100-240 V, 50/60Hz, max. 0.3 A/9 V DC, 1.3 A



6.701 105



7.657 840

Type	PK	Cat. No.
gasprofi 1 SCS micro	1	6.701 105
gasprofi 1 SCS micro <i>school</i> edition	1	7.657 840

Accessories for Safety Laboratory Gas Burners *gasprofi 1* SCS micro/Fuego SCS

WLD-TEC

Type	PK	Cat. No.
Adapter for cartridges CV 360	1	6.233 324
Windshield, stainless steel	1	6.081 539
Spray protector	1	6.081 736
Carrousel for annealing of inoculation loops (<i>gasprofi</i>)	1	7.672 054
Carrousel for annealing of inoculation loops (<i>Fuego</i>)	1	6.242 237



6.081 539



6.081 736

Microbiology/Sterilizers and burners



9.018 760



9.018 761



9.018 798

Safety Bunsen Burner, schuett phoenix II

For sterilising, heating, flame sterilising. For use in every microbiological laboratory or in safety cabinets. Modern Bunsen burner with state-of-the-art safety features plus outstanding quality characteristics:

schuett-biotec

- Controlled burning time 1 sec to 120 min (selectable)
- Automatic safety shut-off (selectable)
- Overheating protection/burner control by sensors
- Precise economic flame regulation (stable flame in strong air current)
- Flame and ignition monitoring
- "Push-and-Twist" bayonet fixture for burner head, no tools needed for cleaning
- Tilting right or left

Operating status, safety notes and warnings pictures and full text (color display) written language for most international languages. Brilliant colour display. Unique Joy-Stick navigation. Operating modes: by hand or with foot pedal or motion sensor. Housing made of stainless steel and safety glass. UV- and solvent resistant. For ease of cleaning and flame-sterilising. Suitable for use with natural gas (central gas) or butane/propane gas (gas cartridges). Integrated stand for tilting right or left. Safety standard acc. to DIN 30665 part 1, DIN-DVGW

schuett phoenix II eco: (with LED control lamp and foot-switch) Start flame by foot-switch or button (On/Off). Best suited for use in microbiological safety cabinets. Best price to performance ratio.

schuett phoenix II standard: (brilliant colour display, selection of native language, sensor and foot-switch)

Start/Stop flame by activating sensor 1x or 2x, use foot switch or press button by hand. Continuous display of timer.

schuett phoenix II accu: (brilliant colour display, selection of native language, sensor and built-in extra heavy duty power cells) Start/stop flame by activating sensor 1x or 2x, use foot-switch or press button by hand. Continuous display of timer and battery power. Operates for up to 30 hours, intermittent use. Complete with battery charger for 3 hour recharging. Ideal for mobile usage.

Power supply: 100 - 240 V, 50/60 Hz

Flame sterilization carousels semi- and fully automated: For precise and time-controlled flaming of different kinds of inoculating loops. Minimization of gas consumption, the life of the inoculating loops is significantly increased. The inoculating loop is placed into the carousel after use and is sterilized immediately after turning the holder in flaming position. Sterilization time infinitely adjustable. Designed for continuous work-flow with sample series in the Laminar Flow.

Semi-automated: schuett easyloop (for 6 Inoculating loop holders, included): Comfortable manual rotation, fully automated flaming process. For use with Safety Bunsen Burners schuett phoenix II standard and accu. Sterilization time: 3 to 5 s (adjustable from 1 s to 120 min)

Fully automated: schuett flammy R (for 5 Inoculating loop holders, included): Fully automated rotation and inoculating. In combination with a standard gas-safety-burner (e.g. schuett phoenix II). Sterilization time: 2 to 10 s

Type	Width mm	Depth mm	Height mm	Weight g	PK	Cat. No.
schuett phoenix II eco*	128	160	85	1000	1	9.018 760 1
schuett phoenix II standard*	128	160	85	1000	1	9.018 761 2
schuett phoenix II accu	128	160	85	1000	1	9.018 762
schuett easyloop	150	190	310	900	1	9.018 798 3
schuett flammy R	100	160	345	2000	1	9.018 779

*incl. foot switch, stainless steel



7.930 139

Accessories for gas-safety burner schuett phoenix II

schuett-biotec



9.018 752

Type	PK	Cat. No.
Adapter for gas cartridges CV 360 incl. pressure reducer	1	7.930 139 1
Adapter for gas cartridges C 206*	1	6.244 006
Adapter for gas cartridges CV 300/470*	1	6.240 475
Adapter for gas cartridges CP 250*	1	9.018 750
Adapter for gas cartridges CG 1750*	1	9.018 751
Windshield, stainless steel	1	9.018 752 5
Glass spatter guard	1	9.018 753
Gas safety hose with threaded screw connections for propane/butane 0.5m	1	9.018 754
Gas safety hose with threaded screw connections for propane/butane 2.0m	1	9.018 755
Hot-Tray, stainless steel, height-optimized	1	9.018 756
Instrument tray	1	9.015 757
Foot-switch, stainless steel	1	9.018 758

* Incl. pressure regulator and 0.5m safety gas tubing.

LLG-Micropestles, stainless steel

Polished stainless steel, micropestles. Precisely fitted for Eppendorf Safe-Lock Tubes™, manufactured in one-piece, smooth handle sections, can be disinfected easily. Minimum homogenate displacement due to tapered piston.

For Reaction tubes:

For homogenisation of cells, tissues or foodstuffs/feed samples.

- For tubes with 0.5 ml, 1.5 ml, 2.0 ml and 13.0 ml
- Can be cooled down to -196 °C
- Sterilisable in an autoclave or dry heat at +200 °C
- Suitable for PCR applications
- Alternative to single-use plastic pestles
- Perfectly suitable for Eppendorf Safe-Lock Tubes

For volume ml	Pestle length mm	PK	Cat. No.
0.5	94	1	9.314 500
1.5	124	1	9.314 501
2.0	120	1	9.314 502
13.0	190	1	9.314 503



9.314 500



9.314 501



9.314 502



9.314 503

5 EPPI pestle, PP



schuett-biotec

For resuspending pellets and homogenising within tubes (1.5, 2.0ml, exact fit). Autoclavable. Suitable for homogeniser/motor drive.

Description	Material	Pestle length mm	Figure	PK	Cat. No.
EPPI pestle, 1.5 / 2.0 ml	stainless steel	100	1	1	9.197 690
EPPI pestle, 1.5 / 2.0 ml	PP	85	2	10	9.197 689
Quick change chuck for EPPI pistol	PP and stainless steel		3	1	9.197 691



Disposable Pellet pestles, PP, with reaction tube



DWK Life Sciences

Autoclavable polypropylene. Suitable for battery-operated drive motor (9.314 496). Pestle length 7cm. Supplied with reaction tube, except Cat. No. 9.314 492 and 9.314 493.



9.314 491

For volume ml	Description	Pestle length mm	PK	Cat. No.
0.5	with reaction tube	70	100	9.314 490
0.5	without reaction tube	70	100	9.314 492
0.5	with reaction tube, RNase, DNase and pyrogen free	70	100	9.314 498
1.5	with reaction tube	70	100	9.314 491
1.5	without reaction tube	70	100	9.314 493
1.5	with reaction tube, RNase, DNase and pyrogen free	70	100	9.314 499
1.5	without reaction tube, RNase, DNase and pyrogen free	70	100	7.620 842



1 Micro pestles, accessory drive motor

DWK Life Sciences

Description	PK	Cat. No.
Complete with two batteries	1	9.314 496
Spare pestle adapter	1	9.314 497



2 3 Tissue Grinders System

DWK Life Sciences

For safety grinding of any cells by minimal temperature rising. Closed System (CS) for minimizing the risk of personal contact with aerosols and sample overflow while grinding. Optimal contact of grinder and conical sample tube (15 or 50ml) to grind each cell in the best way. Each unit is gamma sterilized and comes with a fully assembled pestle, conical sample tube (PP), solid top cap (HDPE) and label.

Type CS1: Tip from glass-filled PP (30%/70%) for standard grinding
 Type CS2: Vitrified tip (cast silica) for harder grinding



Type	For volume ml	PK	Cat. No.
CS 1	15	10	9.651 050
CS 1	50	10	9.651 051
CS 2	15	10	9.651 052
CS 2	50	10	9.651 053



4 Homogenisers DUALL®, with glass pestle

DWK Life Sciences

With conical and cylindrical area for effective tissue for grinding and also for homogenising. Especially suitable for cellular tissue such as muscle, heart and lungs. The pestle is sufficiently stable to be motor driven. The space between the pestle and mortar is between 0.1mm to 0.15mm. Spare components are available and are completely interchangeable.

Capacity ml	Size	Pestle L x o.d. mm	Mortar L x o.d. mm	PK	Cat. No.
1	20	155 x 6	80 x 13	1	9.651 637
3	21	207 x 6	120 x 16	1	9.651 638
5	22	220 x 8	150 x 18	1	9.651 639
15	23	278 x 10	175 x 25	1	9.651 641
30	24	310 x 10	215 x 32	1	9.651 642
50	25	345 x 16	225 x 38	1	9.651 643



5 Homogenisers DUALL®, with PTFE pestle

DWK Life Sciences

With conical and cylindrical area for effective tissue for homogenising. The PTFE pestle is ideal for soft tissue such as brain or liver. The pestle is suitable for motor drive. The space between the pestle and mortar is between 0.1mm to 0.15mm. Spare components are available and are completely interchangeable.

Capacity ml	Size	Pestle L x o.d. mm	Mortar L x o.d. mm	PK	Cat. No.
1	20	155 x 4.5	80 x 13	1	9.651 656
3	21	210 x 6	120 x 16	1	9.651 657
5	22	228 x 6	150 x 18	1	9.651 658
15	23	268 x 6	175 x 25	1	9.651 659
30	24	305 x 10	215 x 32	1	9.651 660
50	25	330 x 10	225 x 38	1	9.651 661

1 Homogenisers Potter-Elvehjem, with glass pestle

All-glass. Pestle is suitable for motor drive. The space between the pestle and mortar is between 0.1mm to 0.15mm. Spare components are available and are completely interchangeable.

DWK Life Sciences

Capacity	Size	Pestle L x o.d.	Mortar L x o.d.	PK	Cat. No.
ml		mm	mm		
1	19	145 x 5	95 x 13	1	9.651 674
5	21	205 x 6	140 x 16	1	9.651 675
8	22	215 x 8	150 x 18	1	9.651 676
17	23	265 x 10	175 x 25	1	9.651 677
45	24	315 x 10	220 x 32	1	9.651 678

1



2 Homogenisers Potter-Elvehjem, with PTFE pestle

With PTFE pestle and glass mortar. Sizes 21 and 24 have notches on the bottom edge of the pestle so that particles can be transported up to the cylindrical part of the mortar for extraction. The space between the pestle and mortar is between 0.1mm to 0.15mm. Spare components are available and are completely interchangeable.

DWK Life Sciences

Capacity	Size	Pestle L x o.d.	Mortar L x o.d.	PK	Cat. No.
ml		mm	mm		
0.5	18	130 x 3	80 x 12	1	9.651 689
1	19	154 x 5	95 x 12	1	9.651 690
3	20	154 x 5	115 x 12	1	9.651 691
5	21	215 x 6	140 x 15	1	9.651 692
8	22	212 x 6	150 x 19	1	9.651 693
17	23	266 x 6	175 x 25	1	9.651 694
45	24	269 x 6	220 x 32	1	9.651 695

2



Shakers, Disruptor Genie® analog/digital

The patented Disruptor Genie® provides a multi-directional action, which simultaneously agitates and vortexes at high speed, dramatically increasing cell disruption or sample resuspension efficiency.

Scientific Industries

- Dramatically increased sample disruption efficiency. Ideal for difficult glass bead procedures (Glass beads - please order separately), cell disruption/homogenisation of yeast, bacteria, plant and animal tissues and pellet resuspensions or anything that requires extremely violent, high-speed agitation.
- Patented multi-directional action simultaneously agitates and vortexes at high-speed producing greater yields in less time
- Hands-Free disruption of up to twelve 1.5ml or 2.0ml microtubes with timer from 0 to 15 minutes (Disruptor Genie® analog), 0 to 99 minutes (Disruptor Genie® digital) or continuous operation
- Performance comparable to expensive ultrasonic cell disruptors/homogenisers.
- Suitable for use in cold rooms or incubators

Supplied with: Disruptor Genie, tube holder for 12 tubes, pop-off cup

Specifications

Speed	
Disruptor Genie® analog:	2850rpm
Disruptor Genie® digital:	1000 to 2850rpm
Dimensions (W x D x H):	122 x 165 x 190mm
Weight:	4.3kg
Supply requirements:	220V 50Hz, 250mA

Type	Connector	PK	Cat. No.
Disruptor Genie® analog	EU	1	9.730 115
Disruptor Genie® analog	CH	1	9.730 117
Disruptor Genie® digital	EU	1	6.253 276
Disruptor Genie® digital	CH	1	9.730 119

Further models can be found in our online shop.

Accessories for Disruptor Genie®

Description	PK	Cat. No.
Microtube Holder for 12 x 1.5 or 2.0ml tubes	1	6.253 281
0.1mm Disruptor Beads, 375g	1	9.730 100
0.5mm Disruptor Beads, 375g	1	9.730 101

3



9.730 115

4



6.253 276

5



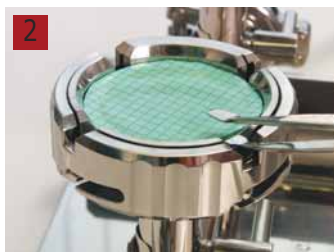
6.253 281



1 2 Microbiological monitoring of water: MBS I system and membranes

The MBS I filtration system is designed for laboratories that handle high numbers of samples for microbiological quality control. It consists of a membrane dispenser, a funnel dispenser, and a 2-place filter AS220 manifold. AS220 Filtration Manifold and Filtration funnels AS220 is a two-place stainless-steel filtration manifold, which can be joined together (maximum of 3 manifolds). This simple manifold can be used with 47mm or 50mm filtration membranes. *Whatman*

- Waste reduction - because PP funnels can be autoclaved up to 50 times
- Time saving - No need to flame in between filtrations
- Easy handling
- Cost saving - 20 PP funnels are enough for 1000 analyses
- Reduces cross-contamination



Description	PK	Cat. No.
2-place vacuum manifold AS 220	1	6.231 788
Automatic dispenser for funnels	1	6.231 860
Funnels 100 ml, PP, autoclavable	20	7.616 566
Funnels 350 ml, PP, autoclavable	20	6.801 571
Autoclaving bags	20	7.608 012
Membran-Butler manual	1	6.225 967
Steel frit with ring for AS220	1	6.801 981



3 Biosart®100 monitors

Filtration unit for use with a Sartorius vacuum manifold or direct attachment to a special vacuum pump. Biosart® 100 Monitors have been specifically designed for the microbiological testing of pharmaceuticals, food, beverages, water and other liquids. These sterile disposable units with built-in membrane filter and cellulose pad are ready to use. After filtration, just remove the 100ml funnel to convert the monitor into a petri dish. Culture media for wetting the pad are available in individually sterilised, convenient plastic ampoules. Biosart® 100 Monitors are ready to use filter units designed to fit onto the receivers of a vacuum manifold. For use with Biosart® 100 culture media. *Sartorius Lab Instruments*

Type	Diam. mm	Pore size µm	Colour Filter / Grid	PK	Cat. No.
K	47	0.45	white / black	48	9.049 300
K	47	0.45	grey / white	48	9.049 315
ACK	47	0.20	white / black	48	9.049 311
ACK	47	0.45	white / black	48	9.049 312
ACK	47	0.45	green / dark green	48	9.049 313
ACK	47	0.45	grey / white	48	9.049 304
Adapter for BioSart	55	-	-	1	9.049 320

ACK= individually sterile packed. K= sterile.



4 Filter funnel, Biosart®250

For microbiological and analytical quality assurance in industry. 250ml sterile plastic funnels reduce process time in colony and particle analysis. For use with Sartorius membrane filters and Sartorius cardboard culture plates. *Sartorius Lab Instruments*

Note: BioSart 250 funnels can also be adapted to fit single filter holders or filtration manifolds.

Type	PK	Cat. No.
BioSart 250 disposable funnel, sterile	50	9.049 340
BioSart 250 disposable funnel, sterile, individually packed	50	9.049 341



5 Membrane Filter Microsart® @filter units, CN

Microsart® @filter 100 filter units are a sterile and ready-to-use combination of funnel made of PP with 47 mm diameter, filter base and gridded membrane in one unit. They have been specifically developed for the detection and enumeration of microorganisms in pharmaceuticals, cosmetics, food, beverages, water and other liquids. The membrane filters can also be used in conjunction with Sartorius Stedim Biotech nutrient board discs. *Sartorius Lab Instruments*



Danger

H phrases: H228

Pore size µm	Colour Filter / Grid	PK	Cat. No.
0.20	white / black	60	6.258 123
0.45	white / black	60	7.657 646
0.45	white / black	24	6.280 425
0.45	grey / white	60	4.652 481

1 Plastic Funnels, Microsart®, PP

The sterile plastic funnels with 47 mm diameter allow quick performance of the filtrations required in the routine testing of water, food and beverages, pharmaceutical and cosmetic products. A Sartorius Stedim Biotech gridded membrane is placed on a stainless steel filter support and a Microsart® Funnel is simply and practically fitted on and the sample is filtered by vacuum. *Sartorius Lab Instruments*

- Click-Fit closure for optimum sealing
- Graduation with markings for exact volume dosing

Volume ml	PK	Cat. No.
100	100	7.659 614
250	96	7.671 690



2 Disposable Analytical Filters Nalgene™, sterile

Single-use filterware. Analytical filterware provides precise, easy-to-use systems for the recovery of microorganisms and particulates for QC testing and research. *Thermo Scientific*

- Disposable, easy-to-use, pre-assembled sterile filter units and funnels
- Easy-to-remove triton-free cellulose nitrate (CN) membranes
- 0.2 µm CN membrane is suitable for sterility testing
- 0.45 µm CN gridded membrane is certified for water quality testing



H phrases: H228

Type	Volume ml	Membrane diam. mm	Pore size µm	Grid	Colour	PK	Cat. No.
Filter funnel	150	47	0.45	black	white	1	9.046 077
Filter funnel	250	47	0.20	-	white	1	7.047 680
Filter funnel	250	47	0.45	black	white	1	7.047 681
Filter funnel	250	47	0.45	black	grey	50	6.273 013
Filter unit	150	47	0.20	-	white	1	9.046 081
Filter unit	150	47	0.45	black	white	1	9.046 082

3 Membrane filters Type 130, cellulose nitrate

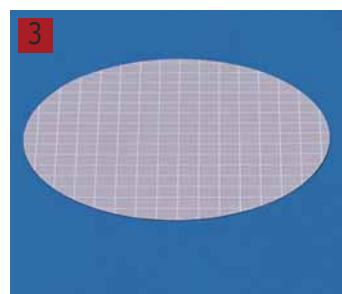
Gray membrane (after wetting, black) with white grid, for detection of yeasts and molds, particle count and microscopy, individually, sterile packaged/non sterile. *Sartorius Lab Instruments*



H phrases: H228

Diam. mm	Pore size µm	Sterile	PK	Cat. No.
50	0.65	+	1000	7.017 078
47 for SMART Filter Dispenser	0.45	+	3	7.054 644
47	0.65	+	100	9.054 122
47	0.45	+	100	9.054 132
50	0.45	+	100	9.054 133
50	0.45	-	100	9.054 139

Other types available on request.



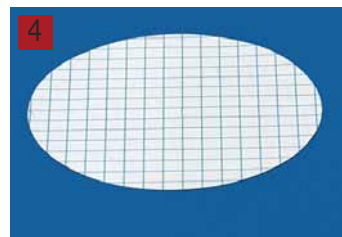
4 Membrane filters type 138, cellulose nitrate

Green membrane with dark-green grid, providing optimal contrast to light-colored or transparent bacteria colonies, individually, sterile packaged/non sterile. *Sartorius Lab Instruments*



H phrases: H228

Diam. mm	Pore size µm	Sterile	PK	Cat. No.
47	0.45	+	100	9.054 202
50	0.45	+	100	9.054 203



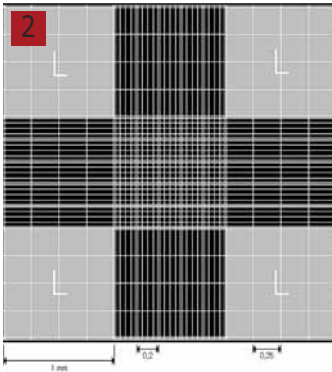


1 Haemocytometer cover glasses

Quality A, ground edges.

Menzel

Width mm	Length mm	Thickness mm	PK	Cat. No.
22	22	0.4	10	6.073 041
24	24	0.4	10	6.313 619
26	20	0.4	10	6.314 328



2 Counting chamber, Improved Neubauer, bright line

Bright line. With double ruling. Calibratable. Same counting grid as the Improved Neubauer cell, but with rhodium coated chamber base. Rulings are engraved into the Rhodium layer and appear bright under normal microscope settings. By altering the contrast it is possible to reverse the image under the microscope to make the rulings appear brighter or darker as required.

BRAND

Description	PK	Cat. No.
Without snap-on clips	1	7.020 271



3 Hand tally counter

Use for counting blood cells, bacterial colonies, drops of liquid, or any repetitive event. Tallies up to 9999. Features a quick-reset knob, lens window for easy reading, and finger ring for a secure grip. Sturdy, chrome-finished, metal housing. Dimensions: 46mm diameter x 41mm W.

Heathrow Scientific

Description	PK	Cat. No.
Hand tally counter	1	6.237 971



4 Tally counter, digital

Effective and practical counter with a sturdy, chrome finished housing. Ideal for counting blood cells, bacterial colonies, drops of liquid or any other repetitive step with a tally level up to 9999. TALLY COUNTER - "handy" Features a quick-reset knob, lens window for easy reading, and a finger ring for a secure grip.

ISOLAB

Description	PK	Cat. No.
Tally counter	1	6.267 411



5 Colony counter eCount™

Multi-function electronic counter with a Sharpie® pen for marking Petri dishes to prevent missing or double-counting colonies. Light, ergonomic body is balanced for easy manipulation. For easy counting of bacteria and mould fungus colonies. Counting control via membrane keys.

Heathrow Scientific

- Incl. thumb button which allows you to use the eCount as a digital tally counter
- Count up, then count down verification
- Display the total and keep in the memory up to 32 separate counts
- Disable the counter so you can write totals and notes
- Verify each count with either a beep or LED Flash
- 5 years warranty (excludes battery)

Type	PK	Cat. No.
Colony counter eCount™ incl. Sharpie® pen black, fine-point and stand	1	9.521 783
Replacement pens Sharpie®, black fine-point	12	9.521 787
Replacement pens Sharpie® Set, black, lime, navy, orange, purple, sky blue, and turquoise, fine and extra fine point	8	7.656 684

1 Colony Counter SC6PLUS, manual

- Pressure sensitive counting
- Pressure can be adjusted
- Audible confirmation
- Choice of light or dark background
- Bright white energy saving LED lighting
- Average count facility
- With BioCote® antimicrobial protection
- Connectivity to printer or computer

Stuart



Scope of supply: Device with two Wolffhuegel graticules and dish centering adapters to facilitate use with 50 to 90 mm dishes.

Please order magnifiers and printers separately.

Specification

Digital display:	3 digit LED
Lighting:	White LED
Magnifier glass:	1.7x and 3x (option)
Counter:	0 to 999
Petri dishes:	diam. 50 to 90 mm
Dimensions (W x D x H):	310 x 300 x 140 mm
Weight:	1.5 kg
Power supply:	120-230 V, 50/60 Hz, 70 W
Warranty:	3 years

Type	PK	Cat. No.
SC6PLUS	1	9.645 280

Accessories for Colony Counter SC6+

Stuart

Description	PK	Cat. No.
Accessory printer with power supply	1	9.950 399
Magnifiers 1.7x	1	9.645 281
Magnifiers 3x	1	6.223 318
Wolffhuegel graticule/segmentation discs for colony counter	10	6.238 272
Centering adapter	2	6.242 195
Protective discs	5	6.241 644

2 Colony counter Scan® 100

Scan® 100 is a high-tech manual colony counter remarkable for its user-friendly functions and ergonomics. A LED lighting system with Dark Field technology gives an accurate and contrasted view of the colonies. The integrated USB port allows export of the results to guarantee traceability and to reduce time of counting and reporting. Touch screen, volume and light intensity are easily adjustable. For all petri dishes from 55mm up to 150mm. Adapted to any kind of pen. *interscience*

Magnifying lens with flexible arm - please order separately.



Type	PK	Cat. No.
Scan® 100	1	6.237 952
Magnifying lens flexible arm	1	7.920 048



1 schuett count Colony Counter

Designed for reliable and efficient counting of bacterial colonies and bacteriophage plaques growing on nutrient agar or nutrient discs/filter disks in Petri dishes. Provides ergonomic and relaxed working.

schuett-biotec

- For Petri dishes with Ø 90 mm (Ø 60 or 150 mm optional)
- Individually adjustable lighting, pressure sensitivity of the counter plate and volume
- LED lighting technology, absolutely glarefree and gentle on the eyes
- Three types of illumination: from below, from the side and incident light (optional)
- High colony transparency and differentiation (agar or nutrient discs/filter), even with transparent colonies
- No heating of the samples
- Natural colour reproduction
- Easy counting by marking the colonies (with any felt pen) on the petri dish
- Acoustic counter control (with volume control)
- 4-digit LED-display (0 - 9999), clearly arranged foil keypad
- Average count calculation, data transfer via USB to PC. Imported in Excel, for further processing, storage and printing

Scope of supply: For 90mm dia. Petri dishes: adapter (transparent) for illumination from below, adapter (black/white) for illumination from side, contrast disc (black), USB-cable, marker-pen with holder.

For enumeration of more than 50 Petri dishes per day, we recommend: schütt colonyQuant automatic colony counter (sample chamber, PC/laptop, software-license): The schuett colonyQuant is equipped with a high-resolution auto focus/auto-zoom color camera. Evaluation of Petri dishes with agar Petri film, filters or nutrient pads, spiral plating or Hemmhof analysis. Storage of counting methods, documentation of results.

Suitable for automatic counting and documentation of Petri dishes or nutrient pads, covered with smallest colonies (min. 0.05 mm diameter), mixed cultures. Connection to existing LIM system possible. Test evaluation of customer-specific plates in the customer's own laboratory possible before purchase.

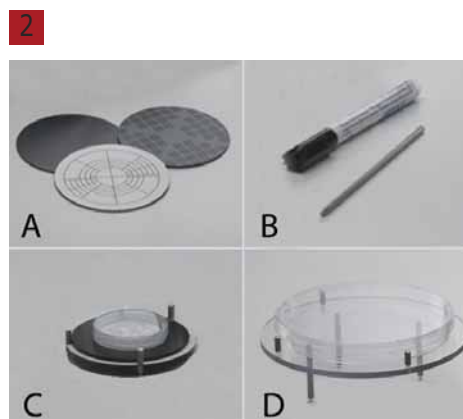
Type	PK	Cat. No.
schuett count colony counter, 100-240 V	1	9.521 940

2 Accessories for schuett count Colony counter

schuett-biotec

Type	Figure	PK	Cat. No.
Magnifier 3 x (100mm dia.)		1	9.521 941
Magnifier 6-8 x (60mm dia.)		1	9.521 942
LED overhead lamp		1	9.521 943
Spiral-Plater Disc, black/white	A	1	9.521 946
Wolffhügel Disc, black/white	A	1	9.521 947
Counting needle	B	1	9.521 948
Adapter for Petri dishes, 50 to 60mm dia.	C	1	9.521 944
Adapter for Petri dishes, 140 to 150mm dia.	D	1	9.521 945

Adapter for other petri dishes sizes on request.



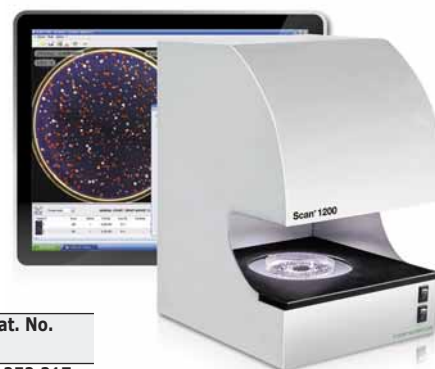
Automatic Colony counter Scan® 300, 500 and 1200

Scan® 300 is an automatic colony counter that includes the essential features for Petri dish counting. *interscience*
It is specifically adapted to the usual media in food microbiology (PCA, MRS...). With a CCD camera with 1 Megapixel - zoom x 28. It counts colonies on a Petri dish in less than half a second, with a minimum colony size of 0.1 mm. For the detection of colonies on round pour, surface, spiral and circle mode plated dishes Ø 55 - 90 mm.

Scan® 500 is a high-tech automatic colony counter. It counts colonies on a Petri dish in less than half a second and gives you quick, accurate, complete and traceable reading of the results. With its CCD camera and a powerful software, it connects to a PC via a Firewire connection automatically export results to Excel.

Scan® 1200 is a high resolution automatic colony counter that offer quick, and traceable counting results. Widely used in food microbiology, it counts colonies and automatically saves all data to Excel. Equipped with a digital camera and a powerful software, it connects to a PC via a Firewire connection. Scan® 1200 counts all colonies, even on smallest poured, spread and Spiral® Petri dishes; on PetriFilm™ and RIDA™ Count/Sanita-kun™, on filtration membrane and Compact Dry™.

1



9.521 960

Type	PK	Cat. No.
Scan® 300	1	6.252 217
Scan® 500	1	6.237 357
Scan® 1200	1	9.521 960 1

2 Colony Counter Scan® 4000, automatic

2

Scan® 4000 is an ultra HD automatic colony counter and inhibition zone reader for high resolution *interscience*
color reading of colonies and inhibition zones. Adapted to all sizes of Petri dishes and all media, its lighting system guarantees a great user comfort, high accuracy and excellent reproducibility. Automatic lighting system with 6 combinations, top and/or bottom light, white or black background. Automatic counting and inhibition zone measurement with manual control

- All stainless steel body
- Counting: 1000 colonies per second
- Minimum size of colony: 0.05 mm
- Color detection: 7 colors on the same dish
- Long-life white LEDs/Dark Field
- Counting on e.g. Petri dishes 55 to 150 mm, PetriFilm™ and other plates
- Inhibition zone reading on 90 to 100 mm round dishes and 120 mm square dishes
- Maximum number of antibiotics: up to 16 antibiotics on a square 120 mm dish
- Reading time: measurement of 16 inhibition zones between 2 and 4 seconds maximum
- Automatic separation of confluent colonies
- Results: Scan® file, PDF report, jpeg, png, bmp, Excel™
- LIMS and USB connection
- Software available in English, French, Spanish, Japanese, Chinese, Russian



Specifications

Camera:	Color HD CCD camera and digital zoom x64
Camera Resolution:	5 mega-pixels
Lighting:	LED/Dark field
Min. colony size:	0.05 mm
Counter:	1000 colonies per second
Culture dishes:	55 to 150 mm, 90 to 100 mm round dishes, 120 mm square dishes
Dimensions (W x D x H):	470 x 470 x 640 mm
Weight:	24.4 kg
Power supply:	100-240 V, 50/60 Hz

Type	PK	Cat. No.
Colony Counter Scan® 4000	1	6.281 917

Microbiology/ATP detection-Hygiene monitoring

1



1 Luminometer Clean-Trace™ LM1

Simple, quick and reliable hand held diagnostic tool to verify cleaning effectiveness and capture, store and manage data for later analysis.

3M Deutschland

- Compact and easy-to-use
- Rapid results allow immediate corrective action
- To be used with the dry swabs 3M™ Clean-Trace™ UXL100, AQT200 and AQF100

Type	PK	Cat. No.
Clean-Trace™ LM1	1	4.665 172

2



2 Dry swabs for Luminometer 3M™ Clean-Trace™ NG3/LM1

3M Deutschland

H phrases: H412

Type	Description	PK	Cat. No.
Clean-Trace™ ATP UXL100	Dry swabs for surfaces	100	6.243 230
Clean-Trace™ Water AQF100	Dry swabs, free ATP	100	6.261 832
Clean-Trace™ Water Plus AQT200	Dry swabs, total ATP	100	6.261 831

3



3 Allergenic test

Optionally in a plastic or in 96 Wells/Kit

3M Deutschland

Lateral flow device in a plastic casset, 25 devices individually packed.
One foil bag with a plate of 96 removable antibody coated wells.

Description	PK	Cat. No.
L25WAL Walnut Rapid LFD, pack of 25 Tests	25	4.665 443
L25HZL Hazelnut Rapid LFD, pack of 25 Tests	25	4.665 444
L25PST Pistachio Rapid LFD, pack of 25 Tests	25	4.665 445
L25EGG Egg white Rapid LFD, pack of 25 Tests	25	4.665 446
L25GLU Gluten Rapid LFD, pack of 25 Tests	25	4.665 447
L25ALM Almond Rapid LFD, pack of 25 Tests	25	4.665 448
L25MLK Milk Rapid LFD, pack of 25 Tests	25	4.665 449
L25PNT Peanut Rapid LFD, pack of 25 Tests	25	4.665 450
L25SOY Soy Rapid LFD, pack of 25 Tests	25	4.665 451
L25COC Coconut Rapid LFD, pack of 25 Tests	25	4.665 452
L25FSH Fish Rapid LFD, pack of 25 Tests	25	4.665 453
L25CHW Cashew Rapid LFD, pack of 25 Tests	25	4.665 454
E96MOL Mollusk ELISA, 96 WELLS/KIT	1	4.665 455
E96CHW Cashew ELISA, 96 WELLS/KIT	1	4.665 456
E96ALM Almond ELISA, 96 WELLS/KIT	1	4.665 457
E96MLK Milk ELISA, 96 WELLS/KIT	1	4.665 458
E96BZL Brazil Nut ELISA, 96 WELLS/KIT	1	4.665 459
E96PEC Pecan ELISA, 96 WELLS/KIT	1	4.665 460
E96MUS Mustard ELISA, 96 WELLS/KIT	1	4.665 461
E96PNT Peanut ELISA, 96 WELLS/KIT	1	4.665 462
E96CAS Casein ELISA, 96 WELLS/KIT	1	4.665 463
E96CRU Crustacean ELISA, 96 WELLS/KIT	1	4.665 464
E96EGG Egg white ELISA, 96 WELLS/KIT	1	4.665 465
E96PST Pistachio ELISA, 96 WELLS/KIT	1	4.665 466
E96SES Sesame ELISA, 96 WELLS/KIT	1	4.665 467
E96SOY Soy ELISA, 96 WELLS/KIT	1	4.665 468
E96FSH Fish ELISA, 96 WELLS/KIT	1	4.665 469
E96HZL Hazelnut ELISA, 96 WELLS/KIT	1	4.665 470
E96MAC Macadamia KIT, 96 WELLS/KIT	1	4.665 471

LLG-Dry swabs, sterile

Description	Ext. diam. mm	Length mm	PK	Cat. No.
with Cotton tip, in PP test tube	12	150	1000	6.272 800
with Rayon tip and plastic stick, in PP test tube	12	150	1000	6.272 801
with Cotton tip and wooden stick, individually wrapped		150	1000	9.404 004
with Rayon tip and plastic stick, in PP test tube, individually wrapped	12	150	150	9.404 005
with Rayon tip and plastic stick, individually wrapped		150	1000	9.404 006
with clear Amies medium, Rayon tip and plastic stick, in PP test tube	12	150	150	9.404 007



9.404 005



9.404 006

3 Air sampler, Airport MD8 airborne bacteria sampler

AirPort MD8 is a new portable air bacteria sampler for the pharmaceutical and food and beverage industries, hospitals, environmental protection and for industrial safety.

Sartorius Lab Instruments

AirPort MD8 has the following benefits:

- Battery-powered and portable for lab or field use
- Battery status display guarantees constant performance during sampling
- Ergonomic, smooth design, surfaces can be disinfected
- Choice of sampling selection, either by total volume or measurement duration



Specifications:

Volume flow control:	Volume flow can be set to three levels using integral hydrometric manometer: 30 L/min., 40 L/min. and 50 L/min.
Fixed sample volumes:	25, 50, 100, 250, 500, 750 and 1000 litres Sample volume can also be adjusted in 5 litre increments
Battery:	NiMH 16.8 Volt/3800 mAh
Running time with a full battery charge:	approx. 4.5 hours
Charging time:	approx. 4.5 hours if battery flat
Noise level:	Using gelatin membrane filters, 48 dB(A)
Weight:	2.5 kg
Dimensions (L x W x H):	300 x 135 x 165 mm
Filter size:	80 mm dia., area 38.5 cm ²

Type	PK	Cat. No.
AirPort MD8	1	9.841 605

4 Disposable gelatin units for air sampler Airport MD8

Gelatine filter disposable units are individually sterile packed, ready-to-connect units consisting of gelatine filter and holder.

Sartorius Lab Instruments

Specifications:

Filter size:	80 mm dia., area 38.5 cm ²
Pore size:	3 µm
Reaction in water:	soluble
Flow capacity (air):	per cm ² : 2.7 l/min. at ΔP 0.05 bar
Environment:	Temperature max. 30°C, humidity max. 85%
Retention:	1. Bac subtilis niger 99.9995% retention at 0.25 m/s flow rate 2. Coli Phages T3 99.94 % retention at 80% rel. humidity and 0.3 m/s flow rate
Sterilization:	sterilisable with gamma radiation



Description	PK	Cat. No.
Gelatin membrane filter, individual pack	10	9.841 615
Gelatin membrane filter, three-pack	10	9.841 616
Adapter	1	9.841 617



1 LLG-Histology cassettes with detachable lid

For routine tissue and biopsy processing and embedding.
 Made of Polyoxymethylene (POM). 100 % resistant to the chemical action of histological solvents.
 With detachable lid (unassembled). Special design for easy frequent opening and closing, as well as easy and safe lid removal/insertion without any danger of specimen loss.
 With two large labeling areas on the cassette sides and a standard 45 °C front writing area adaptable to most cassette labelers.
 Fine square pores (0.9 x 0.9 mm) for an optimal fluid exchange and proper drainage.

Colour	Width mm	Depth mm	Height mm	PK	Cat. No.
blue	28	40	7	500	9.160 841
green	28	40	7	500	9.160 842
pink	28	40	7	500	9.160 843
white	28	40	7	500	9.160 844
yellow	28	40	7	500	9.160 845



2 3 Histology cassettes, POM

Tissue embedding cassettes for paraffin inclusions. With clip-on lid that breaks when closing, which allows an easy removal.

Kartell

Colour	Dimensions (W x D x H) mm	PK	Cat. No.
white	28 x 40 x 6.8	500	6.207 173
blue	28 x 40 x 6.8	500	6.280 220
yellow	28 x 40 x 6.8	500	6.284 765
red	28 x 40 x 6.8	500	6.284 766
green	28 x 40 x 6.8	500	6.284 767
pink	28 x 40 x 6.8	500	6.226 853
white	28 x 40 x 13.6	100	7.910 449
blue	28 x 40 x 13.6	100	6.284 771
yellow	28 x 40 x 13.6	100	6.269 288
green	28 x 40 x 13.6	100	6.284 772
pink	28 x 40 x 13.6	100	6.284 773



4 Sponge for Histology cassettes

Synthetic sponge with a calibrated porosity that can easily be inserted into the tissue embedding cassettes. Very useful for small specimens in biopsy tests.

Kartell

Colour	Dimensions (W x D x H) mm	PK	Cat. No.
Blue	32 x 26 x 2.5	500	6.284 768



5 Embedding rings

Suitable for the processing and histological inclusion of pieces in paraffin.
 Ideal for the storage and the identification of tissue samples.
 Dimensions (W x D x H): 28 x 40 x 11 mm.

Kartell

Colour	PK	Cat. No.
White	500	6.284 760
Blue	500	6.284 761
Yellow	500	6.284 762
Green	500	6.284 763
Pink	500	6.284 764



6 Metal trays for Histology

Made of stainless steel for easy removal of paraffin inclusions: they allow a precise location of the specimen into the paraffin.

Kartell

External dimensions (W x D x H) mm	PK	Cat. No.
52 x 35 x 11.6	10	6.285 347
52 x 35 x 11	10	6.285 348

1 Drawer boxes Styrokay

White modular drawer box with 6 drawers for histology cassettes, documents and small laboratory utensils.

styro GmbH

- Including inscription labels
- 49 histology cassettes per drawer
- 294 histology cassettes per box

Type	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	PK	Cat. No.
Drawer cabinet with 6 drawers without insert	230 x 318 x 45	270 x 345 x 340	1	4.662 136
Drawer cabinet with 6 drawers with insert	230 x 318 x 45	270 x 345 x 340	1	4.662 137

Suitable accessories can be found in our online shop.



Rotary Microtomes RAZOR/RAZOR-e

Rotary Microtoms with disposable blades for paraffin sections for routine and research. Micro and coarse advance movements in enclosed housing.

Micros Austria

Coarse advance left side. Optimum specimen guidance by maintenance-free cross roller guides. Safety lock on hand wheel. Section thickness adjustment from 0.5 µm to 60 µm in defined steps. Precise guide way and clamping device for knifeholder with optimum sliding capability and prism guide.

Manual Rotary Microtome RAZOR:

The rotation of the hand wheel is light and smooth and ensures an ergonomic handling of the instrument, which greatly reduces the operators intensity in the sectioning job. The hand wheel locking is conveniently integrated in the wheel and is designed for one thumb use. The compact ergonomical design offers space for using different application tools.

Fully automatic Rotary Microtome RAZOR-e

Offers great user benefit and gives superior comfort to the operator. The perfectly ergonomic arrangements of the control elements enable an effortless handling of the microtome. Automatic trimming in 3 steps: 1:10 µm, 2:20 µm, 3:30 µm. The powerful cutting motor drive with safety function ensures high section stability and precision. Hand wheel lock conveniently integrated locking lever on the hand wheel. Emergency shut down button. With the emergency shut down button the slicing process can be stopped immediately.

Scope of supply: Microtome Base with Knife Holder Base, Disposable Blade Holder Basic, Changeable clamping plate, Adapter Piece (fixed), Universal Cassette Clamp, Wooden Transport Box, 50 Microtome Blades MS100

The microtome blades MS200 (article no.: 6.270 924) and other suitable blades are available as accessories.

Specifications

Vertical stroke:	70 mm
Horizontal stroke:	40 mm
Section thickness:	0.5 to 60 µm
Section thickness setting:	0.5 to 2 µm, 0.5 µm increments 2 to 10 µm, 1 µm increments 10 to 20 µm, 2 µm increments 20 to 60 µm, 5 µm increment
Coarse advance:	manually by hand wheel left side
Object orientation:	X- and Y-axes 8°, Z-axes 360°
Object retraction:	on upward movement 80 µm
RAZOR-e only:	
Trimming function:	1:10 µm, 2:20 µm, 3:30 µm
Cutting Count:	integrated, LCD-display

Type	Dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
Rotary Microtome RAZOR, manual	460 x 460 x 280	36	1	6.270 919
Rotary Microtome RAZOR-e, fully automatic	460 x 550 x 280	45	1	6.270 920



6.270 919

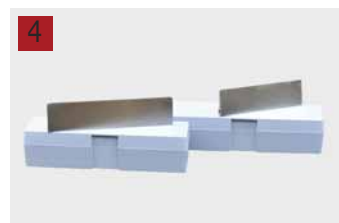


6.270 920

Accessories for Rotary Microtomes RAZOR

Micros Austria

Description	PK	Cat. No.
Microtome knife type C, stainless steel 16 cm	1	6.270 921
Knife, tungsten carbide, 16 cm	1	6.270 923
Knife box, plastic for s knife 10 to 16 cm	1	6.270 922
Blade holder adapter for knife holder, Low Profile	1	6.270 932
Blade holder adapter for knife holder, High Profile	1	6.270 933



6.270 921

1



6.270 924

Blades for Microtoms, stainless steel

MS200: Universal blade with plasma coating for daily routine, suitable for all types of tissue. Especially suitable for ribbon sectioning, excellent sharpness, even with very thin cuts.

Micros Austria

Allrounder with unique hardened blade cutting edge, excellent durability.

MS300: Very sharp blade with plasma coating, especially recommended for cutting bone tissue. Also perfect for all other tissue types as well as for ribbon sectioning.

MS100: For daily routine like ribbon and thin sectioning. Excellent sharpness and durability. All-purpose, even for difficult tissue. High-quality stainless steel, extra hard teflon coated.

MS33: Blade for applications where extremely thin, high-quality sections are required. Suitable also for skin biopsy. Short trimming time and increased durability.

MS24: For hard tissue, but also for soft tissue and biopsies. Excellent long life and sharpness, very suitable for ribbon sectioning.

HP (High Profile Plasma): Excellent references for cryostat and ribbon sectioning.

Special hardened blade with plasma coating, short trimming time, excellent durability.

2



6.310 681

Type	Description	Width mm	Length mm	Thickness mm	Angle	PK	Cat. No.
MS200	Low Profile	8	80	0.25	35	50	6.270 924 1
MS300	Low Profile	8	80	0.25	35	50	6.310 681 2
MS100	Low Profile	8	80	0.25	35	50	6.270 928
MS33	Low Profile	8	80	0.25	30	50	6.270 926
MS24	Low Profile	8	80	0.25	35	50	6.270 927
HP	High Profile Plasma	14	80	0.32	35	50	4.670 750

3



6.270 930

Trimming Knives

For cutting tissue samples without causing deformation for large tissue blocks.

Micros Austria

Type	Angle	Width mm	Length mm	Thickness mm	PK	Cat. No.
MM 130	22	18	130	0.25	50	6.270 930 3
MM 130TEST	22	18	130	0.25	5	6.270 948
MM 260	22	18	260	0.25	50	6.270 931
MM 260TEST	22	18	260	0.25	5	6.290 364

4



Handles for Trimming Knives

Micros Austria

Description	PK	Cat. No.
Handle for Trimming Knife 260 mm	1	4.665 355
Handle for Trimming Knife 130 mm	1	6.310 432

5



5 Tissue Vial CryoELITE®, sterile

The CryoELITE® Tissue Vials are specifically designed for tissue collection, transport and storage.

DWK Life Sciences

Different from cells and biofluids, tissue specimens have particular requirements for cryogenic storage. Offering researchers a uniform vial able to maintain sample integrity while maximizing storage capacity and organization, the CryoELITE Tissue Vials feature a wide-mouth opening, 5mL capacity and high integrity closure. The CryoELITE Tissue Vial offers researchers who work with tissue samples ease of use, convenience and security. The CryoELITE® Tissue Vials are manufactured from low binding, cryogenicgrade virgin polypropylene that meets the USP Class VI classification. Lot tested and certified to be free of pyrogens, RNase/DNase and endotoxins, the vials have a sample capacity of 5mL and a storage temperature range of -156°C to 121°C. The externally threaded cap provides a seal that exceeds DOT and IATA classifications for diagnostic specimens and their transport and is capable of maintaining a secure closure during freeze/thaw procedures. The vials have a flat bottom and a stippled external surface to promote easier handling.

- Lot certified RNase/DNase and Endotoxin Free providing assurance of product integrity
- Cap seal exceeds DOT and IATA regulations ensuring ultimate protection of samples during transportation and demanding freeze-thaw handling
- Wide mouth for insertion and removal of tissue with forceps
- 5 ml volume for use with tissue sections
- Directional indicators to allow orientation of tissue within the vial

Description	PK	Cat. No.
Tissue Vial CryoELITE®, 5 ml, sterile	250	4.658 776

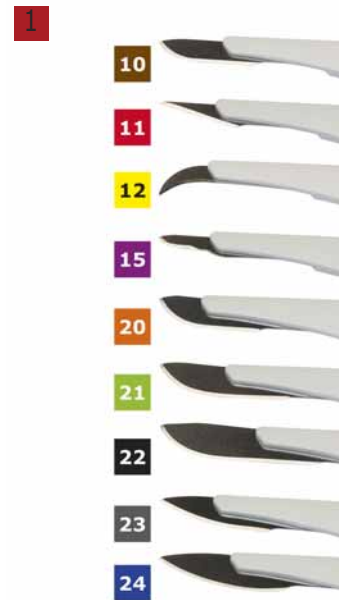
1 Scalpels, disposable Cutfix®

Sterile. For cleaner, smoother, more accurate incisions.

B. Braun Deutschland

- Excellent cutting ability of stainless steel blade
- Ergonomic solid plastic handle
- Ready for use
- Complete range of blades for every incision
- Individually packed precision knife with cap
- Total length about 150 mm depending on the blade shape and length

Type	PK	Cat. No.
10	10	9.409 804
11	10	9.409 805
12	10	9.409 806
15	10	9.409 807
20	10	9.409 808
21	10	9.409 809
22	10	9.409 810
23	10	9.409 813
24	10	9.409 814

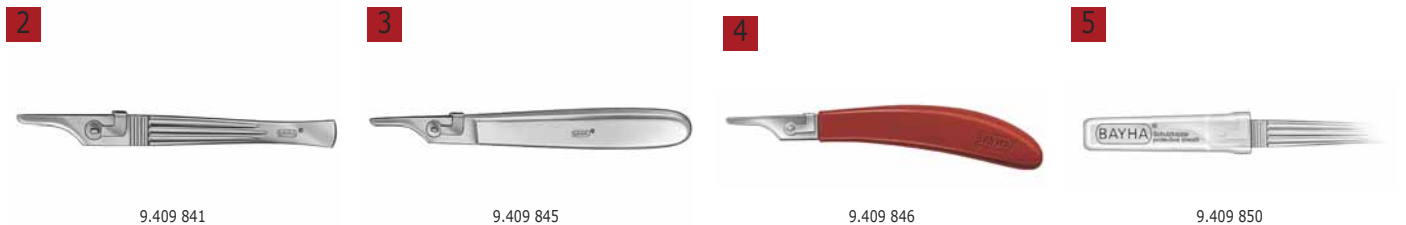


Scalpel handles, stainless steel

For interchangeable, disposable blades using the BAYHA interlocking system. Blades insert into the side of the handle. Scalpel handle (Cat. No. 9.409 846) and protective sheath (Cat. No. 9.409 850) not suitable for sterile processing.

Bayha

Type	Length mm	PK	Cat. No.
Scalpel handle	130	1	9.409 841
Scalpel handle	130	1	6.237 129
Scalpel handle	200	1	6.510 723
Scalpel handle	160	1	9.409 844
Scalpel with hollow handle	150	1	9.409 845
Scalpel handle with plastic grip	160	1	9.409 846
Protective sheath		1	9.409 850



6 Scalpel blades, non-sterile

For scalpel handles using the BAYHA interlocking system. Sterile scalpel blades are available on request, except type S01 and 18R.

Bayha

Type	PK	Cat. No.
11	12	9.409 911
12	12	6.253 719
15	12	9.409 915
16	12	9.409 916
18	12	9.409 918
19	12	9.409 919
20	12	9.409 920
21	12	9.409 921
22	12	9.409 922
23	12	9.409 923
24	12	9.409 924
26	12	9.409 926
27	12	9.409 927
28	12	9.409 928
29	12	9.409 929
18R*	12	6.268 399
S01*	12	9.409 930



*Special scalpel blade acute

Further models can be found in our online shop.

Histology/Scalpels-Dissecting sets

1



1 Dissecting needles

Wironit. CrNi 18/12. Length 50mm.

Hammacher

Description	PK	Cat. No.
Lancet-shaped	1	9.160 040
Straight, sharp	1	9.160 030
Curved, sharp	1	9.160 035
Semi-lancet	10	9.160 036
Spatula	10	9.160 037

2



2 Dissecting needles

With plastic or metal handle.
Length 140mm.

Hammacher

Type	Description	PK	Cat. No.
Plastic	Pointed, straight	1	9.160 070
Plastic	Pointed, curved	1	9.160 072
Plastic	Lancet shaped	1	9.160 075
Metal	Pointed, straight	1	9.160 090
Metal	Pointed, curved	1	9.160 092
Metal	Lancet shaped	1	9.160 095

3



9.160 020

Dissecting needle holder

Wironit CrNi 18/12. For specimen loops and dissecting needles up to max. diam. 1.0mm.

Hammacher

Type	Length mm	PK	Cat. No.
Wironit shaft with plastic handle	240	1	9.160 020
Aluminium shaft with plastic handle	240	1	9.160 022
Wironit shaft with aluminium handle	170	1	9.160 025

4



4 Blood lancets Solofix®, sterile

For single use. Sharp, flexible lancet made of V2A supra steel.
Optimal insertion depth 3.8mm.

B. Braun Deutschland

Type	PK	Cat. No.
Solofix® 200	200	9.409 820
Solofix® 500	500	6.309 148

➔ Disposal Container please see page 261.

5



5 Dissecting Set, 8 pieces, stainless steel

- 1 Scissors, sharp
- 1 Forceps, blunt
- 1 Scalpel with blade 35 mm
- 1 Scalpel with blade 45 mm
- 1 Dressing scissors
- 1 Forceps, sharp
- 1 Dissecting needle
- 1 Lancet

Bochem

Description	PK	Cat. No.
Dissecting set, 8 pieces	1	6.800 729

1 Dissecting set for students

Comprises:
 1 x scalpel handle No. 3
 5 x sterile, disposable scalpel blades for above
 1 pair of preparation scissors
 1 pair of fine, sharp forceps
 1 x lancet needle
 1 x dissection needle

Hammacher

Type	PK	Cat. No.
HSO 130-00	1	9.160 200

1



➔ More cutlery please see our webshop.

2 3 Paraffin Section Flotation Bath, MH8517

The Paraffin Section Flotation Bath is designed to assist with the handling of paraffin wax samples in histology and pathology laboratories. It is essentially a hot distilled water floating bath that allows for the meticulous manipulation and location of sections onto glass slides. This Apparatus achieves a stable 45 °C using 2.25 litres of water within 40 minutes. The stability and accuracy have been improved due to the change of control which now also allows the user to set the temperature as opposed to the arbitrary power, thereby reducing the risk of overheating sections. It has a PTFE black interior and powder-coated aluminium exterior, which makes it virtually maintenance-free, extremely easy to clean and allows for improved visibility of floating sections. The lid is not included and can be ordered separately.

Electrothermal

Capacity: 2.5 l
 Temperature: 30 to 70 °C
 Temperature Stability: ±0.5 °C
 Bath material: Aluminium base with PTFE coated interior
 Dimensions (D x W x H): 330 x 330 x 140 mm
 Weight: 2.7 kg
 Heater Power: 240 W

Type	PK	Cat. No.
MH8517	1	6.268 889
Lid for MH8517	1	6.289 180

2



3



4 Paraffin Wax Dispenser MH8524

The Paraffin Wax Dispenser delivers quickly and conveniently on-demand molten wax, e.g. for histological applications. It is designed for melting up to 6 kg of pelletised wax at a time, and has a large 7.5 l capacity tank.

Electrothermal

- Anti-microbial coating (Ag+) to inhibit growth of bacteria
- Safety features include over-temperature cut-out at 120 °C
- Heated tap and inner filter screen (0.5 mm mesh) to prevent blockages
- Non-drip lever tap
- Small footprint

Specifications

Capacity: 7.5 l
 Temperature: Ambient ... 70 °C
 Display: Digital
 Resolution/Accuracy: 1 °C/±1 °C
 Material: Stainless steel
 Heater Power: 480 W
 Dimensions (W x D x H): 181 x 500 x 455 mm
 Weight: 7 kg
 Power supply: 220-240 V, 50/60 Hz

Type	PK	Cat. No.
MH8524	1	6.291 401

4



1


1 Microscope slide drying bench, MH 6616

Slide Drying Bench aids in the preparation of microscope slides at the specimen mounting stage. *Electrothermal*
 It complements both the Paraffin Wax Dispenser and the Paraffin Section Flotation Bath to provide a complete set of paraffin wax sampling equipment for the modern laboratory. Accepting up to 50 slides (26 x 76mm), it has the facility for drying slides in different orientations- across the drying support bars, angled from the bars, or flat without the bars.

- Up to 50 slides capacity
- Slides can be arranged on the bench in different orientations
- Built-in energy regulator controlling temperature up to 100 °C

Material: Base and top powder-coated aluminium
 Max Element Temperature: 100 °C
 Dimensions (D x W x H): 180 x 390 x 95 mm
 Weight: 1.8 kg
 Electric Requirement: 230 V, 50/60Hz, 150 W

Type	PK	Cat. No.
Microscope slide drying bench, MH 6616	1	9.770 106
Spare heating element	1	9.770 108

2


2 PARAPLAST® Tissue-embedding wax

Granules for embedding tissue. PARAPLAST PLUS® additionally contains dimethyl sulphoxide (DMSO) which improves speed and penetration into tissue samples. Melting point: 55 - 57 °C.

Type	Capacity kg	PK	Cat. No.
PARAPLAST®	1	1	9.170 015
PARAPLAST®	5	1	6.255 599
PARAPLAST PLUS®	1	1	9.170 020

3


3 EUKITT® Mounting medium

EUKITT® mounting media are characterized by fast curing, crystal-clear optics, low fluorescence, *ORSAtec GmbH*
 ideal refractive index, good fluidity and low shrinkage. The preparations are stable over many years without cracking and discoloration. EUKITT® mounting media are colorless and do not change shape, structure or color of the material to be examined. No self-fluorescence under UV light! Delivered in wide neck, unbreakable aluminium bottles.

EUKITT®: Gold-standard mounting medium. Particularly preferred for use in coverslippers. EUKITT® resists heat, cold (-17 °C), humidity, daylight and UV light and preserves the original preparations for an unlimited period. Drying time: 20 minutes.

EUKITT® neo Spezial: Fast drying, xylene free mounting medium. Can be directly applied on EtOH or *i*-PrOH. Washing with xylene can be omitted. Modern formulation approach using a sustainable, renewable raw material as a solvent. Pleasant odour. Drying time: 15 minutes.

EUKITT® UV R: Curing with a single click. Mounting medium which is very quickly cured by UV-light. Only 50% of the amount of standard mounting media are needed. EUKITT® UV R can be directly applied on EtOH or *i*-PrOH and does not present any health risks. Suitable for all tissue types. Curing time: 10 to 30 seconds.


Warning

H phrases: H226|H312|H315|H319|H335|H373

Type	Capacity ml	Refractive index n (20 °C)	Viscosity range mPas	Min. shelf life	PK	Cat. No.
EUKITT®	100	1.49	250 ... 450	3 years	1	6.272 068
EUKITT®	500	1.49	250 ... 450	3 years	1	6.272 069

You can find ordering information for all articles described above as well as other articles online.

1 Histofluid mounting medium

1

Histofluid is a water-clear adhesive of acrylic resins dissolved in xylene. It hardens fast and due to its optical properties suits perfectly well for embedding microscopic preparations. Shortly after having covered a preparation it can already be examined and filed. Histofluid may also be used to firmly lock and seal bottle caps.

Mariefeld



- long storing or temperature changes do not cause fissures or deformations in Histofluid layers
- does not turn yellowish when being exposed to UV-radiation
- does not fluoresce
- does not form bubbles
- even sensitive colorations are preserved due to its acid number = 0
- refractive index of 1.5 (nD 20 °C) is adjusted to the microscope slide and cover glass
- water-repellent and dissolves in, for example, xylene, acetone, chloroform, dioxan and toluol
- can be stored in sealed bottles for an unlimited period
- filled into special bottles designed for hazardous materials and bearing the UN code

Due to its solvent contents Histofluid is flammable and, therefore, considered as hazardous. So it has to be specially packed and shipped according to the international transport regulations. Before ordering please carefully check your country's import regulations and ensure a smooth transport according to the IMO (International Maritime Organization). Any cost that might arise additionally for documents, reloading, returns etc. will be at your expense.



Warning

H phrases: H226|H312+H332|H315|H319|H335|H373|EUH208

Description	Capacity ml	PK	Cat. No.
Histofluid mounting medium	500	1	9.160 899

2 Histological staining solutions

Stains are delivered in 1000 ml bottles. Each bottle is sufficient for 1500 up to 2500 specimens. They can be used for clinical diagnostics.

ORSAtec GmbH

Harris' hematoxylin solution (Papanicolaou's solution 1a): The cytological staining technique developed by Papanicolaou is still the standard method in cancer and hormone cycle diagnosis. By using the classical Harris' hematoxylin solution (Papanicolaou's solution 1a), excellent nuclear staining can be achieved in 3 to 5 minutes. Nuclei are stained blue, dark violet to black. Density (20 °C): 1.04 g/cm³. pH value (20 °C): 2.3 to 2.8. C.I. 75290: 5.3 g/l. Al₂(SO₄)₃ x 18 H₂O: 67 g/l

Mayer's hemalum solution: This solution does not need to be filtrated prior use and the dye is oxidized in a controlled manner, which renders the results robust and allows a brilliant differentiation of the stained structures. Nuclei are intensive blue, cytoplasm is grey-blue. Density (20 °C): 1.05 g/cm³. pH value (20 °C): 1.8 to 2.2. C.I. 75290: 4.4 g/l. Al₂(SO₄)₃ x 18 H₂O: 28 g/l. C₆H₆O₇ x H₂O: 0.5 g/l

0.2% EOSIN Y solution alcoholic: A ready-to-use solution that can be used for routine staining in the hematoxylin-eosin staining process (H&E) of sample material of human origin. Due to the hematoxylin solution, the nuclei will appear blue to dark violet in color and the Eosin Y solution will stain the cytoplasm and intercellular substances red-orange.



Warning

H phrases: H226

Type	PK	Cat. No.
EOSIN (0.2% alcoholic), 1 Liter	1	6.272 067

You can find ordering information for all articles described above as well as other articles online.





1 LLG-Microcentrifuge tubes, PP



LLG Microtubes cover standard volumes for a variety of sample tests. They are available in 0.5ml, 1.5ml and 2.0ml volumes. These standard Microtubes withstand high centrifugal forces, are temperature and chemically-resistant and guaranteed leak-free. An innovative and modern new generation of Microtubes with new features. Perfect sealing qualities, excellent chemical stability and optimal construction materials guarantee even better resistance to centrifugal and chemical forces. Easy to open and to close thanks to the improved lid geometry. For visual volume control the 1.5ml tubes are equipped with graduations at 0.5ml, 1.0ml and 1.5ml. The 2.0ml tubes have graduations at 0.5ml, 1.0ml, 1.5ml and 2.0ml. The 0.5ml tubes have no graduations. Certified DNase-, RNase- and pyrogen-free.

Clear, in bags. Suitable for microbiology. Guaranteed metal-free.

Specifications

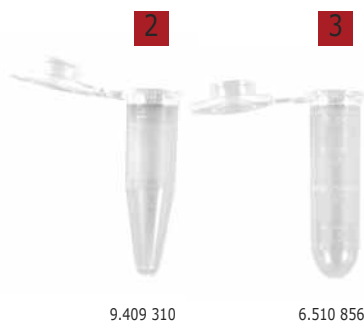
Autoclavability

Temperature: 121 °C
 Pressure: 1.05 bar or 15 psi
 Time: 20 min or less

Centrifugation

Fixed angle rotor: 25000 x g
 Swing out rotor: 70000 x g

Form	Volume ml	Max. rcf	PK	Cat. No.
conical	0.5	20000	1000	9.409 023
conical	1.5	25000	1000	9.409 024
round	2.0	25000	1000	9.409 025



2 Reaction tubes, PP



Ratiolab

Translucent polypropylene (PP), natural colour

- tight sealing cap
- safe and easy to be opened and closed

Capacity ml	Max. rcf x g	PK	Cat. No.
0.5	18000	1000	6.085 184
1.5	10000	1000	9.409 310
2.0	25000	1000	6.510 856



4 Reaction tubes, with attached lid



BRAND

PP. High clarity. Frosted marking area and approximate graduations. Tight fitting attached lid provides leak-free seal, yet reopens easily. Uniform lid-thickness ensures trouble-free piercing. Can be centrifuged up to 20000 xg rcf. at 20°C for max. 20min. Autoclavable at 121°C (2bar), acc. DIN EN 285.

*BIO-CERT® products are sterile, free of endotoxins, DNA, RNase and ATP.

Capacity ml	Colour	Diam. mm	Height mm	Lid	PK	Cat. No.
1,5	clear	10.75	40.80	+	500	9.409 301
1,5*	clear	10.75	40.80	+	450	7.200 414
2,0	clear	10.70	41.15	+	500	9.409 303



1 Microcentrifuge tubes, PP, with lid closure



BRAND

These new 0.5, 1.5 and 2.0ml microcentrifuge tubes are available with an additional lid closure to achieve especially effective sealing and prevent accidental opening.

- Autoclavable at 121 °C (2 bar), acc. to DIN EN 285
- Centrifugeable up to 20000xg
- Free of RNase, DNase, DNA and endotoxins
- Produced under cleanroom conditions, ISO 14 644-1, Class 8
- Made from high-quality medical-grade polypropylene
- Subdivisions for reading the approximate volume
- Frosted labelling surfaces on the lid and tube

Capacity ml	Diam. mm	Height mm	PK	Cat. No.
0.5	10.00	30.0	500	6.266 733
1.5	10.75	40.8	1000	6.257 318
2.0	12.80	40.0	500	6.266 734



Micro tubes with screw caps

Screw cap micro tubes are ideal for storage of serums and blood samples, and for boiling, centrifugation, etc. BRAND

Quality features:

- Available in different formats, designs and quality grades.
- Micro tubes of PP and screw caps of PE or PP are precisely matched to ensure a secure seal. Available screw caps: screw cap with sealing cone, screw cap with silicone seal or tamper-evident screw cap with silicone seal.
- Cap inserts for coding, available in a variety of colors.
- Fast opening and closing with 1¼ turn of cap.
- Micro tubes with ring stands (self-standing) can be placed in suitable racks without the use of both hands.
- Micro tubes without ring stand (round bottom) withstands RCF up to 17 000 g at 20 °C, for 20 min.
- Dimensions: outer Ø 11 mm, height 47 mm.

2 Micro tubes, PP, with attached screw cap, PE, with sealing cone

PP, ungraduated, screw cap PE. Operating range: -90 °C to +100 °C. Available separately: colored cap inserts (PP) for identification. BRAND

Description	Capacity ml	PK	Cat. No.
self-standing	0.5	1000	6.701 485
self-standing	1.5	1000	7.079 677
round-bottom	1.5	1000	7.300 156
self-standing	2.0	1000	7.300 197
round-bottom	2.0	1000	7.510 076



3 Micro tubes, PP, with attached screw cap, PP, with silicone seal



BRAND

PP, graduated, screw cap PP. Frosted marking area. Operating range: -196 °C to +121 °C. Autoclavable at 121 °C (2 bar), acc. DIN EN 285. Available separately: colored cap inserts (PP) for identification.

Description	Volume ml	Grad. ml	External dimensions (Ø x H) mm	Max. rcf	PK	Cat. No.
self-standing	0.5*		13 x 44	17000	1000	6.802 474
self-standing	1.5	1.0	13 x 44	17000	1000	7.070 048
round-bottom	1.5	1.0	13 x 44	20000	1000	7.076 849
self-standing	2.0	1.2	13 x 44	17000	1000	7.300 124
round-bottom	2.0	1.2	13 x 44	20000	1000	7.300 580



*non-graduated

General Consumables/Micro Tubes

1

2


1 2 Microtubes, PP, detached screw-cap, PP

BRAND



- Graduated
- Sterile (SAL 10⁶)
- With frosted marking area
- Operating range: -196 °C to +121 °C
- Autoclavable at 121°C (2 bar), acc. to DIN EN 285
- Sterile
- DNA, DNase, and RNase-free
- Endotoxin-free, non-mutagenic, non-toxic

Volume ml	With	Description	External dimensions (Ø x H) mm	Max. rcf	PK	Cat. No.
0.5*	self-standing	With silicone seal	13 x 44	17000	500	6.401 078
1.5	self-standing	With silicone seal	13 x 44	17000	500	4.000 236
1.5	round-bottom	With silicone seal	13 x 44	20000	500	7.300 006
2.0	self-standing	With silicone seal	13 x 44	17000	500	7.602 492
2.0	round-bottom	With silicone seal	13 x 44	20000	500	7.612 290
0.5*	self-standing	With tamper-evident screw cap, with silicone seal	13 x 44	17000	500	9.284 164
1.5	self-standing	With tamper-evident screw cap, with silicone seal	13 x 44	17000	500	6.251 643
1.5	round bottom	With tamper-evident screw cap, with silicone seal	13 x 44	20000	500	6.251 644
2.0	self-standing	With tamper-evident screw cap, with silicone seal	13 x 44	17000	500	9.284 165
2.0	round bottom	With tamper-evident screw cap, with silicone seal	13 x 44	20000	500	9.284 166

*non-graduated

3

4


3 4 Micro tubes, PP, without screw cap

BRAND



- Non-sterile
- Operating range: -196 °C to +121 °C
- Autoclavable at 121 °C (2 bar), acc. DIN EN 285
- Coloured screw caps and cap inserts available as accessories

Volume ml	With	Description	Max. rcf	PK	Cat. No.
0.5	self-standing	Ungraduated	17000	1000	9.284 167
1.5	self-standing	Ungraduated	17000	1000	9.284 168
1.5	round bottom	Ungraduated	20000	1000	9.284 169
2.0	self-standing	Ungraduated	17000	1000	6.251 980
2.0	round bottom	Ungraduated	20000	1000	9.284 170
0.5	self-standing	Ungraduated, with frosted marking area	17000	1000	4.000 234
1.5	self-standing	Graduated, with frosted marking area	17000	1000	6.801 871
1.5	round-bottom	Graduated, with frosted marking area	20000	1000	6.802 032
2.0	self-standing	Graduated, with frosted marking area	17000	1000	6.401 135
2.0	round-bottom	Graduated, with frosted marking area	20000	1000	6.401 081

5


5 Screw caps, PP for Micro tubes

BRAND



Colour	Sterile	Description	PK	Cat. No.
White	-	With silicone seal	1000	6.901 915
Blue	-	With silicone seal	1000	4.000 235
Red	-	With silicone seal	1000	6.801 872
Green	-	With silicone seal	1000	6.401 082
Yellow	-	With silicone seal	1000	6.401 134
Transparent	-	With tamper-evident screw cap, with silicone seal	1000	6.266 735
Blue	-	With tamper-evident screw cap, with silicone seal	1000	6.266 736
Green	-	With tamper-evident screw cap, with silicone seal	1000	6.266 737
Purple	-	With tamper-evident screw cap, with silicone seal	1000	6.266 738
Red	-	With tamper-evident screw cap, with silicone seal	1000	6.266 739
Yellow	-	With tamper-evident screw cap, with silicone seal	1000	6.266 740

1 Standard reaction tubes, 3810 X, PP



Eppendorf AG

- Flat, frosted cap and marking patch on the body of the tube provide generous space for labelling
- Simplified opening and closing due to improved neck/cap geometry
- Graduated from 0.1 to 1.5ml on the tube body
- Autoclavable when open (at 121°C for 20mins.)
- Can be centrifuged up to 30000 xg in fixed angle rotors (up to 70000 xg in swing-out rotors)
- Compatible with Micropestle

Colour	Capacity ml	PK	Cat. No.
transparent*	1.5	1000	6.700 374
transparent	1.5	1000	9.409 317
blue	1.5	1000	9.409 337
yellow	1.5	1000	9.409 338
green	1.5	1000	9.409 339
red	1.5	1000	9.409 347

* PCR clean

1



2 DNA LoBind Tubes



Eppendorf AG

- less than 1% loss of DNA/RNA at low concentrations and critical conditions (high salt, short DNA-fragments)
- no surface coating, e.g. silicone
- free of DNA, DNase, RNase and PCR inhibitors (PCR clean)
- novel PP, manufactured under optimized conditions
- available as 0.5ml, 1.5ml and 2.0ml Safe-Lock tubes
- highly transparent
- excellent centrifugation durability (up to 18000xg)

Capacity ml	PK	Cat. No.
0.5	250	9.409 324
1.5	250	9.409 326
2.0	250	9.409 327

2



3 Protein LoBind Tubes



Eppendorf AG

- minimum protein loss (less than 3%, BSA 1µg/ml)
- no surface coating, e.g. silicone
- free of DNA, DNase, RNase and PCR inhibitors (PCR clean)
- novel PP manufactured under optimized conditions
- available as 0.5ml, 1.5ml and 2.0ml Safe-Lock tubes
- highly transparent
- excellent centrifugation durability (up to 18000xg)

Capacity ml	PK	Cat. No.
0.5	100	9.409 328
1.5	100	9.409 329
2.0	100	9.409 330

3



General Consumables/Micro Tubes

1



1 2 Safe-lock reaction tubes, PP

Eppendorf AG



- A small clasp on the patented cap locking device clips onto the rim of the tube
- Autoclavable when open (121°C, 20min.)
- Can be opened and closed easily with one hand
- With frosted labelling area.
- The clasp on the cap prevents the lid springing open accidentally (e.g. when heating)
- Excellent mechanical stability for centrifugation
- Graduated
- Safe-lock reaction vessels are also available in Eppendorf Biopur® Quality
- 0.5ml and 1.5ml capacity Safe-lock reaction vessels can be centrifuged up to 30 000 x g

2



Colour	Capacity ml	PK	Cat. No.
Transparent	0.5	500	9.409 320
Yellow	0.5	500	9.409 354
Red	0.5	500	9.409 355
Blue	0.5	500	9.409 352
Green	0.5	500	9.409 353
Amber	0.5	500	9.409 356
Transparent	1.5	1000	9.409 331
Yellow	1.5	1000	9.409 332
Red	1.5	1000	9.409 333
Blue	1.5	1000	9.409 334
Green	1.5	1000	9.409 335
Amber	1.5	1000	9.409 336
Transparent	2.0	1000	9.409 341
Yellow	2.0	1000	9.409 342
Red	2.0	1000	9.409 343
Blue	2.0	1000	9.409 344
Green	2.0	1000	9.409 345
Amber	2.0	1000	9.409 346
Assorted colours	0.5	500	9.409 357
Assorted colours	1.5	1000	9.409 358
Assorted colours	2.0	1000	9.409 359

3



3 4 Safe-lock reaction tubes, Biopur®, sterile

Eppendorf AG

Comply with the exacting requirements set by the medical, pharmaceutical and food industries, molecular biology and cell technology.

- Sterile
- Free from pyrogens, RNase, DNA and ATP
- Independently checked and certified by an external laboratory.
- Individually blister-packed

4



Capacity ml	PK	Cat. No.
0.5	50	9.283 516
1.5	100	9.283 517
2.0	100	9.283 518

5



5 Reaction tubes PCR clean Safe-Lock

Eppendorf AG



Capacity ml	Colour	PK	Cat. No.
0.5	transparent	500	7.400 114
1.5	transparent	1000	7.400 585
2.0	transparent	1000	6.092 988

LLG-Centrifuge tubes, 5ml, PP



The LLG-Centrifuge tubes, 5ml, represent the perfect solution for all laboratory applications requiring incubation, centrifugation and sample handling in an intermediate volume range. Available in clear, and amber for use with light sensitive samples, and as an assorted colour pack (green, blue, yellow and red).

- Max. 25.000 x g, suitable for high speed centrifugation
- Graduations every 0.25 ml for easy volume estimation
- A flat, frosted cap and large writing pad for sample labeling and identification
- Autoclavable
- Fits all rotors and racks that hold 15 ml conical tubes, no adapters needed
- Certified free of RNase and DNase



Description	Package contents	PK	Cat. No.
Clear	1 bag of 250 pieces	250	6.281 113 1
Colour assortment green, yellow, red, blue	4 bags of 50 pieces (1 colour per bag)	200	6.281 114 2
Amber	1 bag of 250 pieces	250	6.281 115 2

Eppendorf Tubes® 5.0 mL, PP

Eppendorf AG



- Simple, practical and ergonomic single-hand operation. Large labelling area.
- Lid design: Hinged lid for minimized sample evaporation during storage and incubation in a wide range of temperatures from -86°C to 80°C
- Certified purity: Available in lot-tested and certified Eppendorf Quality, PCR clean, Sterile and Eppendorf Biopur® purity levels
- Maximum safety and stability for centrifugation up to 25 000 x g.
- Compatible with accessories for conical 15 ml tubes - many existing adapters and racks can be used.
- Available in Eppendorf LoBind® material for maximum recovery of valuable samples

The Starter Pack comprises:

- 400 Eppendorf Tubes® 5.0 mL, PCR clean (Certified purity grade)
- 8 universal adapters for rotors with bores for 15 ml conical tubes
- 2 Tube Racks 5.0 mL (16 spaces; white)
- Free of human DNA, free of DNase and RNase, free of PCR inhibiting agents.
- For PCR preparations or any reactions where DNase or RNase could interfere with the reaction or analysis.

From 80°C on, please use the Tube Clip opener Cat. No. 9.409 294.

Description	Package contents	PK	Cat. No.
Eppendorf Tubes® 5.0 mL, Eppendorf Quality™	2 bags of 100	200	9.409 277 4
Eppendorf Tubes® 5.0 mL, PCR clean	2 bags of 100	200	9.409 278
Eppendorf Tubes® 5.0 mL, Sterile	10 bags of 20	200	9.409 279
Eppendorf Tubes® 5.0 mL, Biopur®	bag of 50, single packed	50	9.409 288
Eppendorf Protein LoBind Tube, PCR clean	2 bags of 50	100	9.409 289
Eppendorf Protein LoBind Tube, PCR clean	2 bags of 100	200	4.665 939
Eppendorf DNA LoBind Tube, PCR clean	4 bags of 50	200	9.409 290
Eppendorf DNA LoBind Tube, PCR clean	2 bags of 100	200	4.665 938
Eppendorf Tubes® 5.0 mL, Eppendorf Quality™, amber (light protection)	2 bags of 100	200	6.265 214 5
Eppendorf Tubes® 5.0 mL, amber (light protection), Sterile	2 bags of 100	200	4.665 937
Tube Clip, Eppendorf Quality™		10	9.409 294 6
5.0 mL Starter Pack, PCR clean	2 Packs with 2 bags of 100 each, 2 Racks (16 spaces each), 8 Universal adapters	1	9.409 291 7
Eppendorf Tubes® 5.0 mL, Forensic DNA Grade	4 bags of 50	200	6.287 838
Eppendorf Tubes® 5.0 mL, Forensic DNA Grade, single packed	4 bags of 50	200	6.287 839



1



1 Eppendorf Tubes® 25 ml, PP

NEW

Eppendorf AG



Transparent. For cell culture applications, sample preparations, storage and transport of samples. The SnapTec™ cap version allows single-handed opening and closing for quick liquid extraction or addition. Also available with HDPE screw cap.

- Conical
- Single-Handed Operation
- Tightness from -86 °C to 100 °C
- Max. RZB 17000 x g
- Lower height than 15 ml/50 ml conical tubes
- The SnapTec tubes are autoclavable

Starter pack 1: 200 Eppendorf Conical Tubes® 25 ml with snap cap SnapTec™, PCR clean, 4 single tube stands, 6 adapters for rotors with bore for 50 ml conical tubes

Starter pack 2: 200 Eppendorf Conical Tubes® 25 ml with screw cap, PCR clean, 4 single tube stands, 6 adapters for rotors with bore for 50 ml conical tubes

Description	PK	Cat. No.
Starter pack 1	1	6.311 419
Starter pack 2	1	4.669 460

2



2 Micro test tubes and racks, PP, 1.2 ml

BRAND



Suitable for biological examination, e.g. PCR, cell uptake studies, RIA, EIA, etc. Functional design for storing, freezing and transporting reagents and samples. Compatible with standard microtitre plates and suitable for work with multi-channel pipettes.

- 8 x 12 configuration
- Alphanumeric identification system
- Tubes and rack are autoclavable at 121 °C (2 bar), according to DIN EN 285
- Tube dimensions: 8.8mm external Ø, height 45mm
- Suitable for storage up to -80°C
- Test tube capacity 1.2ml (1.1ml when capped)
- Individual tube or 8-tube strips available
- With PE cap (not autoclavable)

Type	PK	Cat. No.
Rack with 96 single test tubes, non-sterile, PP	10	9.407 605
Rack with 12 x 8-tube strips, non-sterile, PP	10	9.407 606
Test tubes, single, non-sterile, loose, PP	960	9.407 607
8-tube strips, non-sterile, loose, PP	120	9.407 608
Lid, single, non-sterile, loose, PE	960	9.407 609
8-cap strip, non-sterile, loose, PE	120	9.407 610
Rack with grid, non-sterile (empty), PP	10	9.407 611

➔ Further Centrifuge tubes - please see page 688.



1 2 3 LLG-Test and centrifuge tubes rimmed, PS or PP

- Made of ultra clear virgin polypropylene or virgin polystyrene
- Polystyrene tubes are transparent. Polypropylene tubes are opaque, break-resistant
- Tubes with cap are ethylene oxide sterilized
- With label

LLG-Dual-Position Caps for test- and centrifuge tubes, PE

- For culture tubes with an O.D. of 12 mm and 17 mm
- 2 locking positions possible:
 - Closed , but gas exchange is still possible for aerobic growth conditions
 - Hermetically sealed for anaerobic growth conditions, for storage or despatch of samples or for centrifugation

Description	Capacity	Diam.	Height	Material	Max.	Max.	PK	Cat. No.
	ml	mm	mm		rcf	temp. °C		
with rim	4	12	75	PS	1400	80	500	6.265 657
with rim	4	12	75	PP	3000	120	500	6.265 658
with rim	12	17	100	PS	3000	80	250	6.265 659
with rim	12	17	100	PP	5500	120	250	6.265 660
with dual-position-cap, sterilized	4	12	75	PS	1400	80	500	6.265 661
with dual-position-cap, sterilized	4	12	75	PP	3000	120	500	6.265 662
with dual-position-cap, sterilized	12	17	100	PS	3000	80	500	6.265 663
with dual-position-cap, sterilized	12	17	100	PP	5500	120	500	6.265 664
dual-position-cap		12		PE	-		1000	6.265 665
dual-position-cap		17		PE	-		1000	6.265 666



4 LLG-Centrifuge Tubes economy, PP



- With flat PE caps
- With conical bottom (15 and 50 ml) or with self-standing bottom (50 ml)
- Easy-to-read black volume graduations
- With a large frosted writing area
- Engraved graduation at the conical bottom of each tube
- Max. rotate speed up to 12000 x g for conical bottom tubes and 6000 x g for self-standing tubes
- Autoclavable at 121 °C and freezable to -80 °C
- Leak-proof
- Free of heavy metals, pyrogens and endotoxins
- DNase/RNase-free
- Aseptically or sterile



Capacity ml	Description	Form	Height mm	Diam. mm	PK	Cat. No.
15	Sterile, in bag of 25 pieces	conical	119.6	17	500	4.668 482
50	Sterile, in bag of 25 pieces	conical	113.9	30	500	4.668 483
50	Sterile, in bag of 25 pieces	with rim	116.5	30	500	4.668 486
15	Aseptically, bulk pack	conical	119.6	17	500	6.270 403
50	Aseptically, bulk pack	conical	113.9	30	500	6.270 404
50	Aseptically, bulk pack	with rim	116.5	30	500	6.270 405

General Consumables/Centrifugation Tubes

1



1 LLG-Centrifuge tubes, PP



Polypropylene tubes with very good thermal, mechanical and chemical stability. With screw closures. Sterile tubes with screwed-on closure. Packed in boxes or bags. With graduations and labelling area.

Centrifugation capacity (Max. RCF): 6000 x g
Height: 120 mm

Description	Form	Capacity ml	Diam. mm	PK	Cat. No.
sterile, single packed*	conical	15	17	50	9.316 062
aseptic, bulk pack	conical	15	17	50	6.263 886
big pack	conical	15	17	500	9.316 063
sterile, single packed*	conical	50	30	50	9.316 064
big pack	conical	50	30	500	9.316 065
aseptic, bulk pack	conical	50	30	50	6.263 887
sterile, single packed*	with rim	50	30	50	9.316 067
big pack, bulk pack	with rim	50	30	50	4.008 506
aseptic, bulk pack	with rim	50	30	50	6.263 888

*Cytotoxicity-free, DNase/RNase- and human DNA-free.

2



2 Eppendorf Tubes 15 mL and 50 mL, PP, with screw cap, HDPE

For cell culture applications, sample preparation and storage of samples and solutions.

Eppendorf AG

- Conical
- Temperature resistant from -86 °C to 100 °C
- Max. RZB 19500 x g

Nominal capacity ml	Description	Colour	Sterile	Package contents	PK	Cat. No.
15	Pyrogen-, DNase-, RNase- and DNA-free	clear	+	10 bags of 50 pieces	200	4.664 663
50	Pyrogen-, DNase-, RNase- and DNA-free	amber	+	8 bags of 25 pieces	200	4.664 664
15	Pyrogen-, DNase-, RNase- and DNA-free	clear	+	10 bags of 50 pieces	500	6.266 822
50	Pyrogen-, DNase-, RNase- and DNA-free	clear	+	20 bags of 25 pieces	500	6.266 823
15	Protein LoBind, PCR clean	clear	-	4 bags of 50 pieces	200	6.274 362
50	Protein LoBind, PCR clean	clear	-	4 bags of 50 pieces	200	6.274 363
15	DNA LoBind, PCR clean	clear	-	4 bags of 50 pieces	200	6.285 440
50	DNA LoBind, PCR clean	clear	-	4 bags of 50 pieces	200	6.285 441
15	Forensic DNA Grade, individual packed	clear	-	100 pieces	100	6.287 840
50	Forensic DNA Grade, individual packed	clear	-	48 pieces	48	6.287 841

3



7.657 835

4



7.657 836

Centrifuge tubes, black, PP, sterile



Heathrow Scientific



For light-sensitive samples. With graduations and writing area. Certified DNase, RNase and pyrogen-free. Autoclavable.

Nominal capacity ml	Sterile	Colour	Package contents	PK	Cat. No.
15	+	black	10 bags of 50	500	7.657 835
50	+	black	20 bags of 25	500	7.657 836

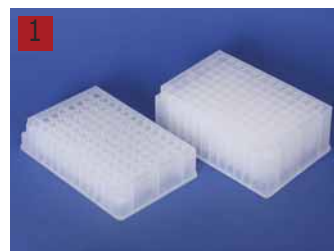
1 Deep-well storage plates, 96-well, PP NEW



Suitable for test preparation and for storage and transport of samples.

- Clear
- Produced under clean room conditions
- Compatible with automated systems
- Round well bottom (U)
- RNase und DNase free

Nominal capacity ml	Sterile	PK	Cat. No.
1.1	-	50	6.313 390
2.0	-	25	6.313 389



2 LLG-Sealing mats for Deep well plates, 96-well

- for sample storage
- alphanumeric grid
- thermoplastic elastomer
- flexible with end tabs

Description	Material	PK	Cat. No.
Square nodules	Silicone	50	6.313 395
Round nodules	Silicone	50	6.313 397



3 Deep Well Plates Nunc™, 96-well, PP

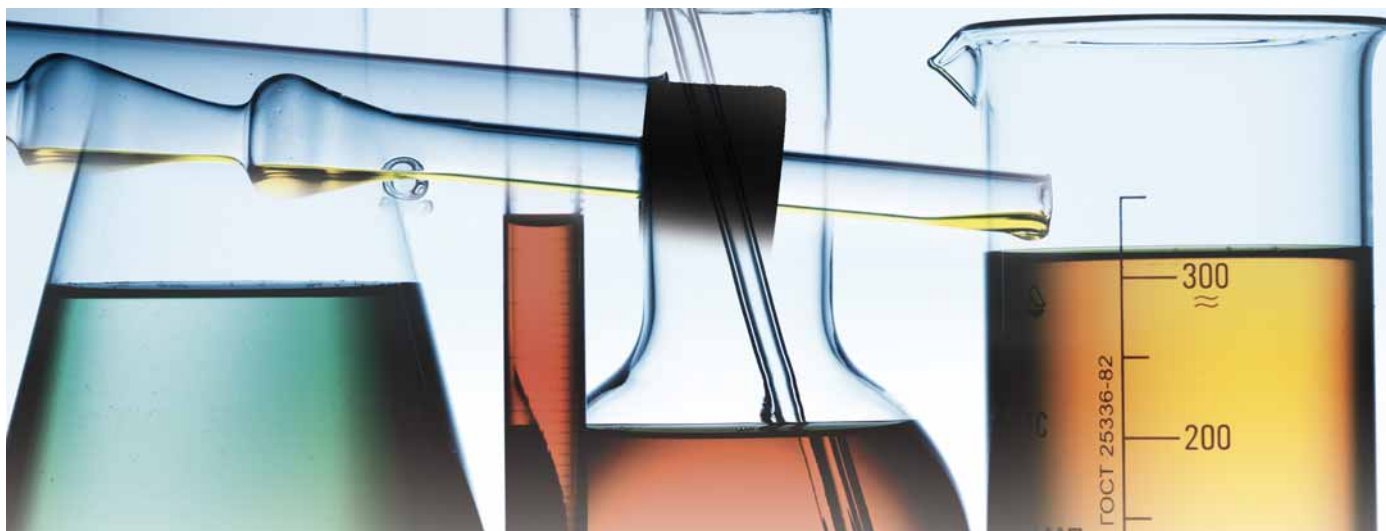


Thermo Scientific

The plates are suitable for sample collection, storage, combinatorial chemistry, substance libraries, bacteria and yeast cultures and as collection plates for Nunc filter plates. They are resistant to most chemicals, solvents and alcohols used in combinatorial chemistry.

- Colour natural
- With shared wall technology
- Round bottom reduces fluid retention

Nominal capacity ml	Sterile	PK	Cat. No.
1	+	50	4.008 844
1	-	50	6.305 666



General Consumables/Deep-well plates



1 2 Deep-well plate system, Riplate®

Riplate® round wells - Standard in Multifunction

Ritter

Raised wells reduce the risk of cross-contamination and increase the security of hot sealing or sealing with adhesive foils. Riplate® 1ml is ideal for use in a thermocycler or for defrosting of samples in a hot-water bath. The U-shaped well bottom reduces the death-volume.

Riplate® square wells - For a Maximum in Capacity

Riplate® SW have been developed for optimal use of capacity when it comes to sample storage. Due to the SBS-format the outside dimensions of Riplate® are given. Form follows function: the construction of cavities is crucial for a maximum absorption of liquids.

Riplate® medio - Saves 50% of Storage Capacity

Due to the compact construction of Riplate® medio less than 50% stacking size is needed. Higher well rims allow an airtight closure or sealing of Riplate® medio. The alphanumeric marking allows registration and identification of single assays.

Riplate® 384 - Optimized for Smaller Volumes

Available in PS and PP for automated screening and storage systems. Alphanumeric marking for identification of samples. Round cavities for reduced capillary forces. With flat well-bottom - ideal for microscopic and optical applications.

Field of application: screening, sample storage et al. Ritter Riplate® systems are in line with the SBS-standard and are suitable for automation systems with corresponding closing- and sealing-mechanism.

Type	PK	Cat. No.
Round well 96, PS - 1ml, U-shaped well-bottom	20	9.284 250
Round well 96, PP - 1ml, U-shaped well-bottom	20	9.284 251
Round well 96, PP - 2ml, U-shaped well-bottom	20	9.284 300
Square-well 96, PP - 2ml, U-shaped well-bottom	20	9.284 252
Cap mat for Square well 96, 2ml	100	9.284 209
Square-well 48, PP - 5ml, V-shaped well-bottom	20	9.284 260
Cap mat for Square well 48, 5ml	100	9.284 228
Square-well 24, PP - 10ml, V-shaped well-bottom	20	7.635 031
384-well Plate PP	100	9.284 256
384-well Plate PS, clear	100	9.284 257
384-well Plate PS, white	100	9.284 258
384-well Plate PS, black	100	9.284 259
Deep-well 96, PP - 1.0ml medio	32	9.284 295
Deep-well 96, PP - 0.5ml medio	40	9.284 296
Square-well 96, PP - 2ml, sterile	10	9.284 297
Square-well 48, PP - 5ml, sterile	10	9.284 298
Square-well 24, PP - 10ml, sterile	10	9.284 299



7.632 508



6.237 242

Deep Well Plates, 96/48-well, PP



Ratiolab

Deep-well plates from Ratiolab are available as standard or low profile version with different volumes from 1.2 to 4.6 ml for each well.

- Available with U-bottom (low profile + standard) and as V-bottom version
- SBS standard micro test plate format
- Wells with significantly larger cross section for reduced cross-contamination
- Improved visual control due to clear polypropylene
- 1.2 ml low profile is about half as high as conventional deep-well plates
- 30 % less storage space when using low profile plates
- Autoclavable at 121 °C, 20 min
- Temperature resistant to -80 °C
- 8 x 12 wells with alphanumeric code in micro test plate format
- 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

Type	Volume ml	Bottom shape	Package contents	PK	Cat. No.
96-well, low profile	1.2	U	10 bags of 5	50	7.632 508
96-well	1.2	U	10 bags of 5	50	4.653 801
96-well	2.0*	V	10 bags of 5	50	6.237 242
48-well	3.5	U	10 bags of 5	50	4.665 841
48-well	4.6*	U	10 bags of 5	50	4.665 842

* with square opening

1 Deep well plates

Developed for a range of uses, e.g. High-Throughput Screening (HTS), general analysis which requires a master reservoir plate, cell and tissue culture, sample storage, etc. Deep well plates can be used with all leading robotic systems and other autosampling devices.

BRAND

- Capacities: 96 well: 0.5ml, 1.1ml, (1ml with lid), 1.2ml or 2.2ml (2ml with lid), 384 well: 0.3ml
- U-bottom wells
- Low Profile and Standard profile
- 96 well: 12 x 8 array, 384 well: 24 x 16 array
- High chemically-resistant polypropylene (e.g.: against DMSO, phenol, chloroform)
- ANSI/SLAS format
- Alphanumeric well coding
- Plates suitable for freezing down to -80°C (PP) or -20°C (PS)
- One notched corner ensures correct orientation.
- Stackable
- DNA-, RNase-, DNase -free



Description	PK	Cat. No.
Deep well plate, 1.2 ml, 96 well, PP, non-sterile, low profile	50	4.007 852
Deep well plate, 1.2 ml, 96 well, PP, non-sterile, high wells	32	9.407 624
Deep well plate, 0.3 ml, 384 well, PP, non-sterile, standard	48	9.407 622
Deep well plate, 0.5 ml, 96 well, PP, non-sterile, standard	48	9.407 618
Deep well plate, 1.1 ml, 96 well, PP, non-sterile, standard	24	9.407 614
Deep well plate, 1.1 ml, 96 well, PS, non-sterile, standard	32	9.407 619
Deep well plate, 2.2 ml, 96 well, PP, non-sterile, standard	24	9.407 615

2 Sealing mats

Cover mats reduce the maximum volume of wells, but improve sealing and reduce sample evaporation. Adhesive sealing films can also be used.

BRAND



Description	PK	Cat. No.
Cover mat for 0.3 ml 384-well plates (standard), silicone, non-sterile	50	9.407 623
Cover mat for 0.5 ml 96-well plates (standard), PP, non-sterile	50	9.407 621
Cover mat for 1.1 ml 96-well plates (standard), mod. PE, non-sterile	24	9.407 616
Cover mat for 1.2 ml 96-well plates (low profile), TPE, non-sterile	50	4.007 853
Cover mat for 2.2 ml 96-well plates (standard), EVA, non-sterile	24	9.407 617
Sealing foil, gas-permeable, non-sterile	100	9.407 620



General Consumables/Deep-well plates

1



4.655 301

2



4.655 304

3



4.655 305

4



6.243 984

Deep-Well Plates, 96/384-well, PP



Eppendorf AG

High-performance plates for manual or automated applications. Suitable for sample storage and preparation, bacteria and yeast cultivation, DNA and RNA isolation, protein analysis and plasmid purification.

- Clear wells
- Frame, white or coloured
- High-contrast, alphanumeric lettering
- Autoclavable (121 °C, 20 min)
- Centrifugation resistance up to 6000 × g
- Rounded RecoverMax®-Well-Design
- Elevated well frames for reliable sealing, even with heat sealing
- Stackable
- PCR clean: free of human DNA, DNase, RNase and PCR inhibitors or sterile
- Available with bar code (on request)

Type	Capacity µl	Colour	Sterile	PK	Cat. No.
96-well	500	white	+	40	4.655 301
96-well	500	white	+	120	4.655 313
96-well	500	yellow	+	40	6.233 985
96-well	500	green	+	40	4.655 302
96-well	500	blue	+	40	6.233 986
96-well	1000	white	+	80	4.655 314
96-well	1000	white	+	20	7.638 886
96-well	1000	yellow	+	20	7.638 887
96-well	1000	green	+	20	7.638 888
96-well	1000	blue	+	20	7.638 889
96-well	2000	white	+	20	4.655 303
96-well	2000	white	+	80	7.671 104
96-well	2000	yellow	+	20	4.655 304
96-well	2000	green	+	20	4.655 305
96-well	2000	blue	+	20	6.243 984
384-well	200	white	+	40	4.655 335
384-well	200	white	+	120	4.655 338
96-well, PCR clean	500	white	-	40	6.236 383
96-well, PCR clean	500	white	-	120	4.655 310
96-well, PCR clean	500	yellow	-	40	4.655 296
96-well, PCR clean	500	green	-	40	4.655 297
96-well, PCR clean	500	blue	-	40	4.655 298
96-well, PCR clean	1000	white	-	20	4.655 299
96-well, PCR clean	1000	white	-	80	4.655 311
96-well, PCR clean	1000	yellow	-	20	4.655 300
96-well, PCR clean	1000	green	-	20	6.234 018
96-well, PCR clean	1000	blue	-	20	6.241 252
96-well, PCR clean	2000	white	-	20	6.232 501
96-well, PCR clean	2000	white	-	80	4.655 312
96-well, PCR clean	2000	yellow	-	20	6.233 418
96-well, PCR clean	2000	green	-	20	6.233 420
96-well, PCR clean	2000	blue	-	20	6.233 421
384-well, PCR clean	200	white	-	40	4.655 334
384-well, PCR clean	200	white	-	120	4.655 337