

VALID UNTIL
31/12/2024

SPECIAL PRICE
pH MEASUREMENT

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LABSOLUTIONS

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GENERAL LABORATORY SUPPLY

PRESSURE ATOMIZER LABOPLAST®, HDPE



The pressurised spray has a working pressure of 4 bar. Extension for spray lance 30 cm available as an accessory.

- Wetted parts PE, PP, glass-fibre reinforced PA, V2A, FKM
- Bottle made of HDPE
- With a short spray nozzle
- Adjustable spray jet
- Graduation up to 1500 ml
- Temperature max. 30 °C

Capacity	Ext. diam.	Neck diam.	Height	PK	Cat. No.
ml	mm	mm	mm		
1500	142	45	315	1	9.223.162

PRESSURE SPRAYER TURN'N'SPRAY



The practical 360° spray function allows you to spray overhead.

- Wetted parts HDPE, PP, FKM, V4A
- Plastic container made of HDPE
- Safety valve to compensate overpressure, max. 4 bar

Capacity	PK	Cat. No.
ml		
1500	1	4.670.813

SEALING FILMS, BRAND SEAL-R-FILM™



Seal-R-film™ sealing film seals beakers, flasks, and other vessels. The sealing film can be stretched to three times its original length and therefore fits even irregular shapes.

- Protects against evaporation, leakage, and contamination
- Lot identification of each roll

Width	Length	PK	Cat. No.
mm	m		
50	75	1	9.170.022
100	38	1	9.170.021
100	75	1	9.170.023
500	15	1	9.170.024

PARAFILM® M SEALING FILM



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 ... 50 °C
 Stretching ability: 200%

Width	Length	PK	Cat. No.
mm	m		
50	75	1	9.170.003
100	38	1	9.170.002
100	75	1	9.170.005
500	15	1	9.170.004

WALL-MOUNTED WORKBENCHES



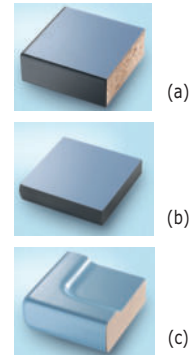
Of course, our laboratory furniture experts are also on hand to help and advise you with complex projects, but we know that sometimes less is more. Köttermann's wall-mounted workbenches make it easy to extend laboratory space, even without complex planning.

- High-quality steel furniture "Made in Germany"
- Non-flammable and non-contaminable, for the highest safety standards in your laboratory
- Environmentally friendly: No hazardous waste during disposal

Choose from two variants: "plinth design" for maximum storage space (1) or "C-foot design" for more flexibility (2).

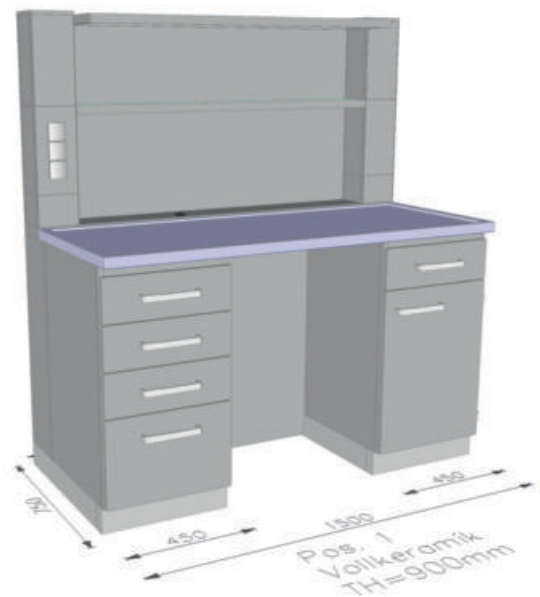
Köttermann also offers a selection of high-quality table tops:

- Melamine (a): Particularly cost-efficient, for writing work, low chemical resistance
- Trespa Toplab Plus (b): Good chemical resistance, durable, high quality
- Solid ceramic with beaded edge (c): Highly resistant to chemicals, extremely durable



WALL WORKBENCH IN PLINTH DESIGN

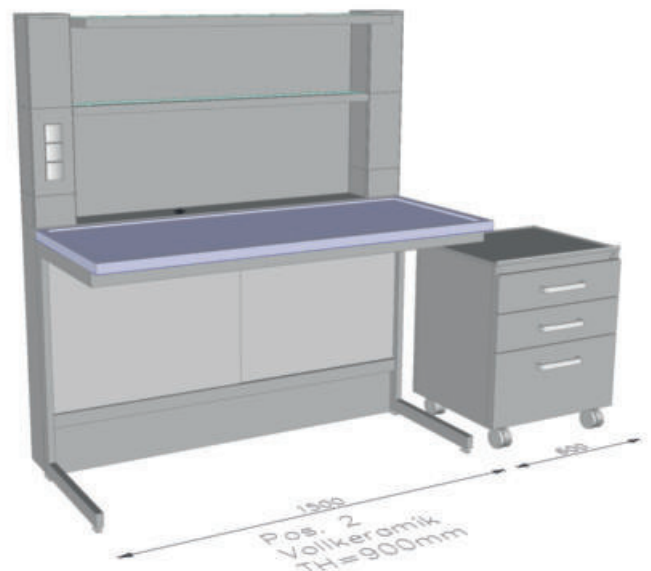
- W=1500 mm, H=900 mm, standing working height with media cell
- H=1620 mm, SD 3x 230 V, shelves and splash guard, D=750 mm
- Plinth base units with door (270° opening angle) and drawers (incl. softclose)
- Color furniture: Arctic White, color table tops: Baltic Blue



Description	PK	Cat. No.
With melamine table top*	1	7.681 859
With table top Trespa Toplab Plus*	1	7.681 860
With all-ceramic table top*	1	7.681 861

WALL-MOUNTED WORKTABLE IN C-LEG DESIGN FOR MOBILE PEDESTALS

- W=1500 mm, H=900 mm, standing working height with media cell
- H=1620 mm, SD 3x 230 V, shelves and splash guard, D=750 mm
- Incl. 1 mobile pedestal with drawers (incl. softclose), lockable, 2 lockable castors
- Furniture color: Arctic White, table tops: Baltic Blue



Description	PK	Cat. No.
With melamine table top*	1	7.681 862
With table top Trespa Toplab Plus*	1	7.681 863
With all-ceramic table top*	1	7.681 864

* Plus individual installation fee and travel cost. Lead time from 4 weeks depending on material used.

LABORATORY EQUIPMENT

LLG-LAB STOOL



The solid black plastic star base and the upholstery edge protector that runs all the way around guarantee a long working life.

- Resistant to all of the usual disinfectants and chemicals.
- Seat upholstery made of artificial leather, 400 mm diameter (soft and comfortable, washable and antibacterial) or soft-touch PU foam, 350 mm diameter (extremely robust, washable and antibacterial) in black.
- Seat height adjustment by gas spring.
- With certificate "Tested Safety" (GS mark).
- 10-year warranty, Made in Germany.

Material	Description	Seat height adjustment	PK	Cat. No.
		mm		
PU foam	Castors	460 ... 630	1	6.287 757
Artificial leather	Castors	460 ... 630	1	6.287 758

LLG-TROLLEYS, STAINLESS STEEL



The LLG transport trolley is made of CNS 18/10 stainless steel, material no. 1.4301. The load capacity per shelf is 80 kg.

Description	Dimensions (W x D x H) mm	PK	Cat. No.
2 shelves, vertical spacing 585 mm	900 x 600 x 950	1	9.148 101
3 Shelves, vertical spacing 275 mm	900 x 600 x 950	1	9.148 104

LLG-LAB CHAIR



Entry model for healthy sitting! The generously proportioned seat and backrest with integrated lumbar support provide additional support and therefore offer the best laboratory ergonomics.

- Minimal joints: Hygienic design for easy cleaning and disinfection
- Resistant to disinfectants and chemicals: Resistant to all of the usual disinfectants and chemicals.
- Seat and backrest upholstery made of artificial leather (soft and comfortable, washable and antibacterial) or soft-touch PU foam (extremely robust, washable and antibacterial) in black.
- Quick adjustment: Every function can be operated comfortably and easily in a sitting position.
- Seat height adjustment by gas spring.
- The backrest is adjustable in height and inclination.
- With certificate "Tested Safety" (GS mark).
- 10-year warranty, Made in Germany.

Accessories: Multifunctional armrests (pair): Adjustable in height, width and depth as well as swivelling.

Material	Description	Seat height adjustment	PK	Cat. No.
		mm		
PU Foam	Castors	440-620	1	6.287 750
PU Foam	Stop and Go Castors, Foot Ring	620-890	1	6.287 752
Artificial Leather	Castors	440-620	1	6.287 753
Artificial Leather	Stop and Go Castors, Foot Ring	620-890	1	6.287 755
-	Armrests	-	1	6.287 756

ROLLER STEPS, WEDO-STEP, PP



Super easy to move thanks to three castors mounted on steel springs. With a load of up to 150 kg, it stands firmly on its integrated rubber support ring. TÜV and GS-tested safety.

Colour	Int. diam. mm	Ext. diam. mm	Height mm	PK	Cat. No.
Blue	290	440	430	1	9.700 400
Red	290	440	430	1	9.700 401
Light grey	290	440	430	1	6.055 095
Black	290	440	430	1	6.289 953

DISPOSABLE GLOVES TOUCHNTUFF®, NITRILE

EN ISO 374-1 Type B EN ISO 374-5 EN 421 EN 420



- Manufactured from nitrile, TouchNTuff® offers up to four times the puncture resistance of comparable natural-latex gloves, and three times the resistance of similar neoprene gloves
- With a unique "Thin Nitrile Technology" formulation, this glove offers easy donning and strong grip in wet or dry conditions
- AQL 1.5 (EN374)
- **Cat. III Low Chemical resistant**
- 100% nitrile, powder-free, green, 0.12 mm thick, length 240 mm, smooth
- Supplied in dispenser box containing 100 gloves

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 421, and EN 420 Suitable for food handling.

Size	PK	Cat. No.
S (6.5 - 7)	100	9.005 400
M (7.5 - 8)	100	9.005 401
L (8.5 - 9)	100	9.005 402
XL (9.5 - 10)	100	9.005 403

LLG-PANORAMIC EYESHIELD

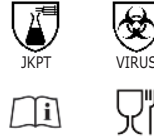


- CE approved EN 166 and EN 170
- Can be worn over any prescription spectacles
- Wide, fully adjustable headband
- 100% UV protection (up to 380 nm)
- Weight: 84 g

Lens	PK	Cat. No.
Clear, polycarbonate, 2C-1.2	1	6.291 832

DISPOSABLE GLOVES, NITRILE PROTECTIVE, POWDER-FREE

EN ISO 374-1 Type B EN ISO 374-5



The powder-free, blue LABSOLUTE® disposable gloves Protective made of nitrile with a rolled cuff are the best supplement to the LABSOLUTE® Sensitive gloves for a higher protection level.

The silicone-free gloves with an AQL value of 1.5 are textured on the outside and comply with the following standards and directives

- EN 420, EN 421, EN ISO 374-1, -2, -4, -5 and EN 16523-1
- (EU) 2016/425 (PPE in accordance with CE category III for complex risks)
- 1935/2004 (can be used in direct contact with food)
- ASTM 1671 / ISO 16604 (viral penetration)

Further properties

- Approved for the use within Hazard Analysis and Critical Control Points (HACCP) concepts
- UV transmission less than 0.1% at 360 nm
- Delivered in handy dispenser boxes of 100 (S, M, L) or 90 pieces (XL)
- Free from phthalates, softeners and allergenic latex proteins
- Storage life: 3 years
- Length: approx. 240 mm
- Thickness (double): finger min. 0.30 mm, palm min. 0.22 mm, cuff min. 0.20 mm
- Can be worn on the left or right hand

Size	PK	Cat. No.
S	100	7.696 906
M	100	7.696 907
L	100	7.696 908
XL	90	7.696 909

EYE-WASH BOTTLE, BARIKOS KS



Barikos KS and Mini Barikos KS are maintenance-free models of eye wash bottles. Containing water, they can be kept ready for use for at least two years in a sealed state. Both models are ideal for first aid boxes and sets. All Barikos mentioned above eyewash bottles comply with EN 15154-4.

- Filled eyewash bottle, pH-neutral eyewash on a water basis without chemical additives
- Ergonomically shaped eye recess

Description	PK	Cat. No.
Barikos KS, 620 ml, filled	1	9.005 009
Mini Barikos KS, 175 ml, filled	1	9.005 008

DISPOSABLE SYRINGES, NON-STERILE, PP

The two-part, non-sterile LABSOLUTE® disposable syringes, with Luer lock connection complying with DIN EN 1707 or Luer slip connection complying with DIN EN 20594-1, are fully manufactured from robust, chemical resistant PP. They are free of latex, plasticizers and PVC. There are no rubber plunger seals or silicone lubricants that can cause contamination of the samples. The syringes are also impressive due to the safe functional back-stop feature and an easy-to-read permanent graduation.



LUER-LOCK



Capacity ml	PK	Cat. No.
2	100	7.672 433
5	100	7.643 933
10	100	6.259 211
20	100	7.672 432

LUER-SLIP



Capacity ml	PK	Cat. No.
1	100	7.657 545
2	100	7.644 125
5	100	7.644 126
10	100	7.644 127
20	100	7.644 128

SYRINGE FILTERS 25 MM

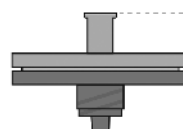
LABSOLUTE® syringe filters with a filter membrane diameter of 25 mm are ideal for the preparation of samples with a volume from 1.5 ml to 100 ml. The effective filtration area is 4.6 cm². This, in combination with the stable housing pressure resistant to 5 bar made from polypropylene (transparent) or acrylic (pore size 0.22 µm blue or pore size 0.45 µm yellow), ensures rapid filtration.



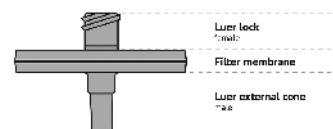
Properties

- Housing diameter 33 mm
- Membrane diameter 25 mm (surface 4.6 cm²)
- Low content of extractable substances
- Low dead volume

Acrylic housing



Polypropylene housing



Filter material	Housing	Pore size µm	Sterile	PK	Cat. No.
Nylon (NY)	PP	0.20	Non sterile	500	7.699 814
Nylon (NY)	PP	0.45	Non sterile	500	7.699 815
Polyether sulfone (PES)	PP	0.22	Non sterile	500	7.699 818
Polyether sulfone (PES)	PP	0.45	Non sterile	500	7.699 819
Polyvinylidene difluoride (PVDF)	PP	0.22	Non sterile	500	7.699 816
Polyvinylidene difluoride (PVDF)	PP	0.45	Non sterile	500	7.699 817
Polytetrafluoroethylene (PTFE)	PP	0.20	Non sterile	500	7.699 810
Polytetrafluoroethylene (PTFE)	PP	0.45	Non sterile	500	7.699 811
Regenerated cellulose (RC)	PP	0.20	Non sterile	500	7.699 812
Regenerated cellulose (RC)	PP	0.45	Non sterile	500	7.699 813

SYRINGE FILTER CHROMAFIL® XTRA, POLYESTER (PET)



Hydrophilic membrane for polar as well as non-polar solvents. The HPLC filter, especially suited for mixtures of water and organic solvents; for TOC/DOC determination; is not cytotoxic, and does not inhibit the growth of microorganisms and higher cells. Polyester filter with integrated glass fibre prefilter (GF/PET): recommended for solutions with a high load of particulate matter or highly viscous solutions.

Pore size µm	Filter diam. mm	Housing	PK	Cat. No.
0.20	25	PP-colourless/labelled	100	4.003 417
0.20	25	PP-colourless/labelled	400	4.003 418
0.45	25	PP-colourless/labelled	100	6.232 548
0.45	25	PP-colourless/labelled	400	4.003 416
1.20	25	PP-colourless/labelled	100	6.232 549
1.20	25	PP-colourless/labelled	400	6.233 172

SYRINGE FILTER CHROMAFIL® XTRA, REGENERATED CELLULOSE (RC)



Hydrophilic membrane with very low adsorption for aqueous and organic/aqueous liquids i.e. polar and medium polar sample solutions. Binding capacity for proteins 84 µg/25 mm filter.

Pore size µm	Filter diam. mm	Housing	PK	Cat. No.
0.20	13	PP-colourless/labelled	100	6.287 308
0.45	13	PP-colourless/labelled	100	6.287 309
0.20	25	PP-colourless/labelled	100	4.003 424
0.20	25	PP-colourless/labelled	400	4.003 425
0.45	25	PP-colourless/labelled	100	4.003 426
0.45	25	PP-colourless/labelled	400	6.233 891

SHORT THREAD VIALS AND MICRO-VIALS ND9, WIDE OPENING

Short thread vials and micro-vials ND9 are available in clear and amber first hydrolytic class glass and can be used on almost all autosamplers. You can replace other 1.5 ml vial types like 11 mm crimp neck vials, 8-425 and 10-425 screw neck vials, which can help rationalize stocks. The wide opening requires matching micro-inserts with 6 mm diameter.

Due to the technical geometry, the vials can be used on all common autosamplers, but preferentially on instruments made by Agilent, HTA, Shimadzu, Thermo Scientific, Varian and Waters.



Type	Description	Capacity ml	Size	PK	Cat. No.
(1)	Clear glass, flat bottom, with integrated micro-insert "Base Bonded"	0.3	32 x 11.6	100	7.629 622
(2)	Clear glass, flat bottom, with inner cone	1.1	32 x 11.6	100	7.616 848
(3)	Clear glass, flat bottom	1.5	32 x 11.6	100	7.663 231
(4)	Clear glass, flat bottom, with label	1.5	32 x 11.6	100	7.663 232
(5)	Amber glass, flat bottom, with label	1.5	32 x 11.6	100	7.645 571

MICRO-INSERTS FOR VIALS WITH WIDE OPENING, GLASS

The micro-inserts made of first hydrolytic class glass are suitable for

- Short thread vials ND9, with wide opening made of glass or plastic
- Screw neck vials ND10, with wide opening
- Crimp neck vials ND11, with wide opening
- Snap ring vials ND11, with wide opening
- Shell vials, with a nominal volume of 2 ml

The micro-inserts with polymer foot are not suitable for shell vials.



Type	Description	Usable volume μ l	Nominal volume μ l	Size mm	PK	Cat. No.
(6)	Clear glass, conical tip 15 mm	250	340	31 x 6	1000	7.615 290
(7)	Clear glass, conical tip 12 mm	300	350	31 x 6	1000	7.620 929
(8)	Clear glass, conical tip, with polymer foot	250	300	29 x 5.7	1000	7.614 088

SHORT THREAD SCREW SEALS ND9



WITH NATURAL RUBBER/TEF SEPTA

These septa are temperature-resistant from -40 °C to 120 °C and are ideal for multiple injections thanks to their excellent resealability properties.

Type	Description	Hardness	Thickness mm	PK	Cat. No.
(9)	Natural rubber red-orange / TEF transparent, blue cap	60° shore A	1.0	100	7.663 239

WITH REDRUBBER/PTFE SEPTA

These septa are temperature-resistant from -40 °C to 110 °C. They are easier to penetrate and have lower particle formation than septa made of natural rubber.

Type	Description	Hardness	Thickness mm	PK	Cat. No.
(10)	RedRubber / PTFE beige, blue cap	45° shore A	1.0	100	7.663 240

WITH SILICONE/PTFE SEPTA

These septa are temperature-resistant from -60 °C to 200 °C and have better purity than septa made of natural rubber, butyl or red rubber. However, they have less effective resealability properties and are therefore more suitable for single-injection applications. Septa with a double-sided PTFE coating show a very low particle formation during penetration.

Type	Description	Hardness	Thickness mm	PK	Cat. No.
(11)	Silicone white / PTFE red, UltraClean, blue cap	55° shore A	1.0	100	7.663 241
(12)	PTFE red / silicone white / PTFE red, blue cap	45° shore A	1.0	100	7.615 823
(13)	Silicone white / PTFE blue, slitted, blue cap	55° shore A	1.0	100	7.645 303

VIAL RACKS, PP

Dimensions W x H x D mm	Positions	For	PK	Cat. No.
200 x 17 x 105	50	ND8*, ND9, ND10, ND11	1	7.654 509

The stackable vial racks made of blue PP allow the easy handling and secure transport of sample vials. PP is not transparent, but more robust than acrylic.

* ND8 screw neck vials

FILTERVIALS



LABSOLUTE

NEW

The LABSOLUTE® filter vials are suitable for convenient sample preparation without syringes. Samples up to a volume of 0.48 ml can be filtered directly in the filter vials: This saves time, reduces sample consumption and is very easy to use. The filter vials contain a slitted septum in the cap and can be used directly in standard autosamplers.

- Vial size 12 x 32 mm
- Outer container and lid made of PP
- Septum made of silicone (white)/ PTFE (red)
- Pressure resistance up to 8 psi (0.6 bar)
- Working temperature up to max. 50 °C

WITH REGENERATED CELLULOSE MEMBRANE (RC)

- Hydrophilic
- Resistant to many organic solvents
- Very low protein binding capacity

Pore size µm	Cap colour	PK	Cat. No.
0.20	Grey	100	7.699 850
0.45	Black	100	7.699 851

WITH NYLON MEMBRANE (NY)

- Hydrophilic
- Resistant to many organic solvents, acids and alkalis
- High protein binding capacity

Pore size µm	Cap colour	PK	Cat. No.
0.20	Light blue	100	7.699 852
0.45	Blue	100	7.699 853

WITH POLYTETRA- FLUOROETHYLENE MEMBRANE (PTFE)

- Hydrophobic
- Resistant to many organic solvents and strong acids
- Low protein binding capacity

Pore size µm	Cap colour	PK	Cat. No.
0.20	Pink	100	7.699 854
0.45	Red	100	7.699 855

WITH POLYVINYLIDENE FLUORIDE MEMBRANE (PVDF)

- Hydrophilic
- Very low protein binding
- High flow rate

Pore size µm	Cap colour	PK	Cat. No.
0.20	Yellow	100	7.699 856
0.45	Orange	100	7.699 857

WITH POLYETHERSULFONE MEMBRANE (PES)

- Hydrophilic
- Low protein and drug binding
- Filtration of buffers and culture media

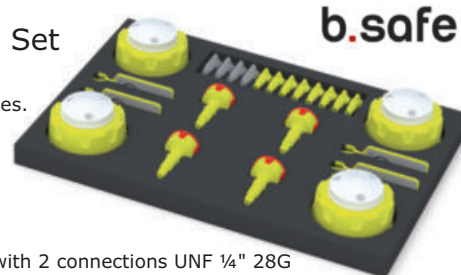
Pore size µm	Cap colour	PK	Cat. No.
0.20	Light green	100	7.699 858
0.45	Green	100	7.699 859

B.SAFE-CAPS STARTER BOXES, GL 45, PPS



Complete Set

For up to 4 storage bottles.



b.safe

Scope of supply:

Starter Box 1:

- 3 x b.safe-Cap GL 45 with 2 connections UNF ¼" 28G
- 1 x b.safe-Cap GL 45 with 3 connections UNF ¼" 28G
- 4 x Air valves with service life indicator
- 5 x Fittings yellow for tubing O.D. 3.2 mm
- 1 x Blind fitting

Starter Box 2:

- 4 x b.safe-Cap GL 45 with 3 connections UNF ¼" 28G
- 4 x Air valves with service life indicator
- 8 x Fittings yellow for tubing O.D. 3.2 mm
- 4 x Blind fittings

Type	Thread	PK	Cat. No.
Starter Box 1	GL 45	1	6.313 845
Starter Box 2	GL 45	1	6.313 846

SAFETY CAPS, GL45, PPS/PP, PFAS ANALYTIC



For PFAS-Analytic

Screw caps, with a freely movable insert made of PP, for connecting capillary tubing and air valve. For PFAS analysis of polyfluorinated chemicals according to DIN 38407-42/DIN 38414-14.

- Insert made of PP
- Fittings made of PP

Scope of supply: Cap, fittings (PP), air valve, service life indicator, labelling field



Capillary	Qty. Fittings	PK	Cat. No.
1	1 x 1.6/1 x 2.3/1 x 3.2 mm	1	6.324 051
2	2 x 1.6/2 x 2.3/2 x 3.2 mm	1	4.699 537
3	3 x 1.6/3 x 2.3/3 x 3.2 mm	1	4.699 539
4	4 x 1.6/4 x 2.3/4 x 3.2 mm	1	4.688 645

WASTE SAFETYCAPS



LabExpert

Ideal for collecting liquid HPLC waste.

- Caps and fittings made of PP
- Body and hose barbs made of PTFE
- GL 45/DIN 45

Connections	PK	Cat. No.
3 x capillaries (2.3 ... 3.2 mm OD)	1	4.684 227
2 x capillaries (2.3 ... 3.2 mm OD) / 1 x hose (7 ... 9 mm OD)	1	4.684 228
2 x capillaries (2.3 ... 3.2 mm OD) / 1 x capillary (1.6 mm OD) / 1 x hose (7 ... 9 mm OD)	1	4.684 229

CONDUCTIVITY METER FiveGo™ F3



Portable conductivity meter for fieldwork.

- Large, clear display, intuitively arranged buttons, simple menu structure
- The foldable tripod offers optimum readability on flat surfaces
- IP 67 waterproof and dustproof

Supplied with:

- F3-Meter:** Meter only
- F3-Standard kit:** Meter with LE703 sensor
- F3-Field kit:** Meter with LE703 sensor, carrying case

F3-Standard kit

Specifications

Conductivity

Measuring range: 0.00 $\mu\text{S/cm}$... 200 mS/cm
Accuracy: $\pm 0.5\%$ of the measured value

Temperature

Measuring range: 0 ... 100 $^{\circ}\text{C}$
Accuracy: ± 0.5 $^{\circ}\text{C}$

TDS

Measuring range: 0.01 mg/l ... 200 g/l
Temperature compensation: Linear 0.00 ... 10.00%/ $^{\circ}\text{C}$, reference temperature 20 and 25 $^{\circ}\text{C}$
Calibration: 1 point, 3 predefined standards
IP code: IP 67 (meter + sensor)

Type	PK	Cat. No.
F3-Meter	1	6.280 115
F3-Standard kit	1	6.280 116
F3-Field kit	1	6.280 117

CONDUCTIVITY STANDARDS



Conductivity standards tested and ISO 17025 certified at 25 $^{\circ}\text{C}$. Uncertainty of measurement of $\pm 1\%$. Directly traceable to N.I.S.T. Temperature dependence data is printed on the label as are lot numbers and expiry dates.

Type	Capacity	PK	Cat. No.
$\mu\text{S/cm}$	ml		
1.3*	250	1	6.225 059
5	500	1	6.901 629
10	500	1	6.901 622
20	500	1	6.802 901
23.8	500	1	6.259 883
84	500	1	9.040 904
100	500	1	6.234 859
147	500	1	9.040 905
500	500	1	6.205 415
1000	500	1	6.901 670
1413	500	1	9.040 906
12880	500	1	9.040 907

*1.25 - 1.35 $\mu\text{S/cm}$ at 25 $^{\circ}\text{C}$.

CONDUCTIVITY TESTER POCKET TESTER SD30 EC



Pocket Tester with waterproof housing for measuring conductivity, TDS, salinity, and temperature.

- Three-colour LED lighting system (blue, green, red) and display symbols for easy handling
- 3 multifunction buttons with symbols
- Up to 3 calibration points
- With stability indicator, auto-hold, and auto-off function
- Battery operation (4 x AAA batteries)
- Easy battery and electrode replacement

Specifications

Conductivity: 0.01 ... 20.00 mS/cm
Resolution: 0.1 $\mu\text{S/cm}$, 1 $\mu\text{S/cm}$, 0.01 mS/cm
Accuracy: $\pm 1\%$ FS
TDS: 0.01 ... 20.00 ppt
Resolution: 0.1 ppm, 1 ppm, 0.01 ppt
Accuracy: $\pm 1\%$ FS

Type	PK	Cat. No.
SD30 EC	1	4.694 728

CONDUCTIVITY SOLUTIONS



The ready-to-use CHEMSOLUTE® conductivity solutions are suitable for calibrations.

- Values stated at 25 $^{\circ}\text{C}$, accuracy $\pm 1\%$
- Traceable to the National Institute of Standards and Technology (NIST)
- Tested by an ISO 17025 accredited laboratory

Description	Capacity	PK	Cat. No.
	ml		
5 $\mu\text{S/cm}$	500	1	1565.0500
84 $\mu\text{S/cm}$	500	1	1570.0500
100 $\mu\text{S/cm}$	250	1	1571.0250
147 $\mu\text{S/cm}$	500	1	1572.0500
500 $\mu\text{S/cm}$	500	1	1573.0500
1413 $\mu\text{S/cm}$	500	1	1575.0500
1413 $\mu\text{S/cm}$	1000	1	1575.1011
12880 $\mu\text{S/cm}$	500	1	1580.0500

pH MEASUREMENT

pH TESTER LLG-pH PEN



Cost-efficient pH tester, ideal for testing small amounts of liquid and in narrow vessels. The supplied storage container prevents the electrode from drying out.

- ATC from 0 °C to 50 °C
- Large, easy-to-read LCD display
- **3-point calibration**

Scope of supply: pH meter

Please order batteries separately.

Specifications

pH Measuring range:	0 ... 14
pH Accuracy:	±0.1
pH resolution:	±0.1
Dimensions with electrode (W x D x H):	36 x 20 x 210 mm
Dimensions electrode (diam. x L):	12 x 110 mm
Weight:	72 g
Power supply:	2 x 3 V CR2032 button cell
IP code:	IP 65
Warranty:	2 years

Type	PK	Cat. No.
LLG-pH Pen	1	6.263.690

pH BUFFER SOLUTIONS IN A TWIN NECK BOTTLE WITH COLOUR CODING (20 °C)



- Accuracy ±0.01 pH units, reference temperature 20 °C
- Traceable to the National Institute of Standards and Technology (NIST)
- The dyed buffer solutions allow easy identification

Description	Colour	Capacity ml	PK	Cat. No.
pH 4.00	Red	250	1	1134.0252
pH 4.00	Red	1000	1	1134.1012
pH 7.00	Yellow	250	1	1137.0252
pH 7.00	Yellow	1000	1	1137.1012
pH 10.00*	Blue	250	1	1140.0252
pH 10.00*	Blue	1000	1	1140.1012

* GHS08, Danger, H360FD P201 P280 P308+P313 P405 P501

LABORATORY INSTRUMENT INOLAB® MULTI 9310 IDS



Whether pH, conductivity or dissolved oxygen, the inoLab® Multi 9310 can be turned into a pH, conductivity or oxygen meter by plugging in the appropriate sensor. The scope of delivery includes the device, stand with sensor holder, data transmission cable and universal plug-in power supply. The inoLab® Multi 9310 IDS is radio-ready for IDS radio modules.

Specifications

Display:	backlit graphic LCD
Memory:	manual: 500/automatic: 5000
Logger:	manual/time controlled
Interface:	Mini USB-B
Power supply:	Universal power supply, 100 to 240 V, 50/60 Hz

Type	Description	PK	Cat. No.
9310	Single instrument	1	9.920.120
9310 Set 1	Incl. SenTix® 940	1	9.920.121
9310 Set 2	Incl. SenTix® 980	1	9.920.122
9310 Set 3	Incl. TetraCon® 925	1	9.920.123
9310 Set 4	Incl. FDO® 925	1	9.920.124
9310 Set C	Incl. SenTix® 940, TetraCon® 925	1	9.920.125

ELECTRODE FILLING SOLUTIONS



These high-quality CHEMSOLUTE® electrolyte solutions are perfectly suited to the secure and reliable maintenance and care of electrodes.

- Ideal for topping up and replacing reference electrolyte solution in pH electrodes
- Suitable for long-term wet storage of the electrodes
- Traceable to SRM from the National Institute of Standards and Technology (NIST)

Description	Capacity ml	PK	Cat. No.
Lithium chloride solution 1 mol/l in ethanol	100	1	2230.0100
Potassium chloride solution 3 mol/l, free from silver ions	1000	1	1619.1000
Potassium chloride solution 3 mol/l, free from silver ions	5000	1	1619.5000
Potassium chloride solution 3 mol/l, saturated with AgCl	1000	1	1633.1000
Potassium chloride solution 5% dissolved oxygen electrolyte	100	1	2265.0100

ELECTRODE STORAGE SOLUTIONS



The high-quality electrode storage solutions from CHEMSOLUTE® are perfectly suited for the safe and reliable storage of electrodes.

- Traceable to the SRM of the National Institute of Standards and Technology (NIST)

Description	Capacity ml	PK	Cat. No.
Potassium chloride solution 2.9 - 3.1 mol/l	500	1	2239.0500
Potassium chloride solution 2.9 - 3.1 mol/l	1000	1	2239.1000

MULTI-PARAMETER MEASURING DEVICE LIQUILINE MOBILE CML18, WITH USB DATA AND CHARGING CABLE

Mobile hand-held measuring device for measuring various parameters (pH/ORP, conductivity, temperature, dissolved oxygen) with digital Memosens sensors. All sensor data and measured values can be transferred to tablets or smartphones via a secure Bluetooth connection. With the free Memobase Pro app, all sample measurements can be traceably stored, documented, and visualised and sensors can be calibrated and adjusted using a guided procedure.

- Measurement of pH, conductivity, and oxygen in one device
- All calibration data, history, and measured values are stored directly in the electrode
- Data logger function for storing over 10000 measured values with time, date, and sample ID stamp
- True Plug & Play with pre-calibrated Memosens sensors enables quick changeover between parameters

The device can either be charged inductively via a pad (not included) or with the supplied USB data and charging cable.

Scope of supply: Multi-parameter measuring device, USB data and charging cable
Please order sensors separately.



Endress+Hauser People for Process Automation



NEW

- Portable Multimeter
- Digital Memosens Sensors
- Easy Change of Sensors

Type	Dimensions (W x D x H) mm	Protection class	PK	Cat. No.
CML18	54 x 47 x 84	IP 66	1	4.696.930

pH ELECTRODE CPL51E

Robust pH electrode with Memosens technology. Plastic electrode with glass membrane. The sensor is supplied pre-calibrated and ready for immediate use.



pH-value	Reference electrolyte	Temp. range °C	PK	Cat. No.
0 ... 14	3 mol/l KCl	-5 ... 80	1	4.696.933

pH ELECTRODE CPL53E

Versatile pH glass electrode with Memosens technology and particularly fast response time. The sensor is supplied pre-calibrated and ready for immediate use.



pH-value	Reference electrolyte	Temp. range °C	PK	Cat. No.
0 ... 14	3 mol/l KCl	-5 ... 100	1	4.696.934

pH-ELEKTRODE CPL59E

Rugged pH glass electrode with Memosens technology. The ion trap offers high stability against oxidizing agents. Ideal for aggressive media and challenging samples. The sensor is supplied pre-calibrated and ready for immediate use.



pH-value	Reference electrolyte	Temp. range °C	PK	Cat. No.
0 ... 14	3 mol/l KCl	0 ... 135	1	4.696.936

pH ELECTRODE CPL57E

The pH glass electrode with Memosens technology contains a reference system with salt storage for drift-free measurement at low conductivities. Ideal for pure and ultrapure water measurements. The sensor is supplied pre-calibrated and ready for immediate use.



pH-value	Reference electrolyte	Temp. range °C	PK	Cat. No.
0 ... 14	3 mol/l KCl	-5 ... 100	1	4.696.935

pH INDICATOR STRIPS

The CHEMSOLUTE® pH indicator strips enable fast and accurate pH value determination. The range offers suitable products for a wide variety of pH value intervals.

- High accuracy and easy legibility
- Stable carrier strips with coloured test fields
- Non-bleeding, no contamination of the medium
- 100 strips per pack

Range	pH steps	PK	Cat. No.
pH			
0 - 14	1.0	100	2714.0001
0 - 14 *	1.0	100	2717.0001
0 - 6.0	0.5	100	2730.0001
2.0 - 9.0	0.5	100	2740.0001
4.0 - 7.0	**	100	2760.0001
4.5 - 10.0	0.5	100	2770.0001
7.0 - 14.0	0.5	100	2790.0001

* in flip-top vial

** 4.0 - 4.4 - 4.7 - 5.0 - 5.3 - 5.5 - 5.8 - 6.1 - 6.3 - 7.0

pH INDICATOR PAPER



CHEMSOLUTE® universal pH indicator paper is a cost-effective alternative for the rapid determination of the pH value and consists of high-quality filter papers impregnated with indicator solution.

- pH value determination in 1.0 pH steps
- With colour scale
- Roll (L x W): 5 m x 7 mm

Range	Description	PK	Cat. No.
pH			
1 - 11	Box with 1 roll	1	2811.0001
1 - 11	Refill pack with 3 rolls	1	2811.0003
1 - 14	Box with 1 roll	1	2814.0001
1 - 14	Refill pack with 3 rolls	1	2814.0003

SAFE SEAL MICRO TUBES, PP

The LABSOLUTE® safe seal micro tubes have a special locking mechanism preventing unintentional opening of the lid during applications with thermal stress.

- Frosted cover and labelling field
- Graduation for easy volume determination
- Non-sterile
- Can be centrifuged up to 18000 x g (0.5 ml and 2.0 ml) and 30000 x g (1.5 ml)
- Autoclavable



Volume ml	PK	Cat. No.
0.5	1000	7.696 755
1.5	1000	7.696 756
2.0	1000	7.696 757

SAFE-LOCK REACTION TUBES, PP



- Autoclavable when open (121 °C, 20 min.)
- Can be opened and closed easily with one hand
- With frosted labelling area.
- Graduated
- 0.5 ml and 1.5 ml capacity Safe-lock reaction vessels can be centrifuged up to 30 000 x g

Capacity ml	Colour	PK	Cat. No.
0.5	Transparent	500	9.409 320
1.5	Transparent	1000	9.409 331
2.0	Transparent	1000	9.409 341
0.5	Assorted colours	500	9.409 357
1.5	Assorted colours	1000	9.409 358
2.0	Assorted colours	1000	9.409 359

EPENDORF TUBES® BIOBASED, PP, WITH SCREW CAP, HDPE



Eppendorf Tubes® BioBased are made of 90% bio-based plastic.

- Sterile
- Pyrogen-, DNase-, RNase- and DNA-free
- Lid with grooved sides
- Conical with a screw cap
- Large labelling field
- ISCC PLUS and ACT certification

Nom. capacity ml	Max. rcf x g	Package	PK	Cat. No.
5	2500	2 bags of 100	200	4.687 109
15	19500	10 bags of 50	500	4.687 110
25	17000	8 bags of 25	200	4.687 111
50	19500	20 bags of 25	500	4.687 112

PCR 96-WELL PLATES, PP

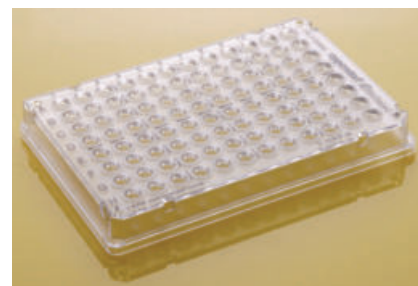


PCR plates for use in thermal cyclers of all common manufacturers.

- All plates are free of DNase, RNase and human DNA
- Optimum heat transfer and short cycle times thanks to very thin and uniform wall thicknesses
- Slightly raised edges of the individual wells to reduce cross-contamination cross-contamination and evaporation of the samples

Description	Capacity ml	Colour	PK	Cat. No.
Skirted, low profile	0.15	Transparent	50	7.696 530
Non-skirted, standard profile	0.20	Transparent	50	7.696 535
Semi-skirted, standard profile	0.20	Transparent	50	7.696 540
Semi-skirted, standard profile, ABI® style	0.20	Opaque	50	7.696 541
Semi-skirted, low profile, for Roche LC480®	0.15	White	50	7.696 545

PCR PLATES, 96/384 WELL, EPENDORF TWIN.TEC® TRACE, BIOBASED, LOBIND, PCR CLEAN



The plates are made of polymer, which is produced from approx. 86% recycled feedstock.

- Laser-engraved lot number and expiration date on each single plate
- Extremely thin-walled polypropylene wells guarantee optimum heat transfer
- Raised well rims
- Free of DNA, DNAase, RNase and PCR inhibitors
- With edge (skirted)
- ISCC PLUS certified
- ACT label

No. of wells	Nominal capacity µl	Frame	PK	Cat. No.
96	150	with	25	4.699 496
96	250	half	25	4.699 494
384	45	with	25	4.699 495
96	20	half	25	4.699 492
384	45	with	25	4.699 493

SCHUETT COUNT COLONY COUNTER

schuettbiotec.de



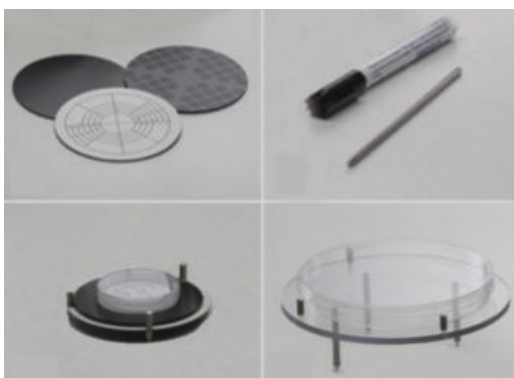
Designed for reliable and efficient counting of bacterial colonies and bacteriophage plaques growing on nutrient agar or nutrient discs/filter disks in Petri dishes. Provides ergonomic and relaxed working.

- 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, is glare-free 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
 - 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 90 mm dia. Petri dishes: adapter (transparent) for illumination from below, adapter (black/white) for illumination from the side, contrast disc (black), USB cable, marker-pen with holder.

Type	PK	Cat. No.
schuett count Colony counter, 100-240 V	1	9.521.940

ACCESSORIES FOR SCHUETT COUNT COLONY COUNTER



Type	PK	Cat. No.
Magnifier 3 x (100 mm dia.)	1	9.521.941
Magnifier 6-8 x (60 mm dia.)	1	9.521.942
LED overhead lamp	1	9.521.943
Adapter for Petri dishes, 50 to 60 mm dia.	1	9.521.944
Adapter for Petri dishes, 140 to 150 mm dia.	1	9.521.945
Adapter for other petri dish sizes on request.		

PETRI DISHES, PS

LABSOLUTE®



The LABSOLUTE® petri dishes are made of crystal-clear PS and offer high optical clarity. The dishes with three vents support gas exchange and are ideal for short incubation times. Dishes without vents are best suited for anaerobic and long-term work. The Petri dishes are prepared and packed under aseptic conditions. Sterilisation for the sterile dishes is done by beta rays.

- Perfectly stackable
- Heat-resistant from -40 - 70 °C

Packed in sub-units of 10 plates (Ø = 35, 60 and 150 mm), 15 plates (Ø = 55 mm) or 20 plates (Ø = 90 mm).

Outer Ø mm	Vents	Sterile	PK	Cat. No.
55	Yes	Yes	1005	7.696.409
60	Yes	Yes	1005	7.696.410
60	No	Yes	1080	7.696.411
92	Yes	No	1080	7.696.390
92	Yes	Yes	480	7.696.392
92	No	No	480	7.696.391
92	No	Yes	480	7.696.393
150	Yes	Yes	480	7.696.412

DISPOSABLE INOCULATION LOOPS, STERILE

LABSOLUTE®



The LABSOLUTE® disposable inoculation loops have a flexible loop at one end to inoculate soft agar culture media and a needle for picking individual colonies at the other end. The disposable inoculation loops are packed sterile in a paper/plastic blister of 20 pieces.

- Length: 195 mm

Capacity µl	Colour	PK	Cat. No.
10	Blue	2000	7.696.430
1	White	2000	7.696.431

CENTRIFUGING

MICROCENTRIFUGE FRONTIER™ FC5513-L, WITH ANGLE ROTOR FOR 18 X 1.5/2.0 ML TUBES

- ! - With Rotor
- For 15 ml and 2 ml Tubes
- up to 14 000 RPM



Compact high-speed microcentrifuge with modern touch-wheel for comfortable operation and reduced wear. Ideal suited for general laboratory applications.

- Backlit, two-lined LCD display
- Powerful brushless induction motor
- 10 acceleration and deceleration rates
- Memory for up to 99 parameters
- Lid locking system
- Imbalance sensor
- Small footprint
- Timer: 10 s to 99 h 59 min 59 s, continuous

Type	Max. rcf x g	Rotation speed rpm	Dimensions (W x D x H) mm	PK	Cat. No.
FC5513-L	15994	200 ... 14000	277 x 356 x 236	1	4.699 640

MINI CENTRIFUGE LLG-uniCFUGE 6

- ! - Complete Set with Combi Rotor
- Compact Design



3 YEARS WARRANTY

NEW



The new LLG-uniCFUGE 6 is equipped with a combi rotor. This allows centrifugation of up to 4 x 50 ml or 8 x 15 ml vessels. The lid opens automatically on run completion.

- Easy switching between RPM and RCF operating mode
- Integrated imbalance detection with automatic switch-off
- Timer setting from 1 minute to 99 minutes or continuous operation
- Enhanced airflow design for extremely quiet performance and temperature control
- Brushless, wear-free motor
- Compact and lightweight design

Scope of supply: Mini centrifuge, combi rotor, 4 adapters for 15 ml vessels, power supply unit, T-Allen key, manual

Type	Max. rcf x g	Rotation speed rpm	Plug type	PK	Cat. No.
LLG-uniCFUGE 6	1985	500 ... 4500	EU	1	6.263 532
LLG-uniCFUGE 6	1985	500 ... 4500	UK	1	6.263 533

LSE MINI MICROCENTRIFUGE



The Corning LSE Mini Microcentrifuge is a compact benchtop device with simple operation. As soon as the samples are loaded and the lid is closed, the rotor accelerates quickly to 6,000 rpm. The mini microcentrifuge can hold up to 8 microcentrifuge tubes or 4 PCR strip tubes. With the supplied tube adapters, smaller samples such as 0.2, 0.25 and 0.5 ml can also be processed.

- Speed 6,000 rpm (2,000 x g)
- Quick-change system for rotors
- No tools required for rotor change
- Electronic brake ensures rapid deceleration
- Compact, robust design
- Double lid switch for safe operation
- Ergonomic design enables comfortable handling

Type	PK	Cat. No.
LSE mini microcentrifuge	1	7.668 497

SINGLE-CHANNEL AND MULTI-CHANNEL PIPETTES MyPIPETMAN® SELECT AND PIPETMAN®

Whether you use the well-known PIPETMAN® or the customizable MY PIPETMAN select®, your results will always be reproducible and significant.



MyPIPETMAN® SELECT SINGLE-CHANNEL PIPETTES

Description	Volume	PK	Cat. No.
My Pipetman Select P2	0.2-2 µl	1	7.680 518
My Pipetman Select P10	1-10 µl	1	7.680 519
My Pipetman Select P20	2-20 µl	1	7.680 520
My Pipetman Select P100	10-100 µl	1	7.680 521
My Pipetman Select P200	20-200 µl	1	7.680 522
My Pipetman Select P1000	100-1000 µl	1	7.680 523
My Pipetman Select P5000	500-5000 µl	1	7.681 929
My Pipetman Select P10 ml	1-10 mL	1	7.681 930



MyPIPETMAN® SELECT MULTI-CHANNEL PIPETTES

Description	Volume	PK	Cat. No.
My Pipetman Select P8x10	0.5-10 µL	1	7.681 931
My Pipetman Select P12x10	0.5-10 µL	1	7.681 932
My Pipetman Select P8x20	2-20 µL	1	7.681 933
My Pipetman Select P12x20	2-20 µL	1	7.681 934
My Pipetman Select P8x200	20-200 µL	1	7.681 935
My Pipetman Select P12x200	20-200 µL	1	7.681 936
My Pipetman Select P8x300	20-300 µL	1	7.681 937
My Pipetman Select P12x300	20-300 µL	1	7.681 938



PIPETMAN® SINGLE-CHANNEL PIPETTES

Description	Volume	PK	Cat. No.
Pipetman P2, Metal Ejector	0.2 -2 µl	1	7.640 481
Pipetman P10, Metal Ejector	1 -10 µl	1	7.640 482
Pipetman P20, Metal Ejector	2-20 µl	1	7.640 483
Pipetman P100, Metal Ejector	10 - 100 µl	1	7.640 484
Pipetman P200, Metal Ejector	20 - 200 µl	1	7.640 485
Pipetman P1000, Metal Ejector	100 - 1000 µl	1	7.640 486
Pipetman P5000	500 - 5000 µl	1	7.640 487
Pipetman P10 ml	1000 - 10000 µl	1	7.640 488



PIPETMAN® MULTI-CHANNEL PIPETTES

Description	Volume	PK	Cat. No.
Pipetman Multichannel P12x10	0.5-10 µL	1	7.678 591
Pipetman Multichannel P8x20	0.5-10 µL	1	7.677 118
Pipetman Multichannel P12x20	2-20 µL	1	7.664 911
Pipetman Multichannel P8x200	2-20 µL	1	7.664 913
Pipetman Multichannel P12x200	20-200 µL	1	7.664 912
Pipetman Multichannel P8x300	20-200 µL	1	7.664 914
Pipetman Multichannel P8x300	20-300 µL	1	7.678 592
Pipetman Multichannel P12X300	20-300 µL	1	7.677 119



BOTTLE TOP DISPENSERS WITH RECIRCULATION VALVE



- With safety sealing cap
- Smooth-running mechanism thanks to PTFE piston with silicone O-ring
- Easy adjustment of the telescopic aspirating tube to the different bottles
- Quick and clearly visible volume adjustment with practical locking screw
- Autoclavable at 121 °C

Volume range	Grad.	Accuracy max. vol.	Precision max. vol.	PK	Cat. No.
ml	ml	≤ ± R%	≤ CV%		
0.25 - 2.5	0.05	0.6	0.2	1	7.695 540
0.5 - 5	0.10	0.6	0.2	1	7.695 541
1.0 - 10	0.20	0.6	0.2	1	7.695 542
2.5 - 30	0.50	0.6	0.2	1	7.695 543
5.0 - 60	1.00	0.6	0.2	1	7.695 544
10.0 - 100	2.00	0.6	0.2	1	7.695 545

MAXI PIPETTE FILLER, 1 TO 100 ML



The large capacity bulb which works perfectly with all pipette sizes from 1 ml up to 100 ml.

Type	PK	Cat. No.
Maxi pipette filler	1	6.238 525

GRADUATED PIPETTES, CLASS AS, TYPE 3, AMBER GRADUATION



DIN EN ISO 835. Made from soda-lime glass. Type 3. With batch identification. Calibrated to "Ex" (+5 seconds). Class AS. Labelling in brown colour. A batch-specific certificate of conformity is available on request.

Capacity	Length	Colour code	Graduation	PK	Cat. No.
ml	mm		ml		
1	360	Yellow	0.01	6	7.691 050
2	360	Black	0.02	6	7.691 051
5	360	Red	0.05	6	7.691 052
10	360	Orange	0.10	6	7.691 053
20	450	Yellow stripes	0.10	3	7.691 054
25	450	White	0.10	3	7.691 055
50	450	Black	0.20	3	7.691 056

Length ±10 mm

CORNING® STRIPETTOR™ ULTRA PIPETTING ASSISTANT



Lightweight, ergonomic, motorised pipette controller for use with serological glass and plastic pipettes from 0.5 to 100 ml.

- LCD display
- Coloured nose pieces for identification
- Well-positioned function buttons
- Includes three-position charging stand and wall mount

Type	PK	Cat. No.
Stripettor™ Ultra Pipetting assistant	10	7.668 190

GREEN SOLVENTS FOR SUSTAINABLE CHEMISTRY

We support the concept of 'green chemistry' and the growing awareness of the environmental impact of chemical products and their production processes. Green solvents are an important part of this sustainable chemistry.






GREEN CHEMISTRY - THE 12 PRINCIPLES

- Avoidance of waste instead of disposal
- Nuclear economy and nuclear efficiency
- Use of less harmful and less toxic chemicals
- Development of safer products
- Use of non-hazardous solvents and additives
- Efficient use of energy
- Use of renewable raw materials raw materials
- Shorter synthesis routes
- Catalysts instead of stoichiometric reagents
- Products should be degradable in the environment
- Analytical methods for monitoring of environmental pollution
- Safe processes from the ground up



GREEN CHEMICALS

At CHEMSOLUTE® you will find "green" alternatives to common solvents.

Description		GHS	Packaging	PK	Cat. No.
Dihydrolevoglucosenone	p. a. (min. 99.0 %) Alt. to DMF and NMP	 ¹⁾	Glass bottle	1 l	2322.1000
1,3-Dioxolane	for synthesis, pure (min. 99.9 %) Alt. to DCM, THF, DMSO and xylene	 ²⁾	Plastic canister	5 l	2314.5000
2-Methyl tetrahydrofuran	for HPLC, isocratic (min. 99.5 %, unstab.) Alt. to DCM, THF and diethyl ether	 ³⁾	Glass bottle	1 l	1483.1000
Mixture Ethyl acetate-Ethanol 3:1 (v/v)	for synthesis, pure (min. 99.9 %) Alt. to DCM, THF and diethyl ether	 ³⁾	Glass bottle	2.5 l	1474.2500
1,3-Propanediol	for HPLC Alt. to DCM	 ⁴⁾	Glass bottle	1 l	1442.1000
	for synthesis, pure (min. 99.7 %) Alt. to petroleum ether		Glass bottle	1 l	1180.1000

¹⁾ Warning H319



²⁾ Danger H225 H319

³⁾ Danger H225 H302 H315 H318 H335

⁴⁾ Danger H225 H319 H336

REDISTILLED SOLVENTS

Reuse instead of disposal: these solvents are obtained by distillation from unmixed solvent waste and thus contribute to environmental protection and resource conservation.

Description		GHS	Packaging	PK	Cat. No.
Acetone	redist. (min. 99.0 %)	 ¹⁾	Plastic bottle	2.5 l	3101.2511
			Plastic canister	5 l	3101.5000
2-Propanol	redist. (min. 99.0 %)	 ²⁾	Plastic bottle	2.5 l	3102.2511
			Plastic canister	5 l	3102.5000









¹⁾ Danger H225 H319 H336 EUH066

²⁾ Danger H225 H319 H336

REAGENTS FOR ANALYSIS AND SYNTHESIS

The CHEMSOLUTE® range includes a variety of chemicals for the different steps of your synthesis or analytical preparation, including solvents, reagents and building blocks.

AMINES

Description	GHS	Packaging	PK	Cat. No.
Diethanolamine	for synthesis (min. 99.0 %)  1)	Glass bottle	1 l	2348.1000
Diethylamine	p. a. (min. 99.0 %)  2)	Glass bottle	1 l	2343.1000
	for synthesis (min. 99.0 %)  2)	Glass bottle	1 l	2358.1000
Diisopropylamine	for synthesis (min. 99.0 %)  3)	Glass bottle	1 l	2349.1000
	p. a. (min. 99.0 %)  4)	Glass bottle	1 l	2170.1000
Ethanolamine	for synthesis (min. 99.0 %)  4)	Glass bottle	1 l	2163.1000
			2.5 l	2163.2500
Ethylendiamine	p. a. (min. 98.0 %)  5)	Glass bottle	1 l	2175.1000
Triethylamine	puriss. (min. 99.0 %)  6)	Glass bottle	1 l	760.1000

¹⁾ Danger H302 H314 H335 H373 H412

²⁾ Danger H225 H302+H332 H311 H314 H335










³⁾ Danger H225 H302+H332 H314 H335

⁴⁾ Danger H302 H312 H314 H332

⁵⁾ Danger H226 H302+H312 H314 H334 H317

⁶⁾ Danger H225 H302+H312+H332 H314 H335

ALDEHYDES UND KETONES

Description	GHS	Packaging	PK	Cat. No.
			1 l	2647.1000
		Glass bottle	2.5 l	2647.2500
			5 l	2647.5000
Acetone	puriss., EP, BP (min. 99.5 %)  1)	Plastic canister	25 l	2647.9025
		Plastic bottle	2.5 l	2677.2511
	for synthesis (min. 99.5 %)  1)	Glass bottle	1 l	2666.1000
		Plastic canister	5 l	2666.5000
Acetylacetone	for synthesis (min. 99.0 %)  2)	Glass bottle	1 l	2606.1000
Benzaldehyde	zur Synthese (min. 99.0 %)  3)	Glass bottle	1 l	2509.1000
2-Butanone	for synthesis (min. 99.0 %)  1)	Glass bottle	2.5 l	1430.2500
Cyclohexanone	for synthesis (min. 99.5 %)  4)	Glass bottle	1 l	2489.1000
			2.5 l	2489.2500
		Plastic bottle	1 l	2137.1011
Formaldehyde solution	p. a., ACS, ISO (min. 37.0 % w/w (stab.))  5)		2.5 l	2137.2511
		Plastic canister	25 l	2137.9025
Methyl ethyl ketone	p. a. (min. 99.5 %)  1)	Glass bottle	1 l	1443.1000
			2.5 l	1443.2500
Methyl isobutyl ketone	p. a. (min. 99.5 %)  6)	Glass bottle	1 l	1471.1000
			2.5 l	1471.2500

¹⁾ Danger H225 H319 H336 EUH066

²⁾ Danger H226 H302 H311










³⁾ Warning H302

⁴⁾ Warning H226 H332

⁵⁾ Danger H301 H311 H314 H317 H331 H341 H350 H370

⁶⁾ Danger H225 H319 H332 H335 EUH066

ETHER

Description		GHS	Packaging	PK	Cat. No.
Cyclopentyl methyl ether	for synthesis, pure (min. 99.9 %) Alt. to DMSO, THF and diethyl ether 	 ¹⁾	Glass bottle	1 l	2497.1000
	puriss. (min. 99.0 %)	 ²⁾	Glass bottle	2.5 l	2581.2500
tert-Butyl methyl ether	p. a. (min. 99.8 %)	 ²⁾	Plastic canister	5 l	2581.5000
			Glass bottle	1 l	2524.1000
	for synthesis (min. 99 %)	 ²⁾	Glass bottle	2.5 l	2540.2500
Diethyl ether	p. a., Ph. Eur. (min. 99.5 %, stab. with BHT)	 ³⁾	Glass bottle	1 l	2362.1000
			Glass bottle	2.5 l	2362.2500
	for synthesis, DAB, Ph. Eur., BP (min. 99.5 %, stab. with BHT)	 ³⁾	Glass bottle	1 l	2367.1000
Diisopropyl ether	p. a. (min. 98.5 %, stab. with BHT)	 ⁴⁾	Glass bottle	1 l	2351.1000
Ethylene glycol monobutyl ether	for synthesis (min. 99.0 %)	 ⁵⁾	Glass bottle	1 l	2269.1000

¹⁾ Danger H225 H302 H315 H319

²⁾ Danger H225 H315

³⁾ Danger H224 H302 H336 EUH019 EUH066

⁴⁾ Danger H225 H336 EUH019 EUH066







⁵⁾ Danger H302 H331 H315 H319



In the LABSOLUTE® range you will find single- and multi-necked flasks, separatory funnels, coolers and other consumables for your synthesis.

ANHYDROUS SOLVENTS

Many chemical reactions or analyses are disturbed by the presence of water in the solvent. CHEMSOLUTE® offers anhydrous solvents in glass bottles or plastic canisters, both with and without molecular sieve.

Description		GHS	Packaging	PK	Cat. No.
Dichloromethane anhydrous	p. a. (min. 99.95 %, stab. with amylene)*	 ¹⁾	Glass bottle	1 l	2384.1000
Diethyl ether anhydrous	p. a. (min. 99.7 %, stab. with BHT)*	 ²⁾	Glass bottle	1 l	2368.1000
N,N-Dimethyl formamide anhydrous	p. a. (min. 99.9 %)*	 ³⁾	Glass bottle	1 l	2359.1000
			Glass bottle	1 l	2273.1000
Ethanol absolut anhydrous	puriss., BP, Ph. Eur., USP (min. 99.5 %)	 ⁴⁾	Glass bottle	2.5 l	2273.2500
			Plastic canister	5 l	2273.5000
			Plastic canister	25 l	2273.9025
Methanol dried	p. a. (min. 99.8 %)	 ⁵⁾	Glass bottle	1 l	1459.1000
			Glass bottle	2.5 l	1459.2500
Tetrahydrofuran anhydrous	p. a. (min. 99.9 %, stab. with BHT)	 ⁶⁾	Glass bottle	1 l	775.1000

*The solvent bottles contain a 4 Å molecular sieve.

¹⁾ Danger H351

²⁾ Danger H224 H302 H336 EUH019 EUH066

³⁾ Danger H226 H312+H332 H319 H360D

⁴⁾ Danger H225 H319

⁵⁾ Danger H225 H301 H311 H331 H370

⁶⁾ Danger H225 H319 H335 H351 EUH019

DISSOLUTION MEDIA

CHEMSOLUTE® dissolution media are high-quality dissolution media that are ready to use with virtually no preparation steps. The extensive range of dissolution media from CHEMSOLUTE® has been specially developed for dissolution studies on semi-solid and solid pharmaceutical preparations. The production complies with the requirements of Ph. Eur and/or USP.

- high time saving due to ready-to-use products from certified production according to pharmacopoeia
- significant cost savings as a result
- reliable reproducibility due to high batch consistency
- independent comparability of the results

READY-TO-USE DISSOLUTION MEDIA

Description	GHS	Packaging	PK	Cat. No.	
Potassium phosphate solution	pH 6.8 ($\pm 0.02/25^{\circ}\text{C}$), acc. to Ph. Eur. & USP	Plastic bottle	1 l	3050.1000	
	pH 7.2 ($\pm 0.02/25^{\circ}\text{C}$), acc. to Ph. Eur. & USP	Plastic bottle	1 l	3055.1000	
	pH 7.5 ($\pm 0.02/25^{\circ}\text{C}$), acc. to Ph. Eur. & USP	Plastic bottle	1 l	3060.1000	
Phosphate buffer solution	pH 4.50 ($\pm 0.02/25^{\circ}\text{C}$), acc. to Ph. Eur.	Plastic canister	10 l	3045.9010	
Hydrochloric acid	0.1 N, acc. to Ph. Eur. & USP	1)	Plastic bottle	1 l	3030.1000
Simulated gastric fluid without enzyme	acc. to Ph. Eur. & USP		Plastic bottle	1 l	3080.1000

¹⁾ Warning H290

DISSOLUTION MEDIA CONCENTRATES FOR 10 L SOLUTIONS

Description	GHS	Packaging	PK	Cat. No.	
Phosphate buffer solution	pH 6.8, acc. to JP	Plastic bottle	500 ml	3043.0500	
Potassium phosphate solution	pH 5.8, acc. to Ph. Eur. & USP	Plastic bottle	384 ml	3048.0384	
	pH 6.8, acc. to Ph. Eur. & USP	1)	Plastic bottle	384 ml	3058.0384
	pH 7.2, acc. to Ph. Eur. & USP	1)	Plastic bottle	384 ml	3063.0384
	pH 7.5, acc. to Ph. Eur. & USP	1)	Plastic bottle	384 ml	3068.0384

¹⁾ Danger H314







CHEMSOLUTE® CUSTOMISED SOLUTIONS CHEMICALS CUSTOM - MADE FOR YOU

Whether solutions, powders, mixtures, acids or alkalis:
We produce exactly according to your specifications or develop customised solutions for your requirements. Customised service!
www.thgeyer.com

CHEMICALS FOR DETERMINING THE CHEMICAL OXYGEN DEMAND (COD)

The chemical oxygen demand (COD) is used in particular as a sum parameter to quantify the pollution of wastewater with organic substances. It is a measure of the sum of all substances present in water that can be oxidized under certain conditions. CHEMSOLUTE® offers various chemicals that are particularly suitable for COD determination.

Description	GHS	Packaging	PK	Cat. No.
Ferriin solution (Redoxindicator)		Glass bottle	100 ml	2781.0100
Potassium dichromate solution (0.02 mol/l)	 ¹⁾	Plastic bottle	1 l 2.5 l	1602.1000 1602.2511
Mercury(II) sulfate solution (80 g/l in sulfuric acid potassium dichromate solution)	 ²⁾	Glass bottle	1 l 2.5 l	1024.1000 1024.2500
Silver sulfate solution (10 g/l in sulfuric acid)	 ³⁾	Glass bottle	1 l 2.5 l	811.1000 811.2500
Silver sulfate solution (10 g/l in sulfuric acid) acc. to DIN 38409-41:1980 and DIN 38414-9:1986	 ³⁾	Plastic bottle	2.5 l	813.2500





¹⁾ Danger H317 H340 H350 H360FD H411

²⁾ Danger H290 H301 H310 H315 H319 H331 H340 H350 H373 H410

³⁾ Danger H290 H314

READY-TO-USE VOLUMETRIC SOLUTIONS

The ready-to-use volumetric solutions from CHEMSOLUTE® are suitable for the quantitative determination of various parameters.

Description	GHS	Packaging	PK	Cat. No.
EDTA Disodium salt solution		Plastic bottle	1 l	2200.1011
		Plastic bottle	1 l	2204.1000
		Bag-in-Box	5 l	2204.5000
		Plastic bottle	1 l	2214.1011
Iodine solution	 ¹⁾	Plastic canister	5 l	2214.5011
		Glass bottle	1 l 2.5 l	1805.1000 1805.2500
Sodium thiosulfate solution	 ²⁾	Glass bottle	1 l	2284.1000
		Plastic bottle	1 l	1369.1000
		Plastic bottle	1 l	1356.1000
Silver nitrate solution	 ³⁾	Plastic bottle	1 l	881.1000
		Plastic canister	5 l	881.5011
		Bag-in-Box	5 l 10 l	881.5000 881.9011
Wijs-solution for determination of the iodine number	 ⁴⁾	Glass bottle	1 l	1810.1000

*tested in an ISO 17025 accredited laboratory

¹⁾ Warning H373

²⁾ Danger H226 H314

³⁾ Warning H315 H319 H410

⁴⁾ Danger H226 H290 H314

BIOCHEMICALS

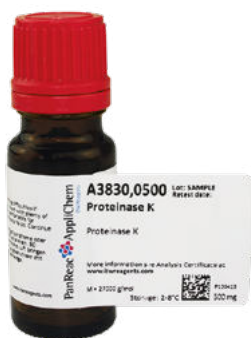
There is something for everyone here - Panreac AppliChem offers you a wide range of biochemicals, all of the highest quality.

SOLVENTS & WATER



Description	PK	Cat. No.
Water, DNA free, for molecular biology, for PCR	10 x 1.7 ml	A8510,1017
Water, molecular biology grade	1 l	A7398,1000
Water bidistilled, sterile	1 l	A4042,1000

ENZYMES



Description	GHS	PK	Cat. No.
Taq DNA Polymerase, DNA-free		500 Units	A5434,0500
DNase I		100 mg	A3778,0100
Proteinase K - solution	¹⁾	10 ml	A4392,0010
Proteinase K, recombinant	²⁾	500 mg	A7932,0500
Proteinase K, lyophilized	²⁾	500 mg	A3830,0500
Chymotrypsinogen A		5 g	A3975,0005
RNase A (DNase-free)		250 mg	A3832,0250

¹⁾ Danger H334

²⁾ Danger H315-H319-H334-H335







BUFFERS



Description	GHS	PK	Cat. No.
PBS tablets pH 7.4 (for 1 L)		100 Tabletten	A9201,0100
PBS tablets pH 7.4 (for 100 ml)		100 Tabletten	A9162,0100
Urea for molecular biology		5 kg	A1049,5000
PBS buffer (1X, Dulbecco's) - Powder		1 l	A0964,1000
Tris for molecular biology		1 kg	A2264,1000
HEPES for molecular biology		1 kg	A3724,1000
EDTA-solution pH 8.0 (0.5 M) for molecular biology	¹⁾	500 ml	A4892,0500

¹⁾ Warning H373

DETERGENTS

Description	GHS	PK	Cat. No.
Saponin from Quillaja Bark (DAB) pure, pharma grade	 ¹⁾	100 g	A4518,0100
Tween® 20 for molecular biology		1 l	A4974,1000
SDS - solution 20 % for molecular biology	 ²⁾	1 l	A0675,1000
Pluronic® F-68 BioChemica		500 g	A1288,0500
TERGITOL™ 15-S-9 (Triton X-100 replacement)	  ³⁾	500 ml	A9780,0500
ECOSURF™ EH-9 (Triton X-100 replacement)	 ⁴⁾	500 ml	A9778,0500
ECOSURF™ SA-9 (Triton X-100 replacement)	 ⁴⁾	500 ml	A9779,0500

¹⁾ Warning H319-H335

²⁾ Danger H315-H318

³⁾ Danger H302+H332-H315-H318

⁴⁾ Warning H319






AMINO ACIDS

Description	PK	Cat. No.
Glycine for molecular biology	1 kg	A1067,1000
L-Histidine base (Ph. Eur., USP) pure, pharma grade	1 kg	A1341,1000
L-Glutamic Acid (Ph. Eur., USP) pure, pharma grade	1 kg	A1704,1000
L-Proline (Ph. Eur., USP) pure, pharma grade	1 kg	A1707,1000
L-Lysine 1-hydrate (DAB) pure, pharma grade	250 g	A1342,0250



BLOTTING

Description	GHS	PK	Cat. No.
Albumin (BSA) Fraction V (pH 7.0)		500 g	A1391,0500
Albumin (BSA) Fraction V (pH 7.0)		100 g	A6588,0100
Albumin (BSA), fatty acid-free, EIA and RIA grade		50 g	A0850,0050
DTT BioChemica	 ¹⁾	5 g	A1101,0005
DTT, molecular biology grade	 ¹⁾	25 g	A2948,0025
DTT solution 1 mol/l (1 M) for molecular biology	 ²⁾	100 ml	A3668,0100

¹⁾ Warning H302-H315-H319

²⁾ Warning H315-H319



DNA DETECTION

Description	PK	Cat. No.
Ethidium Bromide - solution 0.07 % "dropper-bottle"	15 ml	A2273,0015
DNA-Dye NonTox	1 ml	A9555,1000



EASY GRIP

FULL CONTROL



NEW ERGONOMIC HDPE BOTTLES FOR ACIDS, ALKALIS AND SOLVENTS

ADVANTAGES YOU CAN FEEL

Safe and easy handling of hazardous liquids is the key to protecting against accidents and health risks. That is why Merck has developed the new “easy grip” 1-liter HDPE bottle as a counterpart to the popular 2.5-liter HDPE bottle. With a unique ergonomic design with a recessed grip so that the bottles can be gripped safely with just one hand. The bottles are the same height and diameter as the previous model, so there is no need to adapt safety cabinets or shelves.

- Made of specially treated, high-quality HDPE: Unbreakable, durable, inert and impact-resistant
- Special shape and base geometry: For high pressure stability
- S40 thread and lid from Merck: For an absolutely tight seal
- Sharp threaded lip: For safe, drip-free pouring
- Low bottle weight: Easy, safe and economical handling and transportation

Description	GHS	Packaging	PK	Cat. No.
Acetic acid (glacial) 100 % anhydrous for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00063.1011
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00014.1011
Ethanol absolute for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00983.1011
Ethyl acetate for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.09623.1000
Ethylen glycol for analysis EMSURE® Reag. Ph Eur, Reag. USP		HDPE-bottle	1 l	1.09621.1000
Hydrofluoric acid 40 % for analysis EMSURE® ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00338.1000
Hydrofluoric acid 48 % for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00334.1000
Methanol for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.06009.1011
ortho-Phosphoric acid 85 % for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.00573.1000
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph Eur		HDPE-bottle	1 l	1.09634.1011
Sodium hydroxide solution 50 % for analysis EMSURE®		HDPE-bottle	1 l	1.58793.1000

¹⁾ Danger H226 H314
²⁾ Danger H225 H319 H336
³⁾ Danger H225 H319

⁴⁾ Warning H302 H373
⁵⁾ Danger H300+H310+H330 H314
⁶⁾ Danger H225 H301+H311+H331 H370

⁷⁾ Danger H314
⁸⁾ Danger H290 H314

EVERYTHING FROM ONE SOURCE
 MORE THAN 1.100 MANUFACTURERS AND BRANDS



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MULTICHANNEL MICROLITER PIPETTES TRANSFERPETTE® S-8/S-12, VARIABLE



Low operating forces and a short stroke ensure relaxed pipetting, even during long pipetting series. Transferpette® S -8/-12 pipettes are available in 5 different models, covering the volume range from 0.5 µl to 300 µl.

- One-hand operation for right- and left-handed users
- Volume-change protection
- Easy Calibration technology: Calibration without tools
- Universal tip cone
- Completely autoclavable at 121 °C
- DE-M marking

Scope of supply: Transferpette® S -8/-12, supplied with performance certificate, 2 x TipBox filled with pipette tips from BRAND, shelf mount, reagent reservoir, mounting tool, labelling foil, silicone grease and 1 set of sealing rings



Type	Capacity	Tip	PK	Cat. No.
	µl	µl		
S-8	0.5 ... 10	0.5 ... 20	1	9.280 170
S-8	5 ... 50	2 ... 200	1	9.280 171
S-8	10 ... 100	2 ... 200	1	9.280 172
S-8	20 ... 200	2 ... 200	1	9.280 173
S-8	30 ... 300	5 ... 300	1	9.280 174
S-12	0.5 ... 10	0.5 ... 20	1	9.280 175
S-12	5 ... 50	2 ... 200	1	9.280 176
S-12	10 ... 100	2 ... 200	1	9.280 177
S-12	20 ... 200	2 ... 200	1	9.280 178
S-12	30 ... 300	5 ... 300	1	9.280 179

PIPETTE TIPS IN BAGS WITHOUT AEROSOL BARRIER, NON-STERILE



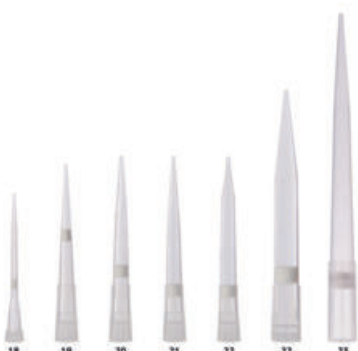
LABSOLUTE® pipette tips in bags, are made of pure PP and comply with the requirements of EN ISO 8655.

Thanks to their universal fit and the high-quality material, the tips guarantee a firm and absolutely tight hold on diverse pipette models. And all this with much less attachment and ejection forces.

The fully automated production and packaging of the pipette tips under clean room conditions guarantee completely contamination-free working conditions with products which are certified free of DNase, RNase, human DNA, pyrogens and ATP - to ensure you reproducible and consistent results.

Volume range	Figure	Colour	Overall length	PK	Cat. No.
µl			mm		
0.1 - 10	1	Transparent	31	1000	7.695 840
0.1 - 10 XL/20	2	Transparent	44	1000	7.695 841
2 - 200 (bevelled tip)	3	Transparent	51	1000	7.695 842
2 - 200 (bevelled tip)	4	Yellow	51	1000	7.695 843
2 - 200	5	Transparent	53	1000	7.695 844
2 - 200	6	Yellow	53	1000	7.695 845
20 - 300	7	Transparent	55	1000	7.695 846
100 - 1000	8	Transparent	71	500	7.695 847
100 - 1000	9	Blue	71	500	7.695 848
100 - 1250	10	Transparent	76	500	7.695 849
100 - 1250 XL	11	Transparent	98	500	7.695 854

FILTER TIPS IN RACKS, STERILE



LABSOLUTE® filter tips offer dual protection! The fine-pored filter made of PE serves as a defence to protect the samples from aerosols and biomolecules. At the same time, the hydrophobic material prevents the pipette from contamination. Delivered in stackable and stable racks.

0.1-10 XL/20 µl tips (7.695 881) are compatible with 20 µl Eppendorf Reference®, Eppendorf Research® Plus and Brand Transferpette®.

Volume range	Figure	Colour	Overall length	Grad.	Pack size	PK	Cat. No.
µl			mm	µl	pieces		
0.1 - 10	18	Transparent	31	2, 10	10 x 96	960	7.695 880
0.1 - 10 XL/20	19	Transparent	44	1, 5, 10, 20	10 x 96	960	7.695 881
0.5 - 20	20	Transparent	53	20	10 x 96	960	7.695 882
2 - 100	21	Transparent	55	10, 50, 100	10 x 96	960	7.695 883
2 - 200	22	Transparent	55	10, 50, 100, 200	10 x 96	960	7.695 884
20 - 300	23	Transparent	55	50, 100, 200	10 x 96	960	7.695 885
100 - 1000	24	Transparent	76	-	10 x 96	960	7.695 886
100 - 1250 XL	25	Transparent	98	200, 500, 1000	10 x 96	960	7.695 887

SPECTROPHOTOMETER LLG-uniSPEC 2



3 YEARS
WARRANTY



High-quality and cost-efficient UV/VIS spectrophotometers for pharmaceutical, biochemical and clinical lab applications. Suitable for different measurement types such as kinetics, wavelength scans, quantitative analysis, multi-wavelength and DNA/Protein analysis.

- Single beam system, grid with 1200 lines/mm
- Silicon photodiode detector
- Parallel port for printer output
- USB port
- 4-position cell holder (10 mm) included
- Additional cell holders are optionally available
- LCD
- Deuterium and tungsten lamp
- Automatic wavelength adjustment

Scope of supply: LLG-uniSPEC 2 Photometer, software for connection to PC, 4 glass cells, and 2 quartz cells.

Specifications

Optical System:	Single beam
Wavelength range:	190 to 1100 nm
Bandwidth:	2 nm
Wavelength accuracy:	±0.5 nm
Stray light:	≤0.1%T
Display:	128 x 64 Dots LCD
Dimension (W x D x H):	460 x 360 x 225 mm
Weight:	18 kg
Power supply:	220 V/50 Hz or 110 V/60 Hz

Type	Plug type	PK	Cat. No.
LLG-uniSPEC 2	EU	1	6.263 610
LLG-uniSPEC 2	UK	1	6.263 611

DISPOSABLE CUVETTES



The LABSOLUTE® disposable cuvettes for the VIS and UV range feature optimised photometric properties and high transparency thanks to modern manufacturing methods. Furthermore, you benefit from the fact that all cuvettes within one packing unit are sorted according to their numbered cavities of origin. Consequently, you receive technically identical cuvettes which prevent deviations in extinction coefficient values. Supplied in practical, reclosable styrofoam racks.

- Increased heat transfer thanks to optimized form and small wall thickness
- Recessed measuring fields: reduce risk of scratching by the cuvette holder
- Arrow marker points to transmission direction
- Path length: 10 mm
- Outer dimensions (W x H x D): 12.5 x 45 x 12.5 mm

FOR THE VIS RANGE

Description	Material	Volume	Range	PK	Cat. No.
		ml	nm		
Macro	PS	2.5 - 4.5	340 - 900	100	7.697 100
Semi-micro	PS	1.5 - 3.0	340 - 900	100	7.697 101
Macro	PMMA	2.5 - 4.5	300 - 900	100	7.697 102
Semi-micro	PMMA	1.5 - 3.0	300 - 900	100	7.697 103

FOR THE UV RANGE

Description	Volume	Range	PK	Cat. No.
	ml	nm		
Macro	2.5 - 4.5	220 - 900	100	7.697 104
Semi-micro	1.5 - 3.0	220 - 900	100	7.697 105

CUVETTE RACK, PP



NEW



The LABSOLUTE® cuvette rack with 16 positions for spectrophotometer cuvettes with a width of 10 mm.
Dimensions: 210 x 70 x 35 mm

Type	PK	Cat. No.
Cuvette rack, PP	1	7.697 099

LLG-CUVETTES, GLASS



LLG-Cuvettes have two clear windows, and two side walls and they are available as optical glass or in quartz variants. Each cuvette is supplied with a PTFE lid.

- Optical Glass: 335 to 2500 nm
- Quartz: 200 to 2700 nm



Type	Volume	Path length	PK	Cat. No.
	ml	mm		
quartz glass	3.5	10	2	4.681 513
quartz glass	17.5	50	2	4.681 514
optical glass	3.5	10	4	4.681 515
optical glass	17.5	50	4	4.681 516

**WIDE-MOUTH BOTTLES,
SODA-LIME GLASS**



Brown glass. Round thread neck in accordance with DIN 168.

Please order screw caps separately.

Capacity	Diam.	Height	Neck thread	PK	Cat. No.
ml	mm	mm	GL		
100	50	92.5	40	56	6.270 392

**SCREW CAPS FOR WIDE-MOUTH
BOTTLES, PP/LDPE**



Cap PP, seal LDPE

Neck thread	PK	Cat. No.
GL		
40	100	9.072 195

**WIDE-MOUTH BOTTLES, BIG PACK,
NATURAL, HDPE**



Natural. Closure made from PP. 100% tight. Perfect for storing and transporting samples. Lids are separate.

Capacity	Internal mouth Ø	Ext. Ø	Height	PK	Cat. No.
ml	mm	mm	mm		
15	13.0	25.0	60.0	2000	7.696 177
30	21.5	36.5	62.5	1000	7.696 178
60	21.5	38.5	85.0	1000	7.696 179
125	28.5	50.5	99.0	500	7.696 180
250	32.5	61.5	133.0	250	7.696 181
500	43.5	72.5	170.0	125	7.696 182
1000	53.0	91.5	199.0	50	7.696 183

**NARROW-MOUTH BOTTLES,
NATURAL, PP**



Natural. Closure made from PP. 100% tight. Perfect for storing and transporting liquids. Autoclavable at 121°C.

Capacity	Internal mouth Ø	Ext. Ø	Height	PK	Cat. No.
ml	mm	mm	mm		
4	8.2	16.0	41.0	12	7.696 126
8	13.0	25.0	44.5	12	7.696 127
15	13.0	25.0	60.0	12	7.696 128
30	13.5	36.5	62.0	12	7.696 129
60	13.5	40.5	85.0	12	7.696 130
125	17.5	51.5	101.0	12	7.696 131
250	17.5	61.5	133.0	12	7.696 132
500	21.3	73.5	170.0	12	7.696 133
1000	28.0	93.0	216.0	6	7.696 134

SQUARE MEDIA BOTTLES, PET, STERILE



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 bottleneck (32 mm) provides easy filling.

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



Nominal capacity	Dimensions (W x D x H)	PK	Cat. No.
ml	mm		
125	53 x 53 x 105	40	9.073 276
250	59 x 59 x 147	45	9.073 277
500	77 x 77 x 174	21	9.073 278
1000	93 x 93 x 214	15	9.073 279

TEMPERATURE MEASUREMENT

WIRELESS TEMPERATURE / HUMIDITY LOGGER TESTO SAVERIS 2-H1



Temperature and humidity monitoring. All relevant temperature and humidity readings are recorded and sent to the Testo cloud via WLAN and can be called up at any time via smartphone, tablet or PC.

- Plug & Play, no software is required
- Automatic data transfer via WLAN to the Testo-Cloud
- High data security due to double storage of all values: in the wireless data logger and the Testo-Cloud
- Reliable alerting
- Flexible data access

Scope of supply: Wireless Data Logger (WLAN) with display for measuring temperature and relative humidity, capacitive humidity sensor internally, including USB cable, wall bracket, batteries, calibration protocol

Specifications

Sensor type:	NTC internal
Measuring range temperature/Accuracy:	-30 ... 50 °C/±0.5 °C (±1 digit)
Measuring range humidity/Accuracy:	0 ... 100% R.H./±2% R.H. (±1 digit)
Resolution:	0.1 °C
Dimensions:	95 x 75 x 30.5 mm
Weight (including batteries):	240 g
Messtakt:	5 s ... 24 h (15 min preset)
Communication cycle:	1 min ... 24h (15 min preset)
Storage:	10000 measured values per channel
Power supply:	4 x AA AIMn mignon cells

Type	PK	Cat. No.
Saveris 2-H1	1	6.283.293

INFRARED THERMOMETERS TFI 260



Non-contact measurement of the surface temperature with infrared. Ideal for fast and secure measurements of moving or energized parts and food. With batteries and factory calibration certificate.

Specifications

Measurement range:	-60 °C to +550 °C
Accuracy:	±2 °C or 2% (at 0 °C to +550 °C), whichever is larger
Resolution:	0.1 °C
Distance : spot ratio:	12:1
Operating temperature:	0 °C to +50 °C
Response time:	1 sec.
Emissivity factor:	0.95 fixed (0.1 to 1.0 possible)
Dimensions (L x W x H):	153 x 115 x 48 mm
Weight (with batteries):	177 g
Power supply:	2 x 1.5 V AAA, replaceable
IP code:	IP 20

Type	PK	Cat. No.
TFI 260	1	6.272.762

DIGITAL HAND HELD THERMOMETER TTX 200



For measuring the core temperature with a fixed probe with cable and handle.

- Very large display with large figures
- Replaceable battery
- Factory calibration certificate



Specifications

Temperature range:	-30 ... +199.9 °C
Resolution:	0.1 °C
Accuracy:	±0.5 °C (-30 ... +100 °C), otherwise ±1%
Sensor length/diam.:	120 mm/3 mm
Cable length:	600 mm
Power supply:	CR 2032
Protection class:	IP 55

Type	PK	Cat. No.
TTX 200	1	6.291.272

THERMOSTATIC CABINETS



The cabinets are equipped with sockets in the interior for connecting stirrers.

- Temperature range 2 °C to 40 °C, continuously adjustable in steps of 0.1 °C
- Illuminated LED display of preset and current temperatures
- Ideal for BOD determination at 20 °C
- With Standard door or glass door

Specifications

Coolant: R600a
 Fan: Axial, delivery rate 320 m³/h
 Power supply: 220-230 V/50 Hz

Type	Capacity	External dimensions (W x D x H) mm	PK	Cat. No.
TC 135 S	135	600 x 600 x 850	1	9.699 142
TC 710 S	288	600 x 654 x 1684	1	6.492 794
TC 720 S	488	750 x 769 x 1684	1	6.492 795
TC 140 G*	140	600 x 600 x 850	1	9.699 146
TC 715 G*	288	600 x 654 x 1684	1	6.492 988

* With glass door

BOD SENSOR SYSTEM



Measuring systems for the reliable determination of 90 to 999 ppm BOD. Complete with sensor heads and multi-position magnetic stirrer.

- The sensor heads are screwed directly onto the BOD bottles
- Automatic storage of 5 results in 24-hour intervals
- Measured readings in mg/l (ppm) can be read directly on the sensor at any time
- Protected against splashing water (IP 54)

Scope of supply BOD sensor system 6: 6-position magnetic stirrer, each 6 BOD sensors incl. batteries, 500 ml brown glass bottles, KOH reservoirs and magnetic stirring rods

Scope of supply BOD sensor system 10: 10-position magnetic stirrer, each 10 BOD sensors incl. batteries, 500 ml brown glass bottles, KOH reservoirs and magnetic stirring rods

Specifications

BOD range: 90 ... 999 ppm
 Display: LED (3 digits)
 IP code: IP 54

Type	Description	PK	Cat. No.
BOD sensor system 6	6 positions	1	6.317 212
BOD sensor system 10	10 positions	1	6.317 213
BOD sensor set	500 ml brown glass bottle with BOD sensor, KOH reservoir, stirring rod	1	4.666 791
BOD sensor	Single sensor	1	4.666 790

BOTTLES (KARLSRUHE BOTTLES) WITH STOPPERS

The special bottleneck of the Karlsruhe bottles absorbs the water which is displaced by the stopper of the electrode. This construction guarantees clean working and ensures at the same time that the test results are not adulterated by unwanted entry of oxygen into the samples.



Capacity ml	Length* mm	PK	Cat. No.
100	20	1	9.920 514
100	60	1	9.920 515
250	20	1	9.920 513
250	60	1	9.920 509

* Stopper handle length (mm)

HEATING

MUFFLE FURNACES SERIES L, MAX. 1100 °C, WITH FLAP DOOR



Nabertherm
MORE THAN HEAT 30-3000 °C

L 5/11/B410

For daily laboratory use. Max. temperature 1100 °C. The flap door can be used as a work platform.

- Dual shell housing made of textured stainless steel sheets for low external temperatures and high stability
- Adjustable air inlet integrated indoor
- Exhaust air outlet in the rear wall of a furnace
- All insulation materials used are classified as non-carcinogenic according to TRGS 905, Class 1 or 2
- Standard connection 220-240 V 1/N/PE 50/60 Hz
- Heating from two sides

Type	Nom. capacity	External dimensions (W x D x H) mm	PK	Cat. No.
L 3/11/B510	3		1	6.321 436
L 5/11/B410	5	385 x 390 x 460	1	6.092 769
L 9/11/B410	9	415 x 455 x 515	1	6.302 391
L 15/11/B410	15	415 x 555 x 515	1	6.056 446
L 24/11/B410*	24	490 x 555 x 580	1	6.206 861

* 400 V 3/N/PE 50/60 Hz connector as standard

CRUCIBLES, MEDIUM FORM, PORCELAIN



LABSOLUTE

DIN 12904. Glazed. Temperature resistant to 1.000 °C.

Capacity ml	Ø mm	Height mm	PK	Cat. No.
12	35	28	5	7.694 907
20	40	32	5	7.694 908
30	45	36	5	7.694 909
45	50	40	5	7.694 910
80	60	48	5	7.694 911
120	70	56	5	7.694 912

HAND PROTECTOR GRIP HEATGUARD



LABSOLUTE

Red silicone rubber. Temperature resistant from -50 to +250 °C. Nobs on HeatGuard's surface make sure that there is a safe, slip resistant grip all the time. You can store the hand protector grip by using one of the two eyelets.

Description	PK	Cat. No.
Hand protector grip HeatGuard	1	7.696 925

UNIVERSAL OVENS UN AND UF

memmert



UF30

SingleDISPLAY: ControlCOCKPIT with one colour display

Specifications

Type designation:

N = Natural convection
F = Forced air circulation

Working temperature range: at least 5 °C above ambient to +300 °C

Setting temperature range: +20 to +300 °C

Setting accuracy: up to 99.9 °C: 0.1 °C/
from 100 °C: 0.5 °C

Power supply:

230 V, 50/60 Hz

Type	Nom. capacity L	Max. grids	Included grids	PK	Cat. No.
UN30	32	3	1	1	9.869 681
UN55	53	4	1	1	9.869 682
UN75	74	6	2	1	9.869 683
UN110	108	5	2	1	9.869 684
UF30	32	3	1	1	9.869 697
UF55	53	4	1	1	9.869 698
UF75	74	6	2	1	9.869 699
UF110	108	5	2	1	9.869 700

CRUCIBLE TONGS, 18/10 STEEL

LABORBEDARF BOCHEM LAB SUPPLY



Electro-polished. With bow and gripping tips.

Length mm	PK	Cat. No.
200	1	9.310 120
220	1	9.310 122
250	1	9.310 125
300	1	9.310 130

FILTRATION UNITS, STERILE, PES



The LABSOLUTE® filtration units are ideal for the filtration of buffer solutions, cell culture media, microbiological media and other aqueous solutions.

The scope of delivery of the complete filtration unit consists of a filter funnel with vacuum connection vacuum connection and lid, the filtrate bottle and the corresponding screw cap.

- 0.2 µm: Ideal for sterilisation applications
- 0.45 µm: Ideal for clarifying buffer solutions and for preparing culture media
- Individually packed
- Pyrogen-free and non-cytotoxic



Capacity	Pore size		PK	Cat. No.
ml	µm			
150	0.22		12	7.697 200
250	0.22		12	7.697 201
500	0.22		12	7.697 202
1000	0.22		12	7.697 203
500	0.45		12	7.697 206
1000	0.45		12	7.697 207

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: 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		12	4.685 730
566	500/500	75	0.10	45		12	4.685 737
569	500/500	90	0.20	45		12	4.685 726
567	1000/1000	90	0.20	45		12	4.685 729

BOTTLE TOP FILTERS NALGENE™ RAPID-FLOW™, PES MEMBRANE, STERILE



Filters securely screw onto glass media bottles with 33 mm or 45 mm neck sizes. 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	45		12	4.675 532
595	500	75	0.20	45		12	4.675 535
597	1000	90	0.20	45		12	4.675 541
295	500	75	0.45	45		12	4.675 536

GENERAL LABORATORY SUPPLY

SAMPLE BEAKERS, STERILE, PP



The transparent LABSOLUTE® multi-purpose beakers are made of PP and suitable for the storage of solids and fluids. Delivery including screw caps made of HDPE.

- Can be used in direct contact with food
- Autoclavable at 121°C (without lid)
- 120 ml/60 ml: with graduation and labelling field (last graduation mark: 100 ml/50 ml)
- 200 ml: without graduation and labelling field

INDIVIDUALLY PACKED

Capacity	Colour screw cap	Height	Ø lid, external	PK	Cat. No.
ml		mm	mm		
60	Red	65.5	42.5	500	7.696 279
120	Red	72.5	62.5	250	7.696 281
120	Yellow	72.5	62.5	250	7.696 285
120	Blue	72.5	62.5	250	7.696 288
200	Red	80.0	64.0	150	7.696 283

Height including lid

BULK PACKAGING

Capacity	Colour screw cap	Height	Ø lid, external	PK	Cat. No.
ml		mm	mm		
120	Red	72.5	62.5	300	7.696 275
120	Yellow	72.5	62.5	300	7.696 286
120	Blue	72.5	62.5	300	7.696 289
200	Red	80.0	64.0	200	7.696 276

Height including lid

MEASURING BEAKERS WITH CLOSED HANDLE, PP



ISO 7056. PP. Approved for food use. Autoclavable. Printed Scale.

Capacity	Grad.	Ø	Height	PK	Cat. No.
ml	ml	mm	mm		
100	10	71	73	1	7.693 020
250	25	91	93	1	7.693 021
600	50	118	128	1	7.693 022
1000	50	141	150	1	7.693 023
2000	100	172	192	1	7.693 024
5000	500	223	262	1	7.693 025

CYLINDRICAL JARS WITH RIBBED CAP, HDPE



The cylindrical jars are supplied with inserts and caps. Thanks to the large neck they are suitable for powders, solid specimens, creamy or semisolid substances, crystals and hygroscopic substances.

Nominal capacity	Ext. diam.	Neck i. d.	Height	PK	Cat. No.
ml	mm	mm	mm		
70	50	36	60	10	4.672 397
120	56	36	71	10	4.672 394
250	69	50	94	10	4.672 395
500	86	70	107	10	4.672 396
1000	111	85	128	10	4.672 393
1500	111	87	182	10	9.073 444
2000	111	87	235	10	9.073 446

VOLUMETRIC FLASKS, CLASS A, WITH PE STOPPER, BLUE GRADUATION



- Engraved ring mark
- Longer lifetime

Made from borosilicate glass 3.3. Clear glass. With standard ground joint and PE stopper. Calibrated to "In" (20°C). Comply with DIN EN ISO 1042. A batch-specific certificate of conformity is available on request.

Capacity	Joint size	Tolerance	PK	Cat. No.
ml	NS	± ml		
10	10/19	0.040	1	7.691 021
25	12/21	0.060	1	7.691 035
50	14/23	0.100	1	7.691 025
100	14/23	0.100	1	7.691 027
250	14/23	0.150	1	7.691 029
500	19/26	0.250	1	7.691 030
1000	24/29	0.400	1	7.691 031
2000	29/32	0.600	1	7.691 032

ANALYTICAL BALANCES ENTRIS® II

SARTORIUS



- Internal Calibration and Adjustment Function
- Hybrid touch display



BCE124i-1CEU

- Made in Germany
- Very fast stabilisation/settling time thanks to modern sensors
- Stainless steel weighing pan
- Excellent readability and operability with a hybrid touch display
- 12 integrated applications with GLP/GMP-compliant protocol
- Multilingual operation

High weighing space, easy access to weighing platform through side doors and upper sliding door. Specially coated windscreen against an electrostatic charge.

EU-type examination for EU member states except France.

Scope of supply: Analytical balance, power supply unit

Specifications

Readability:	0.1 mg
Reproducibility:	±0.1 mg
Linearity:	±0.06 mg
Weighing platform:	Ø 90 mm
Weighing space height:	240 mm
Dimensions (W x D x H):	219 x 317 x 345 mm
Weight:	6.2 kg
Power supply:	100 ... 240 V, 50/60 Hz

Type	Weighing range g	PK	Cat. No.
BCE64i-1CEU	0.0001 ... 60	1	4.669 166
BCE124i-1CEU	0.0001 ... 120	1	4.669 110
BCE224i-1CEU	0.0001 ... 220	1	4.669 126

WEIGHING PAPER

LABSOLUTE®



The smooth surface of the weighing papers guarantees a good sample recovery.

- Dimensions (W x D): 95 x 110 mm
- Weight: 45 g/m²

Description	PK	Cat. No.
Weighing paper	250	7.697 925

PRECISION BALANCES TYPE EG-N

KERN



- Internal Automatic Adjustment
- Housing Made of Impact-resistant Plastic



EG220-3NM

High-quality laboratory balances, housed in a robust and stable plastic casing. With a bar graph capacity display which shows the current available weighing range remaining.

- LCD display
- Internal automatic calibration (type EG-N)
- CAL adjustment programme (type EW-N)
- Draught shield supplied with all 0.001 g readability models
- Parts counting facility, percentage weighing function, under-balance weighing facility
- Weighing with tolerance range
- RS-232 data interface

Scope of supply: Precision balance, protective working cover

Type	Capacity g	Readability g	Plate dimensions mm	PK	Cat. No.
EG220-3NM	220	0.001	Ø 118	1	9.901 018
EG420-3NM	420	0.001	Ø 118	1	9.901 019
EG620-3NM	620	0.001	Ø 118	1	9.901 015
EG220-2NM	2200	0.01	180 x 160	1	9.901 016
EG4200-2NM	4200	0.01	180 x 160	1	9.901 017

WEIGHING BOATS, SQUARE, PS

LABSOLUTE®



PS. Flat bottom for a secure stand. Smooth surfaces. Antistatic. Biologically inert. Temperature resistant from -10 °C up to 70 °C. Food-grade compliant. Can be used with microwave moisture analyzers.

Colour	Volume ca. ml	Dimensions W x H x D mm	PK	Cat. No.
White	10	46 x 8 x 46	500	7.696 256
White	100	85 x 24 x 85	500	7.696 257
White	330	140 x 22 x 140	500	7.696 258
Black	10	46 x 8 x 46	500	7.696 259
Black	100	85 x 24 x 85	500	7.696 260
Black	330	140 x 22 x 140	500	7.696 261

STIRRING

LLG-MAGNETIC STIRRER RCT STANDARD 2.0, SET



The next generation of our top-selling IKA/LLG-Labware co-branded LLG-RCT Standard magnetic stirrer. New design, new features! Trusted and reliable quality!

- Digital controlled speed and temperature
- Clearly arranged LED display
- Digital display of set safety temperature limit
- Hot top indicator, hot surface warning to prevent burns
- Connection for external PT1000 temperature probe
- Aluminium hotplate for optimal heat transfer
- Enhanced safety due to improved heat control technology
- USB interface
- Supplied with housing protection cover
- Tested acc. to DIN EN IEC 61010-1

Scope of supply:

Magnetic stirrer, contact thermometer ETS-D5, temperature probe PT1000, housing protection cover, stand accessories



Specifications

Max. stirring quantity (H ₂ O):	20 l
Speed range:	50 ... 1500 rpm
Heating plate	Ø 135 mm
Temperature range:	RT + device self-heating ... 310 °C
Heat output:	600 W
Safety temperature range:	50 ... 360 °C
Dimensions (W x D x H):	160 x 270 x 85 mm
Weight:	2.4 kg
Power supply:	220 ... 230/115/100 V, 50/60 Hz
IP code:	IP 42

Description	Plug type	PK	Cat. No.
LLG magnetic stirrer RCT standard 2.0, set	EU	1	6.320 411
LLG magnetic stirrer RCT standard 2.0, set	CH	1	6.322 748
LLG magnetic stirrer RCT standard 2.0, set	UK	1	6.322 749

BEAKERS, HIGH FORM, BOROSILICATE GLASS 3.3



DIN 12331. ISO 3819. Borosilicate glass 3.3. With volume scale and spout.

Capacity ml	Ø mm	Height mm	PK	Cat. No.
25	30	55	10	7.690 014
50	38	70	10	7.690 015
100	48	80	10	7.690 016
150	54	95	10	7.690 017
250	60	120	10	7.690 018
400	70	130	10	7.690 019
600	80	150	10	7.690 020
1000	95	180	10	7.690 022
2000	120	240	10	7.690 023
3000	135	280	6	7.690 024

External beaker diameter, without spout

MAGNETIC STIRRING BARS, CYLINDRICAL, PTFE



The cylindrical LABSOLUTE® magnetic stirring bars have a smooth surface. The PTFE coating makes them particularly resistant to chemicals and temperatures.

Length mm	Ø mm	PK	Cat. No.
10	6	10	7.695 100
15	6	10	7.695 101
20	6	10	7.695 102
25	6	10	7.695 103
30	6	10	7.695 104
35	6	10	7.695 105
40	8	10	7.695 106

STIRRING BAR RETRIEVERS, PTFE



The LABSOLUTE® stirring bar retrievers in the lengths of 150, 250 and 350 mm are suitable for removing magnetic stirring bars from vessels of all kinds. They have a strong permanent magnet (Alnico 5) with a 10 mm diameter. Due to the PTFE coating the stirring bar retrievers are particularly resistant to chemicals and temperatures.

Length mm	Ø mm	PK	Cat. No.
250	10	1	7.695 121
350	10	1	7.695 122

STATE-OF-THE-ART MICROBIOLOGICAL QUALITY CONTROL FOR LIQUID SAMPLES

MICROSART® MANIFOLD

Sophisticated device: this filtration system is fully autoclavable and has quick connectors on both sides of the manifold. Quick connect adapters allow easy connection of tubing, filter supports and end caps. Suitable for various funnel types or filtration units.

- Ergonomic: thanks to low working height
- Robust and easy to clean: made entirely of stainless steel
- Sterile venting: reduces the risk of secondary contamination



Description	PK	Cat. No.
Microsart® Manifold, 1 branch	1	4.669 470
Microsart® Manifold, 2 branch	1	4.669 471
Microsart® Manifold, 3 branch	1	4.669 472
Microsart® Manifold, 4 branch	1	4.669 473
Microsart® e.jet liquid pump 4l/min	1	7.629 701

MICROSART® PLASTIC FUNNELS

Sterile plastic funnels for the rapid performance of filtrations in the routine testing of water, food and beverages, pharmaceutical and cosmetic products. Simply click the Microsart® funnel onto the filter support covered with a mesh membrane and filter the sample. Funnel made of polypropylene.

- Graduations for measuring the sample volumes
- Large inner diameter for a high flow rate
- Time saving: simple funnel change instead of time-consuming disinfection



Description	PK	Cat. No.
Cellulose Nitrate, 0.2 µm, white with black grid	60	6.258 123
Cellulose Nitrate, 0.45 µm, highflow, white with black grid	60	7.657 646
Cellulose Nitrate, 0.45 µm, green with dark green grid	60	4.679 746
Cellulose Nitrate, 0.45 µm, highflow, black with white grid	60	4.652 481
Polycarbonate, 0.4 µm, white	60	6.319 376
Cellulose Nitrate, 0.2 µm, white with black grid	48	4.701 205
Cellulose Nitrate, 0.45 µm, highflow, white with black grid	48	4.664 829
Cellulose Nitrate, 0.45 µm, green with dark green grid	48	4.701 206
Cellulose Nitrate, 0.45 µm, black with white grid	48	4.701 207
Cellulose Nitrate, 0.45 µm, highflow, black with white grid	48	4.701 208

Other types of packaging are available in the Th. Geyer webshop.

READY-TO-USE PLATES FOR LEGIONELLA ANALYSIS

With the ready-to-use culture media in 90 mm plates from BIOSOLUTE® you are on the safe side. All plates are ISO 11731 certified and suitable for the isolation, enumeration and detection of Legionella spp. from water. The plates are packed in cellophane bags of 10 ready-to-use plates each.



Description	PK	Cat. No.
Legionella Selective (GVPC) Agar, 90 mm	20	9660-20PLATES
Legionella Selective BCYE Agar with Antibiotics, 90 mm	20	9962-20PLATES
Legionella BCYE Agar without Cysteine, 90 mm	20	9662-20PLATES
Legionella BCYE, 90 mm	20	9664-20PLATES

SHAKING AND MIXING

DIGITAL VORTEXER LLG-uniTEXER 4

Compact vortexer with brushless motor and infinitely variable speed control up to 4200 rpm for optimal mixing results. The digital display alternately shows the set speed and time.

- Programmable Pulse mode
- 3-way switch (on/off/touch)
- Timer adjustable from 1 min up to 999 min

Scope of supply:

Vortexer, conical tube attachment, round disk attachment, universal plug

3 YEARS WARRANTY



Type of movement:	Orbital
Orbital diameter:	4 mm
Speed range:	300 ... 4200 rpm
Dimensions (W x D x H):	205 x 136 x 138.5 mm
Weight:	2.8 kg
Power supply:	110 ... 240 V, 50/60 Hz
IP code:	IP 42

Type	PK	Cat. No.
LLG-uniTEXER 4	1	6.263 500

DISPOSABLE TEST TUBES, PLASTIC



LABSOLUTE®

The disposable LABSOLUTE® test tubes are ideal for a variety of laboratory work. The tubes made of PP are characterized by a high thermal and mechanical strength. The crystal-clear tubes made of high-quality PS allow optimum visibility of the samples.

Ø	Height	Capacity	Bottom design	Material	PK	Cat. No.
mm	mm	ml				
12	75	5	Round	PS	4000	7.696 450
12	75	5	Round	PP	4000	7.696 451
16	100	12	Round	PS	2000	7.696 452
16	100	12	Conical	PS	2000	7.696 453
16	100	12	Round	PP	2000	7.696 454

WINGED CAPS FOR TEST TUBES, PE



The LABSOLUTE® push-in plugs guarantee high tightness thanks to the two sealing lamellas.

For tubes diam.	Colour	PK	Cat. No.
mm			
12	Transparent	1000	7.696 460
16	Transparent	1000	7.696 466

ORBITAL SHAKER FOR CO₂ INCUBATORS

grant

NEW



Orbital shaker for experiments with tissue cultures and cultivations of eukaryotic cells in CO₂ Incubators.

- Different platforms are available (must be ordered separately)
- With a remote controller for protection of the electronics

Specifications

Type of movement:	orbital
Orbit:	20 mm
Max. Load:	3.0 kg
Speed range:	50 ... 250 rpm
Timer range:	1 min ... 96 h or non-stop
Dimensions (W x D x H):	255 x 255 x 100 mm
Weight:	3.4 kg
Power supply:	100 ... 240 V, 50/60 Hz

Type	PK	Cat. No.
CPS-20	1	4.684 290

PLATFORMS FOR ORBITAL SHAKER CPS-20



PUP-12

Type	Description	PK	Cat. No.
Bio PP-4	Flat platform, working area 230 x 230 mm	1	9.721 018
PUP-12	Universal platform, working area 270 x 195 mm	1	9.721 021
P12-100	Platform with clamps for 12 x 100 ml flasks / 150 ml beakers	1	9.721 023
P6-250	Platform with clamps for 6 x 250 ml flasks / 300 ml beakers	1	9.721 024
P16-88	Platform with spring holders for 88 tubes up to 30 mm	1	9.721 049

MICROPLATE SHAKER ENDEAVOR™ 5000



Robust shaker with microprocessor control for powerful mixing of up to 4 microtitre plates in the laboratory. The microplate shaker is equipped with a menu to set, store, and recall multi-step programs.

- Bright, backlit LCD display for speed and time
- RS232 interface for data logging and control
- Visual and audible alarm
- With timer
- Suitable for use in cold rooms and incubators

Type	Rotation speed rpm	Dimensions (W x D x H) mm	PK	Cat. No.
E51LDMPO3	100 ... 1200	262 x 420 x 119	1	4.693 841

TEST TUBES, RIMLESS, SODA-LIME GLASS



Thick-walled.

Ext. Ø mm	Height mm	Wall thickness mm	PK	Cat. No.
12	75	0.75	144	7.690 501
12	100	0.8	144	7.690 502
16	100	0.8	100	7.690 506
16	160	0.9	100	7.690 504
18	180	1.0	100	7.690 505

MICRO TUBES, PP



The LABSOLUTE® micro tubes are made of high-quality PP and are resistant to mechanical and chemical stress. Simple and safe opening and closing of the vessel allow safe handling for greater comfort.

- Free of DNase, RNase and pyrogens
- Non-sterile
- Guaranteed metal-free
- Precise graduations lines on 1.5 and 2.0 ml reaction vessels
- Puncturable cap
- Matted cap with labelling field
- Can be centrifuged up to 25000 x g (1.5 and 2.0 ml) and 20000 x g (0.5 ml)
- Autoclavable at 121°C

Volume ml	PK	Cat. No.
1.5	500	7.696 753
2.0	500	7.696 754

DRY BLOCK HEATERS, DIGITAL



Each of the models is compatible with the separate interchangeable modular blocks. Each block has a thermowell for measuring the block temperature.

- Microprocessor Control
- LED Display
- Temperature Calibration Mode
- Caution Hot Indicator
- Audible Alarm

Without blocks. Please order separately.

Specifications

Temperature range:	ambient +5 to 120 °C
Temperature stability at 37 °C:	±0.2 °C
Uniformity within block at 37 °C:	±0.2 °C
Uniformity across blocks at 37 °C/	
Heat up time to 100 °C	
1 block:	-/45 min
2 blocks:	±0.1 °C/50 min
4 blocks:	±0.2 °C/60 min
6 blocks:	±0.3 °C/65 min
Permissible ambient conditions:	18 to 33 °C
Power supply:	230 V, 50/60 Hz

Capacity	Dimensions (W x D x H) mm	PK	Cat. No.
1 block	203 x 315 x 89	1	4.659 491

BLOCKS FOR BLOCK THERMOSTATS, DIGITAL



For	No. of wells	Diam. mm	Depth mm	PK	Cat. No.
1.5 ml	20	11.5	39.9	1	4.659 846
2 ml	20	11.5	38.1	1	4.659 875
50 ml	5	29.0	47.6	1	4.659 852
15 ml	12	17.1	44.5	1	4.659 856

ULTRASONIC DEVICES

LABORATORY CHILLER LABOCOOL LC 400



The laboratory chiller LABOCOOL LC 400 is used to remove process heat and was specially developed for cooling samples during sonication in an ultrasonic bath.

- Digital display shows water temperature and status of the cooling function
- Practical recessed grips in the housing
- Environmentally friendly thanks to natural refrigerant R-290
- Suitable for all SONOREX ultrasonic baths with bottom drain
- Protection class I
- Incl. connecting hub, three-way ball valve and hose (3 m)

Specifications

Temperature range:	5 ... 30 °C
Cooling power:	440 W
Flow rate:	600 l/h
Pump power:	10 W
Dimensions (W x D x H):	320 x 410 x 420 mm
Weight:	18 kg

Type	Plug type	PK	Cat. No.
LABOCOOL LC 400	EU	1	4.686 330
LABOCOOL LC 400	CH	1	4.686 331

ULTRASONIC BATHS SONOREX DIGITEC



Ultrasonic baths in stainless steel housing with heating, adjustable temperature range from 20 to 80 °C and warning LED at excess temperature, degassing of liquids (DEGAS), Pulse function, SweepTec®. Power supply 230 V ~, 50/60 Hz.

Type	Capacity of the bath litres	Internal dimensions (W x D x H) mm	PK	Cat. No.
DT 31 H	0.9	190 x 85 x 60	1	9.877 831
DT 52 H	1.8	150 x 140 x 100	1	9.877 833
DT 100 H	3.0	240 x 140 x 100	1	9.877 835
DT 255 H	5.5	300 x 150 x 150	1	9.877 840
DT 510 H	9.7	300 x 240 x 150	1	9.877 842

SUSPENSION BASKETS FOR SONOREX DIGITEC ULTRASONIC BATHS



Stainless steel. Optimal ultrasonic wave transmission.

Type	For bath type	Dimensions (W x D x H) mm	PK	Cat. No.
K 1 C	DT 52 H	120 x 110 x 40	1	9.877 631
K 3 C	DT 100 H	200 x 110 x 40	1	9.877 633
K 5 C	DT 255 H	260 x 110 x 40	1	9.877 635
K 08	DT 31 H	170 x 65 x 50	1	9.877 630
K 10	DT 510 H	250 x 195 x 50	1	9.877 697

NOISE PROTECTION BOXES ML/XL



A noise protection box with a quiet fan and optimal insulation guarantees low-noise cleaning. The interior lighting and glass door allow to observe the cleaning process.



- Noise is reduced by max. 85%
- The box can be opened from the top and front
- Laterally arranged halogen lamps
- Stainless steel jacket

Scope of supply ML: Noise protection box, bottom tray with gland plate, power supply, manual
For use with: Elmasonic Easy 10/20/30/40/60/100/120/180, Elmasonic Select 30/40/60/100/120/180, Elmasonic P 30/60/120/180

Scope of supply XL: Noise protection box, 2 bottom trays with gland plate, splash plate, power supply, manual
For use with: Elmasonic Easy 300, Elmasonic Select 80/150/300, Elmasonic P 70/300

Type	External dimensions (W x D x H) mm	PK	Cat. No.
ML	545 x 530 x 525	1	6.326 321
XL	850 x 605 x 525	1	6.492 438

SPEED VACUUM SYSTEMS SC 920 G



- ! - Speed-controlled
- Integrated Gas Ballast Valve
- Automatic boiling point detection

- Vacuum system for 1 rotary evaporator
- Application: Rotary evaporation, distillation, central vacuum supply
- Delivery rate up to 3 m³/h and a final vacuum of 2 mbar abs.
- Radio remote control for safe operation outside closed fume cupboards
- Automatic, precise boiling point detection and boiling point tracking via integrated ramp function
- PPS pump heads in combination with a PTFE-coated diaphragm are ideal for aggressive/corrosive gases and vapours
- Speed controlled
- Integrated gas ballast valve



Specifications

Connectors for tube: pneumatic ID10 mm, coolants ID8 mm inert gas ID6 mm

Permissible media and ambient temperature: 5 to 40 °C

Valves: FFPM

Type	Flow rate L / min.	Plug type	PK	Cat. No.
SC 920 G	20	EU	1	4.658 071
SC 920 G	20	UK	1	6.319 732

With overload protection and mains fuse

LLG-VACUUM MEASURING INSTRUMENT DVR 2 PRO

Versatile vacuum gauge for vacuum measurement between atmospheric pressure and 1 mbar.



- Mains independent due to battery operation
- Large display
- High measuring accuracy
- With support rod
- All parts in contact with media are made of chemically resistant materials



Scope of supply:

Vacuum measuring instrument with connections for small flange D16, compression fitting and tubing nozzle for tubing with 6 to 10 mm ID.

Specifications

Measuring range: 1080 to 1 mbar (hPa), 810 to 1 Torr

Measuring accuracy: < 1 mbar (0.75 Torr) ±1 digit

Power supply/battery: 9 V battery

Dimensions (W x D x H): 115 x 115 x 66 mm

Weight: 0.40 kg

Type	PK	Cat. No.
DVR 2 pro	1	6.263 582

PISTON PUMP LLG-uniVACUUPUMP 1

- ! Can be used as a Vacuum Pump and Compressor



The portable piston pump LLG-uniVACUUPUMP 1 has been developed for vacuum and pressure applications in the laboratory. The LLG-uniVACUUPUMP 1 operates oil-free and can also be used as a compressor to a pressure of up to 3.3 bar. Not recommended for pumping organic, acidic, or basic vapours.

Advantages:

- Dry-running technology for physical applications
- Can be used as a vacuum pump and compressor
- Cost-effective alternative for water pumps
- Oil-free, suitable for continuous operation
- Suction/pressure connection: hose nozzle DN 6 for hose inner diameter 6 mm



Scope of supply: Pump, incl. 2 hose clamps, EU + UK-plug power cord

Specifications

Pump speed 50/60 Hz at atmospheric pressure: 9.2/11 l/min

Final pressure: 292 mbar

Max. overpressure: 3.3 bar

Suction/pressure connection: DN 6

Dimensions (W x D x H): 194 x 114 x 191 mm

Weight: 2.0 kg

Power supply: 230 V/50 Hz

IP code: IP 20

Type	PK	Cat. No.
LLG-uniVACUUPUMP 1	1	6.263 580

WATER JET PUMPS, PP



For continuous use at temperatures up to 80 °C max. High chemical resistance as the media being pumped only comes into contact with PP, FKM and PTFE. Integral non-return valve increases safety.

Comprises:

Water jet pump, including:
Mains water connections: R 3/4" sleeve nut, R 1/2" reducing adapter and flexible tubing connection (nozzle) with external diameter from 10 mm to 12 mm.
Vacuum connection: Detachable nozzle with external diameter from 6 mm to 9 mm and GL 14 screw cap.

Type	PK	Cat. No.
Water jet pump	1	9.303 125
Reducing adapter R 3/8" for water jet filter pump	1	7.020 037
Reducing adapter M 22x1 for water jet filter pump (thread for screen tap)	1	7.020 038



AGAR IN BOTTLES READY-TO-USE, FOR MICROBIOLOGY

BIOSOLUTE® agar in bottles for pouring of plates for the enumeration and detection of microorganisms. BIOSOLUTE® ready-to-use culture media are produced automatically under modern clean room conditions and are subject to strict quality control to ensure the highest standards. Manufacturing is carried out in ISO 9001 and ISO 13485 certified production facilities.

Quality control follows ISO 11133, performance tests for solid culture media are performed in an ISO 17025 certified testing laboratory.

- Storage at room temperature
- Minimum shelf life 12 to 18 months
- Plastic lids suitable for microwaves



Description	Content	PK	Cat. No.
Baird Parker Agar Medium Base	10x 180 ml	1	9887.0180
Tryptone Soya Agar (TSA)	10x 200 ml	1	9692.0200
Kanamycin Esculin Azid Agar (KAA)	10x 200 ml	1	9842.0200
Potato Dextrose Agar	10x 200 ml	1	9367.0200
Malt Extract Agar	10x 200 ml	1	9270.0200
Nutrient Agar DEV	10x 200 ml	1	9396.0200
Orange Serum Agar	10x 200 ml	1	9595.0200
Plate Count Agar (PCA)	10x 200 ml	1	9310.0200
Milk Plate Count Agar	10x 200 ml	1	9480.0200
Sabouraud 4% Dextrose Agar	10x 200 ml	1	9674.0200
Sabouraud Dextrose Chloramphenicol Agar	10x 200 ml	1	9675.0200
TBX Agar (Tryptone Bile X-Glucuronide Agar)	10x 200 ml	1	9880.0200
Water Plate Count Agar	10x 200 ml	1	9688.0200
TSC Agar (Tryptose-Sulfit-Cycloserin-Agar) Base	10x 200 ml	1	9632.0200
VRBD Agar (Violet Red Bile Dextrose Agar)	10x 200 ml	1	9863.0200
VRBL Agar (Violet Red Bile Lactose Agar)	10x 200 ml	1	9867.0200
YGC Agar (Yeast Extract Glucose Chloramphenicol Agar)	10x 200 ml	1	9849.0200

LIQUID MEDIA IN BOTTLES READY FOR USE, FOR MICROBIOLOGY

BIOSOLUTE® liquid ready-to-use media are produced automatically under modern clean room conditions and are subject to strict quality control to ensure the highest standards. Manufacturing is carried out in ISO 9001 and ISO 13485 certified production facilities.

Quality control follows ISO 11133, performance tests for solid culture media are performed in an ISO 17025 certified testing laboratory.

- Pre-enrichment, dilution or for sterility control.
- Storage at room temperature
- Minimum shelf life 12 to 18 months
- Screw cap with septum



Description	Content	PK	Cat. No.
Tryptone soy broth (TSB) EP USP	10x 200 ml	1	9720.0200
Reinforced Clostridial Medium (RCM) EP	10x 100 ml	1	9679.0100
Fraser Broth ISO	10x 225 ml	1	9650.0225
Lactose Broth	10x 100 ml	1	9487.0100
LB Broth acc. to Miller	10x 100 ml	1	9360.0100
Lysine Medium	10x 100 ml	1	9535.0100
Peptone water, buffered ISO	10x 200 ml	1	9230.0200
Sabouraud broth	10x 100 ml	1	9670.0100



All prices are subject to VAT.
Technical changes and errors excepted.
Our sales and delivery terms apply.

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