



 **Lab Friend**

Quarterly Newsletter Q2 | 2019

Q1 REPORT 2019

Q2 2019 will be a transformative quarter for LabFriend, including changes to our quarterly newsletter, and further platform upgrades.

With 450+ brands and 50,000+ products online, it can be hard to determine which items deserve the most focus. Our improved newsletter format is designed to highlight new products available for sale online and help your team discover product ranges that appeal to your market.

After 12 months of hard work, the new web platform is now live. Stabilizing the platform will take us approximately 1-2 weeks. Thank you for your patience whilst our team troubleshoot launch-related issues.

Once stabilized, we will re-integrate Google Analytics, which will provide monthly reporting and analysis of your web traffic.

Admin has also been completely rebuilt and redesigned. We are excited to offer you the ability to add and sell your own range of products alongside products sourced via LabFriend. You can also control store factors and manually override pricing at the product level. Additional upgrades to admin will be deployed throughout Q2.

Our largest web project for Q2 is the deployment of LabFriend mobile. So far, mobile has been poorly addressed within our industry, and lacking strong eCommerce stores for mobile. It's a really big opportunity to further differentiate LabFriend from its competitors.

If you have exciting marketing plans, ideas or projects underway, please let our team know. We always welcome and appreciate your input and feedback!



Regards
Karl Wyzenbeek



Our business

Our purpose To make it simpler, quicker and cheaper to buy premium lab products

Our vision To empower lab distributors to thrive in a connected online world

Q1 Highlights

World class technology

Launched new platform on [Microsoft Azure cloud](#)

Launched [Elastic](#) search & data research

Rebuilt LabFriend platform.
Front-end coded in REACT.js Back-end coded in .Net Core + GIT

New suppliers

[KEK GmbH](#)
Cleanroom Furniture

[Ergomat](#)
OH&S Flooring

[PPS Cleanroom](#)
Cleaning Products

Improved functionality

Store managers can upload an unlimited number of products to their local store

Store managers can control pricing factors and product pricing

More support

New technical center launched in Sri Lanka

New walk-through videos available in Knowledge Base

Company updates

Launched LabFriend South Africa

Head office moving to a new address, still in Sydney

LLG-Laboratory Jack, stainless steel



Plates made of stainless steel. Top plate with Ø 10 mm hole. With non-skid rubber feet. Acc. to DIN 12897.

Width	Depth	Min. height	Max. height	PK	Cat. No.
mm	mm	mm	mm		
200	200	60	270	1	9.117 220

Rectangular Retort Stand Bases, enamel, coated steel plate

Highly stable laboratory stand, thanks to the steel rectangular base, which is stove enamel coated. With an M10 threaded hole in the middle of one short side. Rubber support feet prevent the stand from sliding. Laboratory stands are supplied without support rod. Please select the suitable rod from "support rods".



Width	Depth	Weight	PK	Cat. No.
mm	mm	g		
130	210	1725	1	6.242 701
150	300	2830	1	4.008 486
200	315	4000	1	4.008 487

Support Rods, stainless steel or galvaniser steel



External diameter 12 mm. With M10 thread.

Material	Length	PK	Cat. No.
	mm		
18/10 stainless steel	600	1	4.008 492
18/10 stainless steel	750	1	4.008 493
galvaniser steel	600	1	4.008 490
galvaniser steel	750	1	6.242 703

Bosshead



To DIN 12895. Zinc die casting, powder-coated. For vertical and horizontal clamping.

Jaw opening	Description	PK	Cat. No.
mm			
16	Bosshead with steel screws	1	9.224 251
16	Bosshead with brass screws	1	9.224 245

Bosshead



Malleable cast iron with lacquered chrome finish. DIN 12895. With lug screw.

Jaw opening	PK	Cat. No.
mm		
16.5	1	9.224 254
20	1	6.225 278

Cross Bosshead, right-angle format



Aluminum alloy. With hexagon socket screw.

Jaw opening	PK	Cat. No.
mm		
12 to 13 x 12 to 13	1	9.224 274

Homogeniser, POLYTRON® PT 2500 E (Ecoline)



The electronic control system continuously monitors the speed and automatically adjusts it, keeping it constant even with changing viscosity. Dispersing heads with a variety of styles and diameters are available to provide optimum particle size reduction when using this drive. There are many different styles of aggregates available from 3 mm up to 25 mm

- Aggregate tip speeds up to 32 m/s
- Soft start prevents splashing of homogenate from the sample vessel
- Thermal fuse for overload protection
- Speed remains constant even when viscosity changes
- Aggregate replacement using one-handed quick-release coupling (type E)
- Insulated motor housing keeps motor noise to a safe, approved level
- Various models of EasyClean dispersing aggregates
- Digital display

Stand and dispersing heads must be ordered separately.



- **Constant Speed Even When Viscosity Changes**
- **One-Hand Quick**
- **Connector Digital Display**

Specifications

Application volume:	0.05 2500 ml
Motor input power:	500 W
Dispersing heads:	diam. 3, 5, 7 and 12 mm and diam. 20 mm and 25 mm
Speed range:	Stepless 500 to 30.000 rpm
Dimensions Drive (L x W x H):	157 x 76 x 236 mm
Weight Drive:	1.8 kg
Power supply:	230 V, 50 Hz
Protection class acc. to DIN:	IP 20
Tested to:	IEC/EN61326-1/ IEC/ EN 61000-6-2/ EN 61000-6-4 IEC/ EN 61010-2-51

Type	PK	Cat. No.
POLYTRON® PT 2500 E, with EU plug	1	7.981 185

Dispersing Heads for POLYTRON® PT 2500 E



Dispersing head for fibrous and tough materials. The universal geometry uses two rows of teeth, is suitable for a large spectrum of laboratory applications, and it is reliable and efficient.



Type	Length	Diam.	Working volume	PK	Cat. No.
	mm	mm	ml		
PT-DA 20/2 WEC-E192	192	20	100 - 2500	1	4.013 004

Universal Mill MultiDrive basic



- **Cooling in Grinding Bowl**
- **Up to 20,000 rpm**
- **With USB interface**

Universal mill for the pre- and fine comminution of hard, soft or fibrous samples.

- Adjustable interval operation
- Integrated cooling in the grinding bowl
- Ground product and coolant remain disconnected
- USB interface



Specifications

Motor rating input/output:	1.000/800 W
Speed:	3.000 ... 20.000 rpm
Throughput/Charge max:	400 ml
Material chamber:	stainless steel 1.4301
Feed size:	7 mm
Feed material hardness:	5 Mohs
Dimensions (W x D x H):	300 x 250 x 450 mm
Weight:	10 kg
Power supply:	220 ... 240 V
Protection class DIN EN 60529:	IP 31

Type	PK	Cat. No.
MultiDrive basic	1	4.664 746

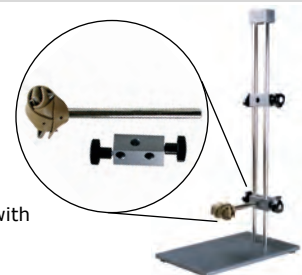
Accessories



Type	Description	PK	Cat. No.
BL 2000	Blender vessel with knife, 2000 ml	1	4.664 748
MI 250	Milling chamber with beater, 250 ml	1	4.664 750
MI 400	Milling chamber with beater, 400 ml	1	4.664 751

Stands for POLYTRON® PT 2500 E

ST-P 20/600: Plate stand with two rod design. Height adjustable.



Type	PK	Cat. No.
ST-P20/600	1	4.013 060
Vessel holder ST-P20	1	7.981 189

NMR Tubes, 5 mm borosilicate glass 3.3, standard



Closing caps for 5 mm NMR and EPR tubes



Colour	PK Cat. No.
red	100 9.400 312
green	100 9.400 313
yellow	100 9.400 314
black	100 9.400 315
blue	100 9.400 316

NMR Tube Rack, PP



With carrying handles. Features an upper deck with holes and a lower deck support for tube ends. Stackable. For 72 tubes with 3 or 5 mm diameter. Dimensions (L x W x H): 213 x 115 x 222 mm.

Type	PK Cat. No.
NMR Tube Rack	1 9.301 065

The NMR tubes have precise tolerances for consistent high accuracy. Most suitable for autosampling NMR systems and high-throughput NMR. Manufactured from 3.3 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

- One end closed, rim fire polished
- Applicable until 600 MHz

Please order closing caps separately.

Outer diam. mm	Int. diam. mm	Length mm	Wall thickness mm	PK Cat. No.
4.95 ± 0.05	4.19 ± 0.05	178	0.38	100 9.400 310
4.95 ± 0.05	4.19 ± 0.05	203	0.38	100 9.400 311

LLG-Pasteur Pipettes, Soda-lime-glass



Single use. With uniform shape and length. With long drawn, 1.1 mm diameter fine tip, 20 mm suction tube and constriction for tight fitting of cotton wool plugs. External diameter: 7.1 mm.

Length mm	Acc. to	PK Cat. No.
150	ISO 7712	1000 9.411 015
230	ISO 7712	1000 9.411 020

LLG-Short Thread Vials economy ND9, wide opening

Hydrolytical class 1, expansion 70.



Capacity	ml
o.d. x	mm
Height	
Colour Form	
PK	
Cat. No.	



1.50
11.6 x 32
clear
flat bottom
1000
6.273 634



1.50
11.6 x 32
amber
flat bottom
1000
6.273 635

LLG Crimp Neck Vials economy ND11, wide opening

Hydrolytical class 1, expansion 70.



Capacity	ml
o.d. x	mm
Height	
Colour Form	
PK	
Cat. No.	



1.50
11.6 x 32
clear
flat bottom
1000
6.273 632



1.50
11.6 x 32
amber
flat bottom
1000
6.273 633

LLG-Disposable syringes, 3-parts, PP, non-sterile, bulk



- Barrel: PP, Plunger: PP and Polyisoprene rubber
- Smooth flow, tight, high transparency barrel
- Latex-free, pyrogen-free, DEHP-free, non-toxic
- Defined safety stop to avoid accidental pull-out of plunger
- Suitable for all syringe filters with Luer connection

Capacity	Nozzle type	PK	Cat. No.
ml			
2	Luer-Slip	500	6.267 267
5	Luer-Slip	500	6.267 268
10	Luer-Slip	500	6.267 269
20	Luer-Slip	500	6.267 270

Disposable Needles HSW FINE-JECT®, PP/stainless steel, sterile



Sterile. Individually wrapped.
Luer-Lock fitting.
Stainless steel in accordance with ISO 9626.

Gauge	Diam.	Length	Colour	PK	Cat. No.
	mm	mm			
26	0.45	25	brown	100	9.410 118
23	0.60	25	blue	100	9.410 116
23	0.60	30	blue	100	9.410 114
22	0.70	30	black	100	9.410 112
20	0.90	40	yellow	100	9.410 101

pH Meter FiveEasy pH F20



- With 3 in 1 Electrode
- Large Display
- Easy Operation



FiveEasy benchtop meters provide high quality pH/mV measurements with the simple click of a button.

- Large, easy to read and easy to understand display with all information visible at a glance
- Five self-explanatory buttons making operation simple and easy
- Electrode arm extension pole included

Scope of supply: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate and power supply, 3-in-1 pH electrode and 1 each x 4.01, 7.00 and 9.21 buffer sachets

Specifications	
Measuring range (Accuracy)	
pH:	0.00 14.00
mV:	-2000 2000 (±1)
Temperature:	0 100 °C (±0.5 °C)
Input:	BNC, Cinch (NTC 30 k) ATC and MTC
Temperature compensation:	100-240 V/50-60 Hz/12 V DC
Power supply:	3 points, linear, 4 predefined buffer groups
Calibration:	

Type	PK	Cat. No.
F20-Standard Kit	1	6.280 101

LLG-Universal Indicator Strips, in vial with snap lid "Premium"



- pH measuring range: 0 - 14.0
- 12 mm matching area for quick matches
- Flip-top vial stays closed when dropped, but is easy to open with one-hand
- Vial keeps strips safe from the elements
- 1 pack (vial) of 100 strips

Range	Package contents	PK	Cat. No.
pH			
0 - 14	100 strips per vial with snap lid	100	9.129 808

pH-Fix Indicator Strips, universal



Permanent colour. Non bleeding.

Range	PK	Cat. No.
pH		
0.0 - 6.0	100	9.130 382
0 - 14	100	9.130 381
0 - 14 PT*	100	9.130 379
7.0 - 14.0	100	9.130 384

* PlopTop tube.

pH Meter LLG-pH Pen



- For Measurements in Narrow Vessels
- 3-Point Calibration



Cost efficient pH tester, ideal for testing small amounts of liquid and in narrow vessels.

3-point calibration, ATC from 0 °C and 50 °C. Supplied with storage vessel, no dry-out of the electrode.

Specifications

pH-Measuring range:	0.00 14.00
Accuracy:	±0.1
Dimensions with electrode (L x W x H):	210 x 36 x 20 mm
Dimensions electrode (diam. x L):	12 x 110 mm
Weight:	72 g
Battery:	2 x 3 V CR2032 button cell
Protection class:	IP 65
Warranty:	2 years

Type	PK	Cat. No.
LLG-pH Pen	1	6.263 690

pH Meter pH150



- Memory
- Function Automatic Buffer
- Identification Large LCD Display



The best value waterproof meter for measuring pH, mV and temperature.

- Large, three line LCD, shows pH or mV measurement with temperature and % slope
- Built-in memory function, stores up to 150 measurements along with temperature
- Auto buffer recognition, automatically identifies USA, NIST or DIN buffer sets for rapid calibration
- Indication of necessary recalibration
- Power with AA batteries or use optional AC adapter
- Features mV offset, calibrate to a Redox/ORP standard or use for pH electrode diagnostics
- Ready indicator, manual or automatic measurement hold feature and optional automatic shutoff function
- % slope and temperature displayed with each measurement
- Includes innovative Grip-Clip, quickly and easily secures the electrode to your beaker or container

Scope of supply: Meter with electrode, ATC probe, Grip-Clip electrode holder, 2 x AA batteries, hard carry case, pH buffers, storage solution, rinse solution

Specifications

pH-range:	-2.00 14.00
Resolution:	0.01
Accuracy:	±0.01
pH calibration points:	Up to 5 points (USA & NIST), up to 6 points (DIN)
mV range:	±2000
Accuracy:	±0.2 mV +2 digits or +0.5 % of reading
Temperature range:	-10.0 to +110.0 °C
Resolution:	0.1 °C
Accuracy:	±0.5 °C
Power supply:	incl. 2 x AA batteries, >700 h continuous use, AC adapter (optional)
Dimensions (W x L x H):	83 x 200 x 57 mm
Weight:	500 g
Protection class:	IP 67
Warranty:	3 years on the meter

Type	Description	PK	Cat. No.
pH150	with double-junction pH electrode, ATC probe	1	6.284 900

Cryogenic Boxes true north® Flatpack, PP



Store down to temperatures of -80 °C.

For tubes	Colour	Dimensions (W x D x H)	Array	PK	Cat. No.
ml		mm			
0.2	white	133 x 130 x 30	144	10	6.281 163
0.2	blue	133 x 130 x 30	144	10	6.281 164
0.5	white	133 x 130 x 42	81	10	6.281 166
0.5	blue	133 x 130 x 42	81	10	6.281 167
1.5/2.0	white	133 x 130 x 51	81	10	6.281 158
1.5/2.0	blue	133 x 130 x 51	81	10	6.281 161
5.0	white	133 x 130 x 75	25	10	6.281 169
5.0	blue	133 x 130 x 75	25	10	6.281 170
15	white	145 x 145 x 36	36	10	6.281 172
50	white	145 x 147 x 120	16	10	6.281 159
50	blue	145 x 147 x 120	16	10	6.281 160

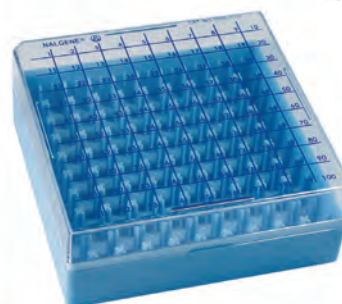
Cool Packs Freez'Pack®



- Composition: water, carboxymethyl cellulose, acticides and blue dye
- Suitable for food contact (non-toxic coolant)
- Dishwasher safe

Type	Weight	Dimensions (W x D x H)	PK	Cat. No.
	g	mm		
Freez'Pack® 2 x M5	200	150 x 80 x 25	10	6.290 795
Freez'Pack® M20	741	200 x 172 x 30	5	6.290 796

Cryogenic Boxes CryoBoxes , PC



Robust design, autoclavable. With printed grid on lid for cryovials and similar tubes up to 13.5 mm diameter (except type 5026: up to Ø 12.5 mm). Temperature resistant from -196 to 121 °C. With grid numbers for reliable identification of individual samples.

Type	For tubes	Dimensions (x w x h) mm	Array	PK	Cat. No.
5026	1/1.5	133 x 133 x 52	10 x 10	1	9.400 927
5025	1.2/2.0	76 x 76 x 52	5 x 5	1	9.400 946
5026	1.2/2.0	133 x 133 x 52	9 x 9	1	9.400 947

Cool Packs Icecatch®-Gel



Icecatch® cool packs for temperature sensitive products used in the pharmaceutical, biotech, medical and food industries.

- Reliable cold storage through the use of immobilised coolant
- For repeat usage due to the use of robust PA/PE film
- Disposal with the domestic trash due to the use of non-poisonous ingredients
- Unobjectionable use in the pharmaceutical and food industries
- Phase transition 0 °C

Description	Dimensions (W x D x H) mm	Weight g	PK	Cat. No.
with cooling gel	90 x 150 x 20	170	80	9.695 001
with cooling gel	90 x 180 x 20	230	60	9.695 002

Chest Freezers Racks, vertical



Stainless steel racks, suitable for all brands of chest freezer. For boxes up to 135 x 135 mm.

Type	Width	Depth	Height	Height Box	PK	Cat. No.
	mm	mm	mm	mm		
10 x 1	140	141	557	approx. 53	1	9.698 746
11 x 1	140	141	613	approx. 53	1	9.698 963
12 x 1	140	140	665	approx. 53	1	9.698 964
13 x 1	140	141	724	approx. 53	1	9.698 965

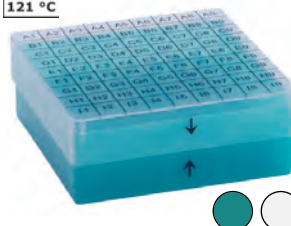
Upright Freezer Racks



Stainless steel racks, suitable for all brands of upright freezers. For boxes up to 135 mm x 135 mm.

Type	Width	Depth	Height	Height Box	PK	Cat. No.
	mm	mm	mm	mm		
4 x 3	140	419	221	approx. 50	1	9.698 950
5 x 4	556	140	407	approx. 78	1	9.698 961
4 x 4	558	139	221	approx. 53	1	9.698 969
5 x 4	558	139	276	approx. 53	1	9.698 971
4 x 5	688	139	221	approx. 53	1	9.698 973
3 x 3	419	139	240	approx. 78	1	9.698 976

Cryogenic Boxes, 81 well, PP, autoclavable



Temperatures as low as -90 °C. The boxes are autoclavable at +121 °C for 20 minutes. The boxes have a fixed grid divider with 9 x 9 cells and are suited for 1.2 ml and 2 ml cryogenic vials. Cellcodes are printed on the lid for easy identification.

Colour	Dimensions (x w x h) mm	PK Cat. No.
	130 x 130 x 50	
Blue	130 x 130 x 50	5 6.290 856
Green	130 x 130 x 50	5 6.290 857
Natural		5 6.290 855

LLG-Cryogenic Storage Boxes, plastic coated



Freezer and cryogenic storage boxes (CryoBoxes). Made of cardboard, **plastic coated** without divider. Dimensions: **136 x 136 mm** square. For the storage of samples. With lid.

Colour	Int. height mm	PK Cat. No.
white	50	1 6.080 130
white	75	1 6.802 726

Made of cardboard, **plastic coated**. Without divider. Dimensions: **133 x 133 mm** square. For the storage of samples. With lid.

Colour	Int. height mm	PK Cat. No.
white	50	1 6.082 701
white	75	1 6.801 707

LLG-Partition Inserts for Cryoboxes

For cryoboxes **136 x 136 mm**. With compartment formats as indicated.

Height	Array	For tubes diam.	PK Cat. No.
mm		mm	
30	9 x 9	ca. 13.9	1 9.405 871
30	10 x 10	ca. 12.5	1 9.405 875

For cryoboxes **133 x 133 mm**. With compartment formats as indicated.

Height	Array	For tubes diam.	PK Cat. No.
mm		mm	
30	9 x 9	ca. 13.0	1 6.081 879
30	10 x 10	ca. 12.0	1 6.075 820

Single Channel Pipette Tacta



Tacta is a premium mechanical pipette available in volume range from 0.1 to 10 000 µl in single channel models, and from 0.5 to 300 µl in multichannel models.

- Ergonomic design for comfortable pipetting
- Optiload feature in both single and multichannel models for easy and light tip loading with perfect tip sealing
- Optijet soft tip ejection feature detaches the tip in a smooth, controlled manner
- Optilock's dual-function volume locking prevents accidental volume changes
- Easy-to-read, four-digit volume display helps to set exact volumes
- Color-coding of volumes to ease the selection of corresponding pipette tips
- Safe-Cone Filters available for models above 10 µl with convenient built-in filter ejection mechanism
- Fully autoclavable without disassembling
- Simple to clean and maintain with only three parts to disassemble
- Easy calibration adjustment with adjustment scale, which ensures accurate results, also in cases where factory calibration does not apply, for example when pipetting viscous liquids
- Materials have high chemical and UV-resistance to ensure a long life span for the pipette



Capacity	Increments	Accuracy max. vol. (± R%)	Precision max. vol. (CV%)	PK	Cat. No.
µl	µl				
0,1 - 3	0.002	1.30	0.80	1	6.284 794
0,5 - 10	0.01	1.00	0.60	1	6.282 658
2 - 20	0.02	0.90	0.40	1	7.645 491
10 - 100	0.10	0.80	0.15	1	6.282 657
20 - 200	0.20	0.60	0.15	1	7.645 492
100 - 1000	1.00	0.70	0.20	1	6.282 656
500 - 5000	10.0	0.50	0.20	1	6.285 006

Single Channel Pipette Tacta, Multipacks



- Multipacks with 3-5 pipettes
- With Pipette Stand
- Completely Autoclavable

- **Tacta® pipette 3-pack 20**, incl. linear stand and Tacta® pipettes 2 - 20 µl, 20 - 200 µl, 100 - 1000 µl and Sartorius Optifit Tip tray Box
- **Tacta® pipette 4-pack 20**, incl. linear stand and Tacta® pipettes 0.5 - 10 µl, 2 - 20 µl, 20 - 200 µl, 100 - 1000 µl and Sartorius Optifit Tip tray Box
- **Tacta® pipette 5-pack 20**, incl. linear stand and Tacta® pipettes 2 - 20 µl, 10 - 100 µl, 20 - 200 µl, 100 - 1000 µl, 500 - 5000 µl and Sartorius Optifit Tip tray Box

Description	PK	Cat. No.
Tacta® Pipette 3-pack 20	1	6.310 494
Tacta® Pipette 4-pack 20	1	6.273 255
Tacta® Pipette 5-pack 20	1	7.982 708

LLG-Pipette Tips *ULTRALOW*, bulk, non-sterile

All LLG-Pipette tips *ULTRALOW* feature an extremely low liquid retention compared to standard tips due to their hydrophobic inner side. This enables accurate, more complete and more precise dispensing of fluids, even of viscous ones.

LLG-Pipette tips *ULTRALOW* are compatible with all major pipette brands such as LLG-proMPL, Gilson, Eppendorf, Brand, Sartorius, Socorex and others.

- With easy visible volume graduations

Capacity	PK	Cat. No.
µl		
10	960	6.291 866
200	960	6.291 867
1250	960	6.291 868

Pipette Fillers Profiller™ 447



- **Powerful, Silent Motor Warning**
- **Lamp for Battery Level**
- **Rechargeable During Operation**



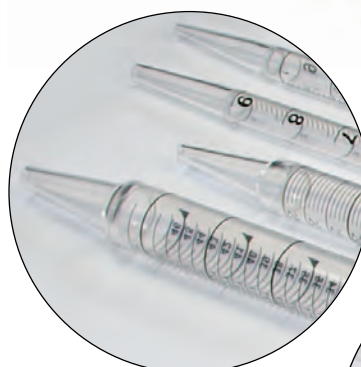
Electronic pipette filler which allows longer and fatigue-free pipetting due to comfortable hand adjustment. Shape is ideal for working with glass or plastic pipettes. A powerful, quiet motor and a switch to set both aspiration and dispensing speeds, enable maximal working efficiency even with large pipetting volumes.

- Powerful pump (fills 25 ml in 3 seconds)
- Comfortable finger triggers
- Low battery light
- NiMH battery rechargeable during use
- Interchangeable protection membrane filter

Scope of delivery: Pipette filler Profiller™ 447, power supply, four plug adaptors (EU, US/JP, GB, AUS/NZ), two spare hydrophobic filters (0.45 µm and 0.2 µm), bench and wall stands and instruction manual.

Type	PK	Cat. No.
Profiler™ 447	1	4.665 542

LLG-Serological Pipettes, PS, sterile



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

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

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

Aspirator LLG-uniVACUUSYS



- **Complete System**
- **Integrated Vacuum Pump**
- **Level Control**
- **Automatic Vacuum Regulation**



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

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

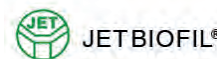
Scope of delivery: Vacuum Aspiration System with integrated vacuum pump, 4 litre waste collection bottle, single channel needle and 8-channel needle aspirator handle, tubing and quick-connectors

Specifications

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

Type	PK	Cat. No.
LLG-uniVACUUSYS with EU-plug	1	6.263 585
LLG-uniVACUUSYS with UK-plug	1	6.263 586

Cell Culture Flasks, treated, PS, sterile



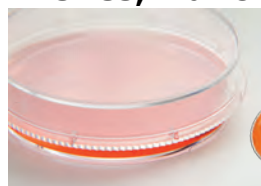
These cell culture flasks with treated surfaces for the cultivation of adherent cells are available with different growth areas from 12.5 to 182 cm². Available with vented or plug-seal caps made from polyethylene. Vented caps contain a 0.22 µm hydrophobic filter to allow gas exchange and minimize risk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

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

Working volume ml	Neck thread mm	Culture surface cm ²	Neck	Cover type	PK	Cat. No.
20	45	12.5	angled	standard	10	6.267 172
20	45	12.5	angled	vented	10	6.267 173
40	45	25.0	angled	standard	10	6.267 174
40	45	25.0	angled	vented	10	6.267 175
75	45	75.0	angled	standard	5	6.267 176
75	45	75.0	angled	vented	5	6.267 177
400	45	182.0	angled	standard	5	6.267 178
400	45	182.0	angled	vented	5	6.267 179

Cell and Tissue Culture

Dishes, Nunc EasYDish , PS



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

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

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

USB hand-held Microscope with integrated 2 megapixels camera, D-EL1 ecoline



- With integrated LED illumination and Motic application software
- Sensor CMOS 1/3"
- 2 Megapixel with USB 2.0 output
- Illumination 8-LED in ring formation with 2-step brightness control
- Power direct from computer through USB2.0 connection
- Soft-grip focus wheel
- Direct capture button
- 2 Step First Magnification 10x-50x.
Second magnification at 200x (depending on screen size)
- Motic EcoLine Tool application software
- Can be used on a Mac with preinstalled application Photo Booth

Calibration slide and metal stand included.

Type	PK	Cat. No.
D-EL1 ecoline	1	9.727 034

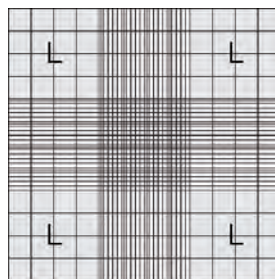
Hand Tally Counter



Use for counting blood cells, bacterial colonies, drops of liquid, or any repetitive event. Tallies up to 9999. Features a quick-reset knob, lens window for easy reading, and finger ring for a secure grip. Sturdy, chrome-finished, metal housing.
Dimensions: 46 mm diameter x 41 mm W.

Description	PK	Cat. No.
Hand tally counter	1	6.237 971

Counting Chamber, Neubauer

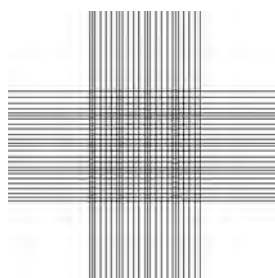


With double ruling. Calibratable. Cell depth 0.1 mm. Same ruling as Improved Neubauer, but the large square in the centre is divided into 16 squares each with a side length of 0.25 mm. Unlike the more modern Improved Neubauer counting chambers, the counting area of each group square is limited by the outermost of the triple border lines.



Description	PK	Cat. No.
without clamp	1	9.161 086

Counting Chamber, Thoma



Double ruling. Without snap-on clips. Calibratable. Cell depth 0.1 mm. Grid is the same as the grid in the centre of large square in the Neubauer chamber. The area of the small square is 0.0025 mm². Since the large outer squares are not included, the Thoma system is only used to count thrombocytes and erythrocytes.



Description	PK	Cat. No.
double ruling, without clamp	1	9.161 080

Drying Pads



The strips remove excess liquids on microscope slides. They quickly, cleanly and easily dry stained specimens for microscopy. 1 block = 50 strips.

Width	Length	PK	Cat. No.
mm	mm		
37	100	100	4.665 268

Drawer Boxes Styrokay

White modular drawer box with 6 drawers for histology cassettes, documents and small laboratory utensils.



- Including inscription labels
- 49 histology cassettes per drawer
- 294 histology cassettes per box



Type	Internal dimensions (W x D x H) mm	External dimensions (W x D x H) mm	PK	Cat. No.
without insert	230 x 318 x 45	270 x 345 x 340	1	4.662 136
with insert	230 x 318 x 45	270 x 345 x 340	1	4.662 137

Accessories for Styrokay



Description	PK	Cat. No.
Insert with 7 compartments à 28 x 300 x 15 mm	1	4.662 138

Tissue-Embedding Wax, PARAPLAST®



Granules for embedding tissue. PARAPLAST PLUS® additionally contains dimethyl sulphoxide (DMSO) which improves speed and penetration into tissue samples. Melting point: 55 - 57 °C.

Type	Capacity kg	PK	Cat. No.
PARAPLAST®	1	1	9.170 015
PARAPLAST PLUS®	1	1	9.170 020

Histology Cassettes, POM



Tissue embedding cassettes for paraffin inclusions. With clip-on lid that breaks when closing, which allows an easy removal.

Colour	Dimensions (W x D x H) mm	PK	Cat. No.
White	28 x 40 x 6.8	500	6.207 173
Blue	28 x 40 x 6.8	500	6.280 220
Yellow	28 x 40 x 6.8	500	6.284 765
Red	28 x 40 x 6.8	500	6.284 766
Green	28 x 40 x 6.8	500	6.284 767
Pink	28 x 40 x 6.8	500	6.226 853
White	28 x 40 x 13.6	100	7.910 449
Blue	28 x 40 x 13.6	100	6.284 771
Yellow	28 x 40 x 13.6	100	6.269 288
Green	28 x 40 x 13.6	100	6.284 772
Pink	28 x 40 x 13.6	100	6.284 773

Scissors dissecting, stainless steel



Excellent grade polished stainless steel with fine sharp points and close shanks.

Type	Length mm	PK	Cat. No.
straight body form	130	1	6.236 264
curved body form	130	1	9.204 222

Blades for Microtoms, stainless steel



Universally Used



micros

MS200: For daily routine, suitable for all types of tissue. Especially suitable for ribbon sectioning, excellent sharpness, even with very thin cuts. Allrounder with unique hardened blade cutting edge, excellent durability

MS23: For biopsies and standard specimen. Very good for ribbon sectioning with soft and hard tissue. Short trimming time, sharpness and long life are perfectly matched.

MS33: Blade for applications where extremely thin, high-quality sections are required. Suitable also for skin biopsy. Short trimming time and increased durability.

MS24: For hard tissue, but also for soft tissue and biopsies. Excellent long life and sharpness, very suitable for ribbon sectioning.

MS100: For daily routine like ribbon and thin sectioning. Excellent sharpness and durability. All-purpose, even for difficult tissue. High-quality stainless steel, extra hard teflon coated.

HP (High Profile): Excellent references for cryostat and ribbon sectioning. Special hardened blade, short trimming time, excellent durability.

Type	Description	Width	Length	Thickness	Angle	PK	Cat. No.
		mm	mm	mm			
MS200	Low Profile	8	80	0.25	35	50	6.270 924
MS23	Low Profile	8	80	0.25	35	50	6.270 925
MS33	Low Profile	8	80	0.25	30	50	6.270 926
MS24	Low Profile	8	80	0.25	35	50	6.270 927
MS100	Low Profile	8	80	0.25	35	50	6.270 928
HP	High Profile	14	80	0.32	35	50	6.270 929

Scalpels, disposable Cutfix®

B. BRAUN
SHARING EXPERTISE



Sterile. For cleaner, smoother, more accurate incisions.

- Excellent cutting ability of stainless steel blade
- Ergonomic solid plastic handle
- Ready for use
- Complete range of blades for every incision
- Individually packed precision knife with cap
- Total length about 150 mm depending on the blade shape and length

Type	PK	Cat. No.
10	10	9.409 804
11	10	9.409 805
12	10	9.409 806
15	10	9.409 807
20	10	9.409 808
21	10	9.409 809
22	10	9.409 810
23	10	9.409 813
24	10	9.409 814



Orbital Shakers SSL1



- **Suitable for Permanent Use**
- **Easily Adjustable Attachment for Different Flask Sizes**



This lab scale platform shaker has powerful yet quiet shaking mechanisms and has been designed for trouble-free, continuous use. The cradle type platforms have four rubber cushioned horizontal securing bars which can be easily adjusted both vertically and horizontally to hold most sizes and types of vessel, including flasks, bottles and beakers. For example, they will accommodate the following Erlenmeyer flasks or bottles: 12 x 250 ml or 9 x 500 ml or 6 x 1000 ml or 2 x 2000 ml. Speed is continuously adjustable and is set digitally. The speed is accurately maintained, even over long runs. A built-in digital timer allows shaking times from 1 to 999 minutes to be set. Alternatively the unit can be set for continuous operation. With BioCote silver based antimicrobial protection.

- Available with orbital or reciprocating action
- Digital speed selection up to 300 rpm with soft start
- Built-in digital timer
- Fully adjustable cradle system

Specifications

Type of movement:	orbital
Orbit:	16 mm
Speed range:	30 ... 300 rpm
Max. Load:	10 kg
Timer:	1 ... 999 min
Power consumption:	50 W
Working temperature:	4 ... 40 °C
dimensions (W x D): Overall	335 x 335 mm
dimensions (W x D x H): Net	360 x 420 x 270 mm
weight:	11 kg
Supply requirements:	230 V, 50 Hz

Type	PK	Cat. No.
Shaker, orbital, large platform, EU	1	9.728 840
Accessory platform 510 x 510 mm with 6 rubber securing bars	1	9.728 842
Accessory flat platform 350 x 350 mm without cradle	1	9.728 843

Tumbling Shaker TL 2



- **Ideal for Cell Culture**
- **Suitable for Incubators**



Robust tumbling shaker with slow, three-dimensional movement for even and gentle mixing. Low space requirement. Suitable for Petri dishes, culture bottles, etc.

- Gentle start-up for optimum development of cell cultures
- Minimal heat emission, thus no influence on ambient conditions
- Can be used at CO₂ concentrations up to 5 %.
- Easy setting of speed and time via LED display
- Extension shelf available as accessory

Scope of delivery: basic unit with platform, rubber mat

Specifications

Speed:	1 ... 22 rpm
Type of movement:	tumbling
Rocking angle:	8° fix
Timer:	0 ... 99 Std./continuous
Max. load:	2 kg
range: Max. CO ₂ concentration:	5 °C ... 45 °C
humidity:	5 %
Platform dimensions:	85 %, not condensing
Dimensions (W x D x H):	220 x 220 mm
Weight:	250 x 415 x 118 mm
Protection class:	9.1 kg
Power supply:	IP 21
	100 ... 240 V,
	50/60 Hz

Type	PK	Cat. No.
TL 2	1	4.663 361

Extension Shelf for TL 2



For tumbling shaker TL 2. With rubber mat.

Type	Height	PK	Cat. No.
	mm		
Additional tray TL 2	80	1	4.663 362

Thermo Shaker LLG-uniTHERMIX 1 pro and 2 pro

The LLG-uniTHERMIX pro is ideal for shaking and temperature control of a variety of tubes or plates (depending on the block used). With its high temperature uniformity, fast heating rate and excellent mixing results the LLG-uniTHERMIX pro is perfect for the incubation of samples of any kind, in particular for Life Science applications, e.g. Enzyme reactions, transformations, denaturation of DNA and RNA. The heating blocks are magnetically attached to the LLG-uniTHERMIX pro and do not have to be screwed down.

- Precise temperature control system
- Temperatures up to 100 °C
- Temperature accuracy of ± 0.5 °C (20 to 45 °C)
- Efficient mixing up to 1500 rpm (depending on the heating block)
- Up to 9 storable programs
- Many block options available (see below)
- Automatic block recognition

LLG-uniTHERMIX 1 pro: with shaking and heating function,
Temperature range: RT + 5 °C to approx. + 100 °C

LLG-uniTHERMIX 2 pro: with shaking, cooling and heating function,
Temperature range: 15 °C below RT to approx. +100 °C

Blocks must be ordered separately.

Specifications

Temperature range	RT + 5 °C approx. + 100 °C
LLG-uniTHERMIX 1 pro:	15 °C below RT approx. + 100 °C
LLG-uniTHERMIX 2 pro:	C ± 0.5 °C (at 20 45 °C)
Temperature control: Uniformity:	± 0.5 °C (at 20 45 °C)
Max. heating rate:	5.5 °C/min
Max. cooling rate	5 °C/min (100 °C RT)
(LLG-uniTHERMIX 2 pro only):	0.5 °C/min (below RT)
Speed range:	300 1500 rpm
Orbit:	3 mm
Display:	LCD
Programs:	6 stages, 9 programs
Timer:	1 99 min or continuous
Capacity:	1 exchangeable block*
Dimensions (W x D x H):	200 x 235 x 120 mm
Weight:	7.3 kg
Electrical heating/cooling power:	200 W
Power supply:	220 - 240 V, 50/60 Hz



LLG-uniTHERMIX 1 pro
with shaking and heating function,
RT + 5 °C to approx. + 100 °C



Quick Change of Blocks Due to Magnetic System



LLG-uniTHERMIX 2 pro
Shaking, cooling and heating function
15 °C below RT to approx. +100 °C

Type	PK	Cat. No.
LLG-uniTHERMIX 1 pro with EU-plug	1	6.263 482
LLG-uniTHERMIX 1 pro with UK-plug	1	6.263 483
LLG-uniTHERMIX 2 pro with EU-plug	1	6.263 484
LLG-uniTHERMIX 2 pro with UK-plug	1	6.263 485

*Exchangeable blocks are not included in delivery.

Heating Blocks for Thermo Shaker LLG-uniTHERMIX 1 and 2 pro



For	PK	Cat. No.
24 tubes, 0.5 ml	1	6.263 486
24 tubes, 1.5 ml	1	6.263 487
24 tubes, 2 ml	1	6.263 494
8 tubes, 5 ml	1	6.263 495
8 tubes, 15 ml	1	6.263 496
4 tubes, 50 ml	1	6.263 497
96 well PCR plates, 0.2 ml tubes	1	6.263 498
96/384 microplate	1	6.263 499

Measuring Cylinders, PP, tall form, class B, blue moulded graduations



Highly transparent.

With easily readable, raised, embossed blue scale and ring marks at the primary scale points. Calibrated 'In'. Class B tolerances according to DIN 12681/ISO 6706.

Hexagonal base with bottom studs provides high stability. Thermal stress up to 80 °C does not cause tolerance limits to be permanently exceeded. To preserve markings, do not clean at temperatures exceeding 60 °C.

Food-safe (suitable for contact with foodstuff in accordance with Regulation (EC) No. 10/2011).

Capacity	Grad.	Tolerance	Diam.	Height	PK	Cat. No.
ml	ml	± ml	mm	mm		
100	1.00	1.0	33	250	1	9.274 411
250	2.00	2.0	44	315	1	9.274 412
500	5.00	5.0	58	360	1	9.274 413
1000	10.00	10.0	69	440	1	9.274 414
2000	20.00	20.0	97	482	1	9.274 415

Volumetric Trapezoidal Flasks, DURAN®, class A, blue graduation, with PE stopper

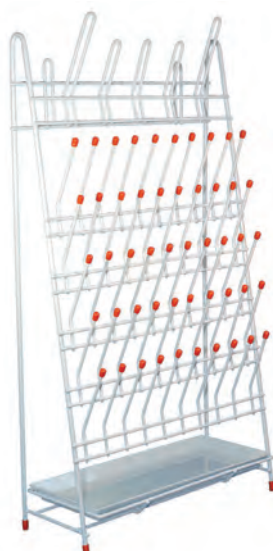


IN (TD) calibrated. With dated batch identification. Declaration of conformity acc. to DIN 12600. NS ground with poly stopper. Ring mark and graduation in high contrasting blue enamel. According to DIN EN ISO 1042. For those products batch calibration reports, which are free of charge, can be generated and printed on www.hirschmannlab.com. Additional single calibration reports or DAkkS certificates (former DKD calibration reports) are available.

Capacity	Tolerance	Height	Joint size (NS)	PK	Cat. No.
ml	± ml	mm			
1	0.025	60	7/16	1	9.276 645
2	0.025	70	7/16	1	9.276 646
5	0.025	70	7/16	1	9.276 647
5*	0.04	70	10/19	1	9.276 648
10	0.025	90	7/16	1	9.276 649
10*	0.04	90	10/19	1	9.276 650
20	0.04	110	10/19	1	9.276 651
25	0.04	110	10/19	1	9.276 652
50	0.06	140	12/21	1	9.276 653

* wide neck.

LLG-Draining Racks, PE-coated wire



Wall or bench mounting for 50 reagent bottles and 5 flasks. With drip channel and plastic covered feet. Dimensions (L x W x H): 360 x 130 x 650 mm.

Description	PK	Cat. No.
For 50 reagent bottles and 5 flasks	1	6.281 619

Chemically-resistant Liquid Pumps LIQUIPORT®



- Application: Transferring liquids
- Flow rate from 0.2 up to 3 l/min
- Pressure head 10 mWg, suction head 3 mWg
- Self priming, dry running
- Tubing connection for tubing with ID 8 mm for NF 100 and ID 12 mm for NF 300
- Pump heads available in your choice of PP, PVDF or PTFE
- Flow rate manually adjustable

Specifications

Suction head:	3 mWS
Pressure head:	10 mWS
Ambient temp.:	+5 +40 °C
Liquid temp.:	+5 +80 °C
Diaphragm:	PTFE-coated
Valves:	FFKM
Supply requirements:	100-230 V, 50/60 Hz



- Chemically Resistant Materials
- Self-Priming

Type	Int. diam. mm	Width mm	Height mm	Depth mm	Flow rate l / min.	Rating W	Weight kg	PK	Cat. No.
NF 100 KT.18 S	8	99	177	130	0.2 ... 1.3	12	1.00	1	9.880 597
NF 100 TT.18 S	8	99	177	130	0.2 ... 1.3	12	1.00	1	9.880 598
NF 100 FT.18 S	8	99	177	130	0.2 ... 1.3	12	1.00	1	4.664 493
NF 300 KT.18 S	12	104	188	160	0.5 ... 3.0	24	1.50	1	9.880 599
NF 300 TT.18 S	12	104	188	160	0.5 ... 3.0	24	1.50	1	9.880 600
NF 300 FT.18 S	12	104	188	160	0.5 ... 3.0	24	1.50	1	7.634 612

Syringe Pumps Legato® 101



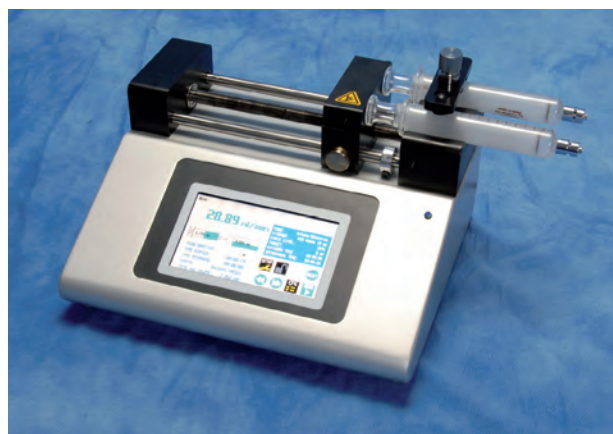
- Precision Down to the Picoliter Volume Range
- Chemically Resistant Touch Screen



The Legato® series syringe pumps provide the smoothest most accurate flow available. The intuitive, chemically resistant touch screen enables the user to quickly create configurations and recall them for ease of use. This infusion only pump is ideal for applications where dual syringes are required with small volumes under 10 ml.

- Holds syringe sizes from 0.5 µl to 10 ml
- Flow rates down to the picoliter/min
- Programmable interface without the need for a PC (Model dependent)
- USB/RS-232/TTL Interfaces for external control
- Rugged construction with cold rolled steel chassis

Applications: Electrospraying, Flow Cytometry, Microfluidics, Mass Spec, Drug Discovery, Organic Synthesis, Nanofluidics, Stereotaxic Injections



For syringes	Dimensions (W x D x H) mm	Flow rate	Weight kg	PK	Cat. No.
2 (0,5 µl - 10 ml) *using a 0.5 µl syringe	226 x 191 x 150	1,28 pl/min* - 25,99 ml/min	2.70	1	6.267 707

LLG-Glass-Syringes, Luer-Lock, borosilicate glass



With brown graduations.
Sterilisable up to 134 °C.



Capacity ml	Material Cone	Nozzle type	PK	Cat. No.
1	Metal	Luer-Lock	1	6.272 094
2	Metal	Luer-Lock	1	6.272 095
5	Metal	Luer-Lock	1	6.272 096
10	Metal	Luer-Lock	1	6.272 097
20	Metal	Luer-Lock	1	6.272 098
50	Metal	Luer-Lock	1	6.272 099

LLG Test Tubes, round bottom, Soda-lime glass



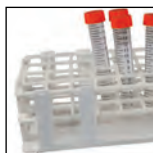
Heavy wall.
Rimless, with round bottom.

Diam.	Length	PK	Cat. No.
mm	mm		
16.0	100.00	100	9.400 022
14.0	130.00	100	9.400 030
16.0	160.00	100	9.400 040
18.0	180.00	100	9.400 050

LLG-Test Tube Rack, PP



Made of PP. Stackable. Supplied in three parts and easy to assemble. Alphanumeric grid referenced on top tier for easy identification of probes. Can be used in water baths. With large lateral marking area. Autoclavable.



For tubes diam.	Colour	Dimensions (x w x h)	Array	PK	Cat. No.
mm		mm			
16	white	106 x 251 x 71	60	1	6.286 169
16	blue	106 x 251 x 71	60	1	6.286 170
16	red	106 x 251 x 71	60	1	6.286 171
20	white	108 x 252 x 72	40	1	6.286 172
20	blue	108 x 252 x 72	40	1	6.286 173
20	red	108 x 252 x 72	40	1	6.286 174
30	white	107 x 252 x 71	21	1	6.286 175
30	blue	107 x 252 x 71	21	1	6.286 176
30	red	107 x 252 x 71	21	1	6.286 177

Narrow-Mouth Bottles, Soda-lime glass



Amber or Clear, to DIN 5090. Standard packaging bottles. Round thread neck in accordance with DIN 168.

Please order caps separately.

Colour	Capacity	Diam.	Height	Neck thread	PK	Cat. No.
	ml	mm	mm	GL		
clear	100	45.0	117.0	22	72	6.287 783
clear	250	61.5	148.5	22	42	6.287 784
clear	500	76.0	176.5	25	35	6.287 785
clear	1000	96.5	225.0	28	20	6.287 786
amber glass	100	45.0	117.0	22	56	6.287 789
amber glass	250	61.5	148.5	22	42	6.287 790
amber glass	500	76.0	176.5	25	35	6.287 792
amber glass	1000	96.5	225.0	28	20	6.287 791

Screw Caps for Narrow-Mouth Bottles, PP/LDPE



PP cap with LDPE seal.

Neck thread	PK	Cat. No.
GL		
22	1	9.072 161
25	1	9.072 162
28	1	9.072 163

Laboratory Bottles Borosilicate glass 3.3, GL 45, with retrace code



Borosilicate glass 3.3. DIN 168 - 1. EN ISO 4796-1. With graduations and retrace code, pouring ring, PP screw cap with ISO thread.

Certificates are available on request.

Capacity	Ext. diam.	Height	PK	Cat. No.
ml	mm	mm		
100	56	100	10	9.072 331
250	70	138	10	9.072 332
500	86	176	10	9.072 334
1000	101	225	10	9.072 335
2000	136	260	10	9.072 336
5000	186	330	1	9.072 337

LLG-Mini Narrow-Neck Vials, PP, Heavy Duty



- With screw cap
- Very stable design
- Transparent
- With graduation

Capacity	Diam.	Thread	Height	PK	Cat. No.
ml	mm	external diam.	mm		
4	16.0	13	40	100	6.289 520
8	25.0	19	44	100	6.289 450
30	36.0	19	61	100	6.289 451
60	40.0	19	85	100	6.289 452
125	51.0	23	99	50	6.289 453

Space saving Jerrycan Flachmann LaboPlast®, PP



A space saving jerrycan with a width of only 6.5 cm or 12.5 cm. A large variety of liquids can be stored and filled in a limited space. It can also be stored horizontally, e.g. in refrigerators. The ribbing and the thick wall make it very durable.

- PP, transparent
- With tamper evident cap
- Jerrycan without tap autoclavable
- With raised, indestructible litre scale
- Capacity: 5 l or 10 l

Compact space saving set: with 1 space saving jerrycan Flachmann LaboPlast® 5 l or 10 l with threaded connector and 1 drain cock Compact (9.140 003).

Space-saving StopCock set: consists of 1 space saving jerrycan Flachmann LaboPlast® 5 l or 10 l with threaded connector and 1 drain cock StopCock (9.139 997).

Capacity	Description	Dimensions (W x D x H) mm	PK	Cat. No.
5	Space-saving Set Compact	65 x 335 x 335	1	9.140 004
5	Space-saving Set Stopcock	65 x 335 x 335	1	9.140 011
10	Space-saving Set Compact	125 x 335 x 335	1	6.290 255
10	Space-saving Set Stopcock	125 x 335 x 335	1	6.290 254

Adhesive Label Tape Write-on , writable



Excellent adhesion to glass, metal, PE, etc. Resistant to humidity, as well as acids and alkali solutions in weak concentrations. Leaves no residue when removed.

Colour	Width	Length	PK	Cat. No.
	mm	m		
White	12.7	36.4	1	9.040 379
White	19.0	36.4	1	9.040 380
White	25.4	36.4	1	9.040 381
White	12.7	54.6	1	9.040 351
White	19.0	54.6	1	9.040 352
White	25.4	54.6	1	9.040 353
Red	12.7	36.4	1	9.040 336
Red	19.0	36.4	1	9.040 341
Red	25.4	36.4	1	9.040 346
Yellow	12.7	36.4	1	9.040 337
Yellow	19.0	36.4	1	9.040 342
Yellow	25.4	36.4	1	9.040 347
Green	12.7	36.4	1	9.040 338
Green	19.0	36.4	1	9.040 343
Green	25.4	36.4	1	9.040 348
Blue	12.7	36.4	1	9.040 339
Blue	19.0	36.4	1	9.040 344
Blue	25.4	36.4	1	9.040 349
Orange	12.7	36.4	1	9.040 340
Orange	19.0	36.4	1	9.040 345
Orange	25.4	36.4	1	9.040 350

Stabilising/Weighting rings, lead



Vinyl-coated lead rings will not mark or scratch benchtops and labware.

Type	For flasks ml	Int. diam. mm	PK	Cat. No.
O-Shape	125 - 500	48	1	6.243 010
O-Shape	250 - 1000	51	1	6.242 742
O-Shape	500 - 2000	57	1	6.243 011
O-Shape	1000 - 4000	70	1	7.054 161
C-Shape	125 - 500	42	1	9.149 902
C-Shape	250 - 1000	51	1	9.149 905
C-Shape	500 - 2000	54	1	9.149 906

LLG-Scissors general purpose, stainless steel



Excellent grade polished stainless steel with straight form and close shanks.

Type	Length	PK	Cat. No.
	mm		
sharp - sharp	130	1	6.237 703
sharp - sharp	160	1	9.204 231
blunt - sharp	130	1	9.204 232
blunt - sharp	160	1	9.204 233

LLG-Forceps, 18/10 steel



Blunt-straight.

Length	PK	Cat. No.
mm		
105	1	4.008 471
115	1	4.008 472
130	1	4.008 473
145	1	6.255 826
160	1	4.008 474
200	1	4.008 475
250	1	4.008 476
300	1	4.008 477

Spatulas, round grooved, 18/10 steel



Polished, round grooved.

Length	Spatula width	PK	Cat. No.
mm	mm		
150	9	1	4.008 448
185	9	1	4.008 449
210	9	1	4.008 450

LLG-Spoon Spatulas, 18/10 steel, wide form



18/10 steel. Wide form.

Dimensions Spoon (L x W)	Dimensions Spatulas (L x W)	Length	PK	Cat. No.
mm	mm	mm		
31 x 23	30 x 20	120	1	4.008 445
38 x 27	32 x 22	150	1	9.150 810
40 x 30	35 x 25	180	1	9.150 811
40 x 30	35 x 25	210	1	9.150 812

Reagent Spoons, double-ended, 18/10 steel



18/10 steel. Double ended.

Dimensions Spoon (L x W)	Length	PK	Cat. No.
mm	mm		
30 x 22 - 23 x 17	150	1	9.150 015
40 x 29 - 30 x 22	180	1	9.150 018
40 x 29 - 30 x 22	210	1	9.150 021
48 x 29 - 40 x 29	250	1	9.150 025
48 x 35 - 40 x 29	300	1	9.150 030

Micro Spoon Spatulas, 18/10 steel



Excellent grade polished stainless steel with one end having a flat spatula and the other end having a micro spoon.

Dimensions Spoon (L x W)	Length	PK	Cat. No.
mm	mm		
9 x 5	150	1	9.150 820
9 x 5	180	1	4.008 451

Powder Spoon, 18/10-steel



18/10 steel. Narrow form.

Dimensions Spoon (L x W)	Length	PK	Cat. No.
mm	mm		
40 x 10	170	1	9.150 620

Compact Balances Type EMB

KERN



- **Additional Weighing**
- **Function Large LCD Display**

Economically priced, battery-operated models. Large LCD readout with 15 mm high digits. "Weigh-in" function simplifies mixing. Supplied with 9 V block or 2 x 1.5 V AA batteries (Types EMB 2200-0). With d.c. power connection socket (accessory mains adapter Cat. No. 6.270 080 available at extra cost). Auto-off function activates after 3 minutes without use for saving battery power.

Dimensions (W x D x H): 170 x 240 x 39 mm
 EMB 100-3/EMB1000-2: 170 x 240 x 54 mm
 Net weight: approx. 750 g



Type	Plate diam. mm	Capacity g	Readability g	Reproducibility g	Linearity ± g	PK	Cat. No.
EMB 100-3	82	100	0.001	0.001	0.003	1	6.238 426
EMB 200-2	105	200	0.01	0.01	0.02	1	9.901 320
EMB 600-2	105	600	0.01	0.01	0.03	1	9.901 321
EMB 1000-2	150	1000	0.01	0.01	0.03	1	6.235 728
EMB 500-1	150	500	0.1	0.1	0.2	1	9.901 322
EMB 1200-1	150	1200	0.1	0.1	0.3	1	9.901 323
EMB 5.2K1	150	5200	1.0	1.0	3.0	1	9.901 324
EMB 2200-0	150	2200	1.0	1.0	2.0	1	9.901 371

Halogen Moisture Balance MB27

Ideal for routine moisture determinations, that require precise results up to 0.01 % and high capacity up to 90 g. Optimal for applications e.g. in the food, agriculture, chemical and pharmaceutical sector. Easy setting of the parameters. Compact instrument with easy-to-clean heating chamber.

- Backlit LCD display
- Tare Range to capacity by subtraction
- Displays % moisture or % solids or weight (g), temperature, time
- Bidirectional interface (RS-232)

Specifications Capacity: 90 g
 Repeatability 3 g/10 g: 0.2 %/0.05 %
 Readability: 0.01% or 0.001 g
 Timer: 1 to 99 min, 30-second increments to 60 min
 Temperature range: 50 ... 160 °C (in 5 °C increments)
 Operating temperature: 5 ... 40 °C
 Pan size (diam.): 90 mm
 Dimensions (W x D x H): 170 x 280 x 140 mm
 Weight: 2.3 kg
 Power supply: 100 - 240 V, 50/60 Hz



- **Exact Results up to 0.01 %**
- **Easy to Disassemble, Easy to Clean**

Type	PK	Cat. No.
MB27	1	4.663 998

LLG-Sample Dishes, Aluminium



High quality aluminium sample dishes, for moisture determination.

Description	Diam. mm	Height mm	PK	Cat. No.
Sample dishes	90	7	80	6.282 670
Sample dishes	100	7	80	6.265 408
Sample dishes with rim	100	7	80	6.281 537

Women and Mens Laboratory Coats 1654



- Stand-up collar
- Two side pockets are provided
- One outer breast pocket
- Without belt at the back

Material: 65 % PES/35 % Cotton
 Colour: white
 Weight: approx. 215 g/m²
 Length: approx. 103 cm

Size	PK	Cat. No.
XS	1	9.414 326
S	1	9.414 327
M	1	9.414 328
L	1	9.414 329
XL	1	9.414 330
XXL	1	9.414 331

Panoramic Eyeshield 2890 and 2890SA



The 3M 2890 and 2890SA safety goggles are a classic panoramic eyeshield, with a modern, slim design. They feature acetate, anti-fog lenses, that offer reliable protection and optimized sight. The broad, comfortable and adjustable headband, variable lateral joints and grooves allow the 3M 2890 and 2890SA to be worn over prescription glasses, and is ideal for use in many laboratory applications. Can be worn with the 3M 4000 half mask series for complete face protection.

- Suitable for over glasses
- Type 2890 with indirect ventilation
- Type 2890SA without ventilation, gas-tight
- Protection against gas and fine dust
- Excellent chemical resistance
- UV-protection

Type	Colour	Lens	PK	Cat. No.
2890	transparent	clear, polycarbonate, 2C-1.2 3M 1 N BT 9	1	6.266 909
2890SA	transparent	clear, acetate, 2C-1.2 3M 1 N FT	1	6.235 920

Respirators Aura 9300+Gen3, Series, Folding Masks



- Low Breathing Resistance
- Ideal Fit



4.665 366



4.665 369



- Cool Flow Comfort Valve
- Ease of positioning
- Braided headbands
- Colour coded for easy identification:
FFP1 = yellow, FFP2 = blue, FFP3 = red
- 3M Advanced Electret (Filter) Media (AEM)
- Embossed top panel helps re-direct exhaled air, reducing fogging of eyewear
- Large soft nose foam material and smooth inner cover
- Hygienic individual packaging helps protect the respirator from contamination before use
- 3M Safe Guard Product Authentication Process

Testing standards: EN 149:2001 + A1:2009

Type	Protection-Description level	PK	Cat. No.
Aura 9310+Gen3	FFP1 without valve	20	4.665 366
Aura 9312+Gen3	FFP1 with Cool-Flow valve	10	4.665 367
Aura 9320+Gen3	FFP2 without valve	20	4.665 368
Aura 9322+Gen3	FFP2 with Cool-Flow valve	10	4.665 369
Aura 9330+Gen3	FFP3 without valve	20	4.665 370
Aura 9332+Gen3	FFP3 with Cool-Flow valve	10	4.665 371

Skin Protection Cream LINDESA® PROFESSIONAL with Beeswax

Non-greasy, quickly absorbed. Smooths and cleans without leaving a residue. LINDESA® PROFESSIONAL gives the skin elasticity and suppleness through its special caring agents. For low levels of soiling it provides protection against weak acids, alkalis and organic substances.



eco Pack

Capacity	PK	Cat. No.
ml		
50	10	4.665 408
100	10	4.665 407

Disposable Gloves NeoTouch®, Neoprene, Powder-Free



Ansell



- Without Natural Latex
- Protection Against Acids, Bases and Alcohols PU
- Inner Coating

- With a latex-free formulation, these gloves are appropriate for the prevention of Type I allergies. Because they're powder-free, they also limit the risk of dermatitis for the wearer
- They provide excellent resistance to acids, bases and alcohols
- Polyurethane inner-coating that ensures easy donning. Their textured fingertips provide a secure grip in both dry and wet conditions
- The beaded cuff ensures a secure hold, and their green colour makes them easy to identify
- AQL of 1.5 for pinholes, which matches the legal requirements for medical gloves
- **Cat. III Low Chemical resistant**



Size	Length	PK	Cat. No.
	cm		
S	24	100	6.229 608
M	24	100	6.229 607
L	24	100	6.229 606

Safety Gloves, Heat Protection, up to 232 °C

EN 388 EN 407



2X4X x2xxxx

Heathrow Scientific LLC



Durable Safety Gloves made of 100 % knitted cotton terry cloth.

- Heat resistant when dry
- Good abrasion resistance
- Designed with a straight thumb
- Gauntlets provide extra safety for wrist and forearm protection
- One size fits all
- Washable

Length: 480 mm
Palm width: 135 mm
Colour: Natural
EN: EN388:2003 2X4X, EN407:2004 X2XXXX

Size	PK	Cat. No.
One size	1	4.664 781

Chemical Protection Gloves DermaShield®, Polychloroprene, Sterile

EN 374 EN 374 EN 421



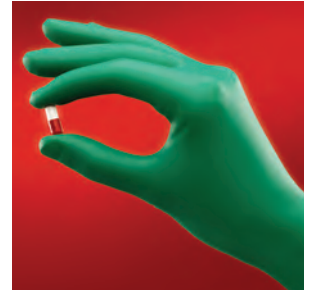
Ansell



Free of Latex Proteins and Accelerators

Made of poly-chloroprene, DermaShield® is free of latex, proteins and accelerators. It minimises both Type I and Type IV allergies associated with natural rubber. While DermaShield® has the comfort and flexibility of natural rubber gloves, its neoprene composition offers better chemical resistance - at a similarly competitive price. The new beaded cuff prevents the glove from rolling down, providing increased protection. DermaShield®: for optimal product and worker protection.

- The DermaShield® is sterile and specifically adapted to critical environments ISO 5 (Class 100 & GMP AB)
- AQL 0.65 (EN374) - Ideal Application - Handling of cytostatics
- **Cat. III**
- Pack size: 1 pair



Length: 310 mm
Thickness: 0.175 mm
Colour: green

Size	PK	Cat. No.
6 1/2	1	7.635 086
7	1	7.635 087
7 1/2	1	9.006 307
8	1	7.635 088
8 1/2	1	9.006 308
9	1	7.635 089

Safety Gloves, Heat Protection, up to max. +700 °C

Nabertherm
MORE THAN HEAT 30-3000 °C



6.233 610



6.233 681

Heat-resistant gloves for protection of the operator when loading or removing hot materials at furnaces.

Type	Temp.	Length	PK	Cat. No.
	max. °C	mm		
Carbon fiber finger gloves, knitted	650	270	1	6.233 610
Fibreglass finger gloves	700	380	1	6.233 681

Adhesive Tape



PET-coated Adhesive PVC-tape with water-soluble adhesive.

- Easy to remove without stains
- Thickness: 0.14 mm
- Core: PE
- Packed dustfree in a cleanroom

Width	Length	Colour	PK	Cat. No.
mm	m			
12	33	red	10	4.659 106
12	33	blue	10	4.659 107
12	33	yellow	10	4.659 108
12	33	green	10	4.659 109
12	33	white	10	4.659 110

Adhesive Mats Sticky Mat



- Collects Dirt and Dust
- Consecutively Numbered



The Sticky Mat provides a fast, convenient, reliable way to clean shoe soles or other items before entering a clean and sanitary area. Sticky Mats significantly reduce traffic-borne contaminants.

Each Sticky Mat consists of a stack of tear-off adhesive polyethylene sheets, effectively capturing dirt and dust from foot-traffic and equipment wheels before they enter controlled environments. The corner tabs are consecutively numbered to show the number of remaining sheets, thereby helping you to keep track of the number of sheets remaining and preventing multiple sheets being removed at once.

Ergomat White Sticky Mats are produced in an 46 x 114 cm sheet, sold in pads of 30 sheets, with 10 pads per box (300 sheets total.)

Description	Colour	PK	Cat. No.
Frame for Cleanroom mats Sticky Mat	grey	1	6.272 245
Pack of 10 mats of 30 sheets	white	10	6.272 241
Pack of 10 mats of 30 sheets	blue	10	6.272 242
Set of 10 mats of 30 sheets + 1 frame	white	1	6.272 243
Set of 10 mats of 30 sheets + 1 frame	blue	1	6.272 244

Laboratory Coat KIMTECH Science*A7 P+, PP

EN 1149



- Certified PPE Cat III directive 89/686/EEC
- Type 6 limited chemical splash protection
- Micro-organism protection tested
- EN1149-1:1995 Antistatic clothing
- High performance chemical resistant fabric
- Low lint fabric, Helmke Drum Category II
- 99 % particle and bacterial filtration efficiency
- Individually packed, 15 p. in an outer package for ISO 7 Grade C areas
- Silicone-Free
- Abrasion-resistant, film-coated polypropylene
- Elastic cuff, thumb-loops
- High strength triple stitched seams



Size	PK	Cat. No.
S	15	4.653 906
M	15	4.653 907
L	15	4.653 908
XL	15	4.653 909
XXL	15	4.653 910

Disposable Chemical Protection Coverall 4B

Material: polyethylene-laminate

- Excellent wearer comfort due to the breathable, light and flexible material
- Self-adhesive zipper flap and taped seams ensure optimum protection against penetration by liquid aerosols and solid particles
- The hood is easily compatible with filtering face masks
- Middle finger loops prevent sleeves from sliding up
- Silicone free
- Suitable for cleanroom environment (Class 7, ISO 14644-1)
- Chemical protection: personal protective equipment category 3, EN 14605 (Type 4), EN ISO 13982-1 (Type 5), EN 13034 (Type 6), EN 1149-5, EN 14126



Size	PK	Cat. No.
S	5	9.414 100
M	5	9.414 101
L	5	9.414 102
XL	5	9.414 103
XXL	5	9.414 104
XXXL	5	9.414 105

CERTOCLAV-EL 12 L/18 L Tabletop Autoclave

CERTOCLAV



- **One-Button Operation**
- **4-way Safety System**

The CertoClav EL laboratory autoclave is so simple to operate that it is ready to start after only a few moments of being turned on. Its versatility, reliability, single-button operation and compact construction make the CertoClav -EL laboratory autoclave almost indispensable for research, development and medical applications. The thermostat and the 2-stage control valve ensure that operations and processes are precise. Culture media preparations, quality checks and autoclave processes can be carried out simply and quickly. The precision thermometer and precision pressure gauge, with maximum indicator, ensures faultless results for all applications. The sterilisations chamber is easy to open and close, simply turn the cover and remove. The CertoClav 4-fold safety system: the overpressure valve, the safety interlock preventing opening under pressure, the safety control valve and the overpressure safety opening, enable operation without any hazards.

CE certified. Compliant with 2014/35/EU, 2014/30/EU, 2011/65/EU. Expert reports on microbiological and germicidal effectiveness.

Including accessories: Stable instrument panel, with 3 feeds and minimum water level indicator

Operating temperature/pressure:

maximum 3 bar
Stage 1: 125 °C = 1.4 bar/
Stage 2: 140 °C = 2.7 bar
Stage 1*: 115 °C = 0.7 bar/
Stage 2*: 121 °C = 1.1 bar
integrated in floor/not exposed
no water connection necessary
Aluminium
free steam flow process
1900 W
230 V/50 - 60 Hz.

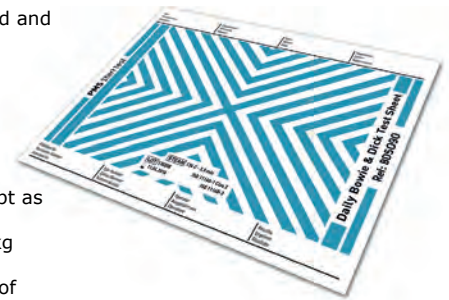
Heater:
Water connection:
Housing:
Air evacuation:
Thermal output: Mains connection:

Type	Capacity	Diam.	Int. height	PK	Cat. No.
	Litres	mm	mm		
EL 12L GS	12	240	260	1	9.842 013
EL 18L GS	18	240	400	1	9.842 014

* Special valve: CertoClav EL 12 and CertoClav EL 18 L delivery with valve temperature 125/140 ° C or 115/121 ° C. Please regard by your order.

Bowie-Dick Test Pack

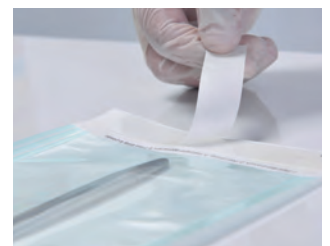
- Disposable, pre-assembled and ready to use test packs
- Designed for STEAM sterilization at 134 °C - 3.5 minutes. With EN 285.
- Clean and accurate indicator color change
- Indicator sheet can be kept as a permanent record
- Validated for 4 kg and 7 kg sterilisation load
- Manufactured in absence of lead or other heavy metals



Description	PK	Cat. No.
Bowie-Dick-Test (4 kg)	48	6.272 290
Bowie-Dick-Test (7 kg)	24	6.272 291

Self-Seal Sterilization Pouches

The self-seal sterilization pouches are constructed from transparent PET/PP multi-layer copolymer film, medical grade paper and adhesive strip which provides excellent resistance to over-exposure of steam and clean opening. Water based, non-toxic process indicators for steam and ethylene oxide sterilization complying with ISO 11140-1, ISO 11607 and EN 868-5 are applied on the paper surface and help to differentiate between processed and unprocessed packages.



- Reinforced film to avoid tearing during opening
- Clean and accurate indicator color change
- Tear, fibre-free opening and aseptic presentation
- Triple band seal for higher package integrity



- **Triple Seal**
- **With Sterilisation Indicator**

Dimensions	PK	Cat. No.
mm		
75 x 200	200	6.272 280
90 x 230	200	6.272 281
90 x 270	200	6.272 282
130 x 290	200	6.272 283
190 x 340	200	6.272 284
300 x 430	200	6.272 285

Indicator Tape for steam, hot air and gas sterilisation

Crepe paper, adhesive. With indicator. Colour changes according to DIN EN ISO 11140-1. Rolls of 50 m.



With	colour change	Width	Figure	PK	Cat. No.
		mm			
Steam indicator, lead free	green / black	18	a	1	9.140 787
Steam indicator	white / brown	19	b	1	9.140 784
Steam indicator	white / black	25	b	1	9.140 789
Hot air indicator	green / brown	19	c	1	6.240 223

Hand operated Solvent Pump



- For contamination-free, dispensing of organic solvents and flavouring agents
- Suitable for all commercially available, stainless steel drums up to 60 L with R2" fine thread necks, hand pump for tinplate canisters incl. adapter for pull-out spouts (immersion depth 600 mm - fully adjustable)
- Gas-tight pump can be completely sealable with two ball valves
- Medium-contacting parts are made of stainless steel with PTFE-seals
- Supplied with gas tight, R2" steel barrel external thread connection
- Electrostatic charge can be dissipated through the antistatic set accessory (please order separately)

Description	Immersion depth mm	PK	Cat. No.
Hand pump	600	1	9.001 349
Hand pump for tinplate canisters	600	1	6.237 176

Anti-Static Set



Pump for dispensing combustible/explosive liquids, both dispensing and filling drum involved in the process must be sufficiently earthed, in order to prevent ignition or explosion through electrostatic discharges. Antistatic set, includes three colour-coded connecting cables with clamps, supplied complete in plastic case.

Type	PK	Cat. No.
Antistatic set	1	9.001 346

Safety Container, HDPE



Conductive

Electro conductive container for a safe collection and transportation of flammable liquids and solvent waste. Made of electro conductive HDPE to avoid ignition risks. With or without floater for level control. Please note: The containers can be grounded with a suitable grounding cable.

Type	Capacity	Dimensions (W x D x H) mm	Thread	PK	Cat. No.
Without floater*	10	185 x 290 x 265	S 60 / 61	1	4.005 602
Without floater*	20	185 x 290 x 500	S 60 / 61	1	4.005 671
Without floater*	30	240 x 364 x 455	S 60 / 61	1	4.664 150
Without floater*	60	330 x 395 x 625	S 70 / 71	1	4.005 593
With floater	10	185 x 290 x 265	S 60 / 61	1	4.005 682
With floater	20	185 x 290 x 500	S 60 / 61	1	4.005 683

* with UN approval

Absorbent FastSorb 4.0, oil and chemical binder



FastSorb 4.0 is a spreadable absorbent agent for a rapid binding of hazardous liquids. This quick binder should be used on all places of operation where dangerous leaks are possible.

- Tested by TÜV Rheinland according to the BAM test method
- Occupational health and environmental safe absorbent

Optional wall mount with shovel and hand brush available.

Description	PK	Cat. No.
1500 g Quick binder for mineral oil and chemicals	1	4.664 658
50 L Quick binder for mineral oil and chemicals	1	4.664 659
Wall bracket incl. Handbrush, with rubber bristles, shovel, plastic bag and mounting kit, without FastSorb 4.0	1	4.664 660

Muffle Furnaces series LE



- Heating Elements in Quartz Glass
- Tubes Double-Walled Housing

Compact muffle furnaces with dual shell furnace housing of rust-free stainless steel, and heating elements encased in quartz glass tubes.

- Tmax 1100 °C, working temperature 1050 °C
- Heating from two sides, from heating elements in quartz glass tubes
- Maintenance-friendly replacement of heating elements and insulation
- Insulation only made of materials that are classified as not carcinogenic acc. to TRGS 905, class 1 or 2
- Housing made of sheets of textured stainless steel
- Dual shell housing for low external temperatures and high stability
- Flap door which can also be used as a work platform
- Exhaust air outlet in rear wall
- Compact dimensions and light weight
- Controller mounted under the door to save space
- Equipped with the R 7 controller as standard with adjustable holding time
- Standard power supply 230 V 1/N/PE 50/60 Hz



9.764 533



9.764 539



Type/Controller	Capacity	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Rating kW	Weight kg	PK	Cat. No.
LE 1/11/R7	1	290 x 280 x 406	90 x 115 x 110	1.5	10.00	1	9.764 543
LE 2/11/R7	2	330 x 385 x 406	110 x 180 x 110	1.8	10.00	1	9.764 537
LE 6/11/R7	6	390 x 434 x 466	170 x 200 x 170	1.8	18.00	1	9.764 539
LE 14/11/R7	14	440 x 534 x 516	220 x 300 x 220	2.9	25.00	1	9.764 541

External dimensions vary for versions with additional equipment. Dimensions on request.

Multi-size Heating Mantles, series KM-MPE

LabHEAT®-Heating mantles for round bottom flasks, to be used for three different sizes each. Flexible glass yarn heating element in plastic coated, chemical-resistant metal housing with built-in power-on and heating zone switch. Additionally equipped with a controller which allows a continuous adjustment of the heater power; max. heating element temperature 450 °C; 1.5 m power supply (earthed) cable and RCD (residual current detection); nominal voltage 230 V.



Capacity	Flask diam.	Rating	Heating zones	PK Cat. No.
ml	mm	W		
50 to 250	51 to 85	160	3	1 9.642 540
250 to 1000	85 to 131	350	3	1 9.642 541
1000 to 3000	131 to 185	700	3	1 9.642 542

Serial heating units and Heating mantles with other specifications available on request.

Crucible Tongs, 18/10 steel



18/10 steel. Electro polished.
With bow and gripping tips.

Length	Description	PK Cat. No.
mm		
200	18/10 E-Poli	1 9.310 120
220	18/10 E-Poli	1 9.310 122
250	18/10 E-Poli	1 9.310 125
300	18/10 E-Poli	1 9.310 130
400	18/10 E-Poli	1 9.310 140
500	18/10 E-Poli	1 9.310 150
600	18/10 E-Poli	1 9.310 160

2-in-1 Mini-Centrifuge and Magnetic Stirrer MagFuge®



- **Unique Centrifuge and Stirrer**
- **Combination Universal Plug**



The MagFuge® combines a High-Speed Centrifuge and a Magnetic Stirrer in one unit.

Centrifuge-Function:

- Maximum speed and flexibility
- Comfortable and easy to use
- Safety stop when lid is open, rotor jammed, or the unit is out of balance
- Ideal for most protocols requiring fast spins, and appropriate for PCR, microfilter cell separation, and HPLC protocols

Magnetic stirrer-Function:

- Powerful magnetic coupling ensures consistent accurate alignment of the stir bar
- With Silicone mat for stirrer lid to prevent spills and to keep vessels stable
- With low voltage, double insulated Power adapter to keep the unit cool and ensuring sample integrity

Scope of supply: Mini-Centrifuge, 1.5/2.0 ml and 5 ml Tube Rotors, Stirrer Rotor, 12 x 0.2 ml and 12 x 0.5 ml Tube adapters, 2 Silicone mats, 2 cylindrical Stirring Bars, Power adapter with cord set for EU, UK, US, AUS and JPN

Specifications

Centrifuge-function Max.

RCF: 15 ... 9.800 x g
 Max. speed: 500 ... 12.500 rpm
 Max. tube capacity: 12 x 1.5/2.0 ml or 6 x 5 ml
 Dimensions (W x D x H): 30 s ... 60 min in 5 s increments
 185 x 235 x 120 mm

Magnetic stirrer-function

Max. speed: 50 ... 2.500 rpm
 Max. stirrer capacity: 3 l
 Stirrer Mode: 30 s ... 60 min in 5 s increments
 Oscillating Stirrer Mode: 1 min ... 60 min
 30 s ... 15 min in 15 s increments
 130 mm

Dimensions stirring plate (diam.):

Dimensions stirring bar

(L x diam.):

Weight:

Power supply:

Warranty:



Colour	PK	Cat. No.
Grey/purple	1	4.664 776
Grey/blue	1	4.664 777

Nalgene Oak-Ridge centrifuge tubes, PC



①



②



① **PC**

Transparent. PC with PP screw cap. Can be used in suitable refrigerated or ambient centrifuges at up to 50.000 x g rcf. Autoclavable. Accessory sealing cap assemblies are available for 10 ml, 30 ml and 50 ml sizes.

Capacity	Diam.	Height	PK	Cat. No.
ml	mm	mm		
50*	28.8	107.0	1	9.315 694
85**	38.2	105.7	1	9.315 695

* Capacity: 43 ml to the brim.

**Capacity: 81 ml to the brim.

② **PP-Copolymer**

PP-copolymer with PP screw cap. PPCO is more resistant to chemicals than PC. Autoclavable. When wet, the translucent test-tube enables observation of the contents. Can be used in refrigerated and unrefrigerated centrifuges at up to 50.000 x g rcf. Accessory sealing cap assemblies are available for all sizes.

Volume	Diam.	Height	PK	Cat. No.
ml	mm	mm		
10	16.0	81.4	1	9.315 711
30	25.5	94.3	1	9.315 713
50*	28.8	106.7	1	9.315 714

* Capacity: 42 ml to the brim.

LLG-Microcentrifuge Tubes, PP



Certified DNase-, RNase and pyrogen free. Clear, in bags. Suitable for microbiology.

Specifications

Autoclavability

Temperature: 121 °C
 Pressure: 1.05 bar or 15 psi
 Time: 20 min or less

Centrifugation

Fixed angle rotor: 25000 x g
 Swing out rotor: 70000 x g

Form	Volume	Max.	PK	Cat. No.
	ml	rcf		
conical	0.5	20000	1000	9.409 023
conical	1.5	25000	1000	9.409 024
round	2.0	25000	1000	9.409 025

Microcentrifuge G-L



- **Membrane-Sealed Panel**
- **Also Suitable for PCR Strips**



Due to the material separation at medium speeds, this microcentrifuge is ideal for all types of separation processes, such as in molecular biology. It can be used with standard 1.5/2 ml tubes as well as with PCR strips. The lid opens automatically at the press of a button.

- High-performance motor
- With metal cover
- Starts only when the cover is firmly closed
- Direct and easy setting of speed, rotational speed and programmes via membrane keypad

Scope of delivery: Metal rotor and cover for 12 vessels, with a capacity of 1.5/2 ml

Specifications

Max. RCF:	16.500 x g
Max. speed:	15.700 rpm
Max. capacity:	12 x 1.5/2.0 ml yes
Timer:	65 W
Power consumption:	200 x 280 x 140 mm
Dimensions (W x D x H):	2.9 kg
Weight:	220 ... 230 V,
Power supply:	50/60 Hz
	IP 20

Protection class acc. to DIN EN 60529:

Type	PK	Cat. No.
G-L	1	4.664 755

Centrifuge Tubes, round bottom, DURAN®



To DIN 58970 part 2.
Glass Type I/neutral glass as per USP, EP and JP.
Autoclavable. Maximum loading:
4000 x g rcf.



Capacity	Diam.	Height	PK	Cat. No.
ml	mm	mm		
12	16	100	1	9.315 011
25	24	100	1	9.315 014
50	34	100	1	9.315 017
80	44	100	1	9.315 026

Compact Centrifuge Z 206 A



- **Easy to Handle**
- **Unbalance**
- **Detection Rotor Easy Change**



The Z 206 A accepts up to 12 x 15 ml conical and round bottom tubes. For tubes with smaller dimensions we offer several adapters. For larger volumes we offer an angle rotor for 6 x 50 ml conical and round bottom tubes.

- Microprocessor with LCD display
- Electrical lid lock
- Pre-selection of the rotor type
- Active imbalance-identification and cut off
- Manufactured according to international safety regulations, i.e. IEC 61010
- Noise level under 60 dBA at max. speed
- Easy change of rotors
- Distinct control panel

Scope of delivery: Compact centrifuge Z 206 A incl. angle rotor 12 x 15ml

Specifications

Max. RCF:	4427 x g
Max. speed:	6000 rpm
Max. capacity:	6 x 50 ml
Timer:	59 min 50 sec/10 sec increments 99 h 59 min/1 min increments
Power consumption:	100 W
Dimensions (W x D x H):	280 x 370 x 260 mm
Weight:	12 kg
Power supply:	230 V, 50/60 Hz

Description	PK	Cat. No.
Z 206 A	1	9.945 738

Magnetic Stirrer with heating LLG-uniSTIRRER 5, complete package

Universal magnetic stirrer with an outstanding price-performance ratio. Safety features include a **"hot" warning display** and a stirring function that continues to run until the plate temperature is below 50 °C, even when the device is switched off. A digital timer enables unattended operation and can be set from 1 min to 99 h 59 min. When the set time has elapsed, the unit stops automatically. An integrated control function offers precise control of the heated fluid temperature via a remote PT1000 temperature probe.

- Latest generation magnetic stirrer/hotplate
- Maintenance-free, brushless DC motor
- **Timer** (1 min to 99 h 59 min)
- Digital control and **backlit display**
- Stirrer and display can be controlled remotely via an RS232 interface
- Hot surface indicator
- Stainless steel plate with glass ceramic
- Sturdy metal housing
- Powerful stirring
- Connection for PT1000, integrated control function

Delivery includes: Magnetic stirrer with PT1000 probe, rod and holder

Specifications	Stirring
quantity (H ₂ O):	Speed
range:	Accuracy:
Magnetic bar:	Display:
Heating plate:	
	20 l
	100 1500 rpm
	±1 rpm
	80 mm
	LCD
	diam. 135 mm/ stainless steel plate with glass ceramic
Permissible ambient temperature:	5 40 °C
Temperature range:	ambient to 340 °C
Setting accuracy:	±0.1 °C
Control accuracy:	±0.2 °C
Heat output:	550 W
Safety temperature:	100 360 °C
Dimensions (W x D x H):	Weight:
Power supply:	2.8 kg
Protection class:	200 - 240 V, 50/60 Hz
	IP 42



- **Complete Set Hot-**
- **Warning Timer**
- **Illuminated Display**
-

Type	PK	Cat. No.
LLG-uniSTIRRER 5, with EU-plug	1	6.263 440
LLG-uniSTIRRER 5, with UK-plug	1	6.263 441