

# LABORTOPS

valid until 30th of June 2018



- Top Quality at a Low Price!
- Tested by an Independent Analytical Laboratory



Further details on page 3



Chromatography	2	pH Measurement	20
Cryogenic Accessories	4	Spray / Bunsen Burner	22
Cooling	6	Life Science	23
Sampling and Sample Storage	8	Electrophoresis	24
Desiccators	9	LLG Labware Instruments	26
Occupational Safety	10	Cleaning	28
Clean Room	12	Absorption	29
General Laboratory Consumables	14	General Laboratory Consumables	30
IKA Special	15	Liquid Handling	31
Water Baths / Heating Mantles	19		

NEW

### **LLG-Short Thread Vials ND9 and Fitting Sealing Caps**





Short Thread Vial ND9 with flat bottom and wide opening, clear glass. Sealing cap for ND9 Short Thread Vial.



Description	PK	Cat. No.
Vial, 1.50 ml, 11.6 x 32 mm Cap, blue, Septa silicone white / PTFE red		6.290 728 6.290 729

### **LLG Crimp Neck Vials ND11 and Fitting Crimp Caps**





Crimp Neck Vial ND11 with flat bottom and wide opening, clear glass. Crimp cap for ND11 Crimp Neck Vial.



Description	PK	Cat. No.
Vial, 1.50 ml, 11.6 x 32 mm Cap, aluminium, silver, Septa, natural rubber red-orange / TEF transparent		6.290 730 6.290 731

### **LLG-Crimping Tools ND11**



Description	PK	Cat. No.
****		
M. I	-	0.000.474
Manual crimper	1	9.003 471
Manual decapper	1	9.003 367
Tidridal decapper	_	3.003 307

### **LLG-Disposable Syringes, 3-part, 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
- Non-sterile, bulk packed in box of 500
- Defined safety stop to avoid accidental pull-out of plunger
- Suitable for all syringe filters with Luer connection

Capacity	Nozzle	PK	Cat. No.
,	type		
	type		
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
2	Luer-Lock	500	6.286 616
5	Luer-Lock	500	6.286 617
10	Luer-Lock	500	6.286 618
20	Luer-Lock	500	6.286 619

### **Disposable Syringes HSW** NORM-JECT®, 2-part, PP/PE, sterile





- PP barrel, with PE piston, with Luer or Luer-Lock nozzle
- Smooth flow, tight, high transparency barrel
- No rubber, styrene or DEHP, latex- and silicone-oil-free
- Pyrogen-free, PVC-free, non-toxic
- Sterile, individually blister strip packed
- Defined position of the plunger at volume "0" to feel when plunger is completely inserted
- Extended graduation for wider range of application
- Tested for use in HPLC
- Defined safety stop to avoid accidental pull-out of plunger

Capacity	Nozzle	PK	Cat. No.
. ,	type		
	сурс		
ml			
1: 1/100 (Tuberculin)	Luer-Slip	100	9.410 000
2 (3)	Luer-Slip	100	9.410 002
5 (6)	Luer-Slip	100	9.410 005
10 (12)	Luer-Slip	100	9.410 010
20 (24)	Luer-Slip	100	9.410 020
2 (3)	Luer-Lock	100	6.234 387
5 (6)	Luer-Lock	100	6.234 388
10 (12)	Luer-Lock	100	6.286 306
20 (24)	Luer-Lock	100	7.631 525

### **LLG-Syringe Filters SPHEROS**

Cost-efficient syringe filters for filtration of a broad variety of solvents and aqueous or inorganic solutions. These syringe filters cover most applications in HPLC, pharmaceutical, environmental, biotechnology and food and beverage testing laboratories.

- Robust housing made of Polypropylene
- Multifunctional Syringe filters with female Luer-Lock inlet and male Luer-Slip outlet
- Suitable for all syringes with Luer connection
- Sterile or non-sterile
- Sterile products in individual hard blister packaging







 Tested by an Independent Analytical Laboratory





### **Cellulose Acetate**

Hydrophilic membrane for filtration of aqueous liquids. Low protein binding capacity. Especially suitable for biological macromolecules, water soluble oligomers and polymers. With female Luer-Lock inlet and male Luer-Slip outlet. Sterile products in individual hard blister packaging.

Filter diam.	Pore	Housing	Sterile	PK	Cat. No.
	size				
mm	μm				
13	0.22	PP, red	-	100	6.272 802
13	0.45	PP, red	-	100	6.272 803
25	0.22	PP, red	-	50	6.272 804
25	0.45	PP, red		50	6.272 805
13	0.22	PP, red	+	100	6.272 806
13	0.45	PP, red	+	100	6.272 807
25	0.22	PP, red	+	45	6.272 808
25	0.45	PP, red	+	45	6.272 809

### **Nylon**

Hydrophilic membrane for filtration of aqueous and organic liquids with medium polarity. Very good chemical resistance to esters, alkaline solutions and alcohols. With female Luer-Lock inlet and male Luer-Slip outlet.

Filter diam.	Pore size	Housing	Sterile	PK	Cat. No.
mm	μm				
13	0.22	PP, pink	-	100	6.272 810
13	0.45	PP, pink	-	100	6.272 811
25	0.22	PP, pink	-	50	6.272 812
25	0.45	PP, pink	-	50	6.272 813

### **PTFE**

Hydrophobic membrane for filtration of non-polar liquids and gases. Very good chemical resistance to all kinds of solvents and alkaline solutions. With female Luer-Lock inlet and male Luer-Slip outlet.

mm µm 13 0.22 PP, white - 100 6.2	Cat. No.
13 0.22 PP, white - 100 6.2	
	.272 816
13 0.45 PP, white - 100 6.2	5.272 817
25 0.22 PP, white - 50 6.2	.272 818
25 0.45 PP, white - 50 6.2	5.272 819

# Cryovials with external screw thread, PP, sterile



Self-standing, conical. Increase storage capacity in mechanical and gaseous phase liquid nitrogen freezers. With writing area and graduation. Gamma radiation sterilized. One-handed operation possible. DNAse/RNAse free. Pyrogen-free and non-cytotoxic.



### With PP screw cap and silicone gasket, System 100.

Capacity	Ext. diam.	Height	PK C	at. No
ml	mm	mm		
1.5	12	48	25 9	.400 9



### With HDPE screw cap and sealing ring, Type 5000.

Ext. diam.	Height	PK
mm	mm	
13.5	38	25
13.5	48	25
13.5	92	50

### **LLG-Cryotubes, PP, sterile**





With star-shape in the screw cap, for automated capper/decapper. Temperature resistant down to -196 °C. **Not appropriate for operations in liquid nitrogen**. With marking area, fill line and graduations printed on the vial. Safe and precise handling of biotechnology materials. Bar-code printed on each tube. DNase/RNase free. Vials and caps are autoclavable at 121 °C.

- Homogeneous conception: single-body, single-turn screw cap
- Printed graduations for accurate measurements
- Large white area for writing specimen identification
- With stand ring

Packed in 2 bags of 50 tubes.

Capacity	Ext. diam.	Height	Thread		PK	Cat. No.
ml	mm	mm				
1.2	12.6	40.2	external	1	.00	9.401 160
2.0	12.6	45.6	external	1	.00	9.401 162
2.0	12.6	48.2	internal	1	.00	9.401 163
2.0	12.6	44.5	external*	1	.00	9.401 164
5.0	12.6	87.6	external	1	.00	9.401 166
5.0	12.6	90.3	internal	1	.00	9.401 168

\* Without stand ring

# Insert Cap Disks for LLG-cryotubes, PP





Cap-disk with star-shaped insert. For colour-coding of LLG-cryotubes and quick identification of the samples.

Colour	PK	Cat. No.
blue	1000	9.401 170
white	1000	9.401 171
yellow	1000	9.401 172
red	1000	9.401 174
green	1000	9.401 175

# LLG-Cryogenic Storage Boxes, plastic coated, white





Made of cardboard, plastic coated. Without divider. Please order inserts separately.

### BIG PACK

Dimensions (I x w x h) mm	PK	Cat. No.
133 x 133 x 50	10	6.290 869
133 x 133 x 75	10	6.290 878
133 x 133 x 100	10	6.290 879
136 x 136 x 50	10	6.290 870
136 x 136 x 50	10	6.290 873
136 x 136 x 50	10	6.290 877

# **LLG-Partition Inserts for Cryoboxes,** white





With compartment heights and formats as indicated.



Dimensions	Arrav	For tubes	PK	Cat. No.
	7.11.07		***	000.1101
$(l \times w \times h)$		diam.		
mm		mm		
133 x 133 x 30	9 x 9	ca. 13,0	10	6.290 871
100 100 00	40 40		40	C 200 07C
133 x 133 x 30	10 x 10	ca. 12,0	10	6.290 876
136 x 136 x 30	9 x 9	ca. 12,5	10	6.290 872
136 x 136 x 30	10 x 10	ca. 13,9	10	6.290 874
		,		
136 x 136 x 65	9 x 9	ca. 13,9	10	6.290 875
		/-		

# Cryogenic Boxes, 81 Well, PP, autoclavable



The boxes are made of polypropylene and can be used in 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.



Туре	Dimensions (I x w x h) mm	PK	Cat. No.
Blue	130 x 130 x 50	5	6.290 855
Green	130 x 130 x 50	5	6.290 856
Natural	130 x 130 x 50	5	6.290 857
Red	130 x 130 x 50	5	6.290 858
Yellow	130 x 130 x 50	5	6.290 859

# Cryogenic Boxes, SYSTEM 100™ 5026, PC, autoclavable







Stable, autoclavable PC. With printed grid on lid for cryovials and similar tubes up to 13.5 mm diameter. Temperature resistant from -196 to +121 °C. With grid numbers for reliable identification of individual samples. For tubes up to 12.5 mm diameter.

For tubes	Dimensions (I x w x h)	Array	PK	Cat. No.
ml	mm			
1/1.5	133 x 133 x 52	10 x 10	1	9.400 927

### **Deep Freeze Labels TOUGH-SPOTS®**





Pre-cut peel-off round labels for 0.5 and 1.5/2.0 ml microcentrifuge tube tops. Temperature resistant from -196 °C to 80 °C.

- Easy to write on: PVC labels accept writing from most lab markers.
- Convenient: Dispensing box assists in labelling individual tubes used in small experiments.

Colour	Diam.	For tubes	PK Cat. No.
	mm		
White	9.5	0.5 ml	1000 9.040 711
Blue	9.5	0.5 ml	1000 9.040 712
Green	9.5	0.5 ml	1000 9.040 713
Red	9.5	0.5 ml	1000 9.040 714
Yellow	9.5	0.5 ml	1000 9.040 715
White	13.0	1.5/2.0 ml	1000 9.040 716
Blue	13.0	1.5/2.0 ml	1000 9.040 717
Green	13.0	1.5/2.0 ml	1000 9.040 718
Red	13.0	1.5/2.0 ml	1000 9.040 719
Yellow	13.0	1.5/2.0 ml	1000 9.040 720

### Deep Freeze Labels Cryo-Babies®/Cryo-Tags®







### **High Temperature Resistance**

Temperature resistant from -196 °C to +150 °C. All labels withstand freezer temperatures down to -196 °C (liquid and vapour phase nitrogen), boiling water baths, autoclaving and moderate ovens (150 °C). Chemically inert labels resist most organic solvents and caustic agents. They adhere to most plastics, glass and metals without cracking, peeling or degrading. Made with a flexible, polyolefin label material and acrylic adhesive. Convenient dispensing box assists in labelling individual tubes used in small experiments. PVC labels accept writing from most lab markers including solvent resistant pens. Colour: white.

Туре	Dimensions (W x D) mm	For tubes	PK	Cat. No.
Cryo-Babies®	24 x 13	0.5ml tubes	1000	9.100 030
Cryo-Babies®	33 x 13	1.5/2.0ml tubes	1000	9.100 031
Cryo-Tags®	38 x 13	General application	1000	9.100 032

### Cool Packs Icecatch®-Gel







For temperature sensitive products used in the pharmaceutical, biotech, medical and food industries.

- Cooling gel
- Reliable cold storage through the use of immobilised coolant
- For repeat usage due to the use of robust PA/PE film
- Unobjectionable use in the pharmaceutical and food industries
- Phase transition 0 °C
- Spreading of heat absorption around the 0  $^{\circ}\text{C}$  range through the use of immobilised cooling gel
- Optimal price/heat absorption capacity relationship

Dimensions (W x D x H)	Weight	PK	Cat. No.
mm	g		
90 x 150 x 20	170	80	9.695 001
90 x 180 x 20	230	60	9.695 002
140 x 190 x 30	460	32	9.695 003
140 x 240 x 40	690	24	9.695 004

### Cool Packs Freez'Pack®





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



Туре	Dimensions (W x D x H)	Weight	PK	Cat. No.
	mm	g		
Freez'Pack® M5	150 x 80 x 25	200	10	6.290 795
Freez'Pack® M20	200 x 172 x 30	741	5	6.290 796
Freez'Pack® M30	255 x 210 x 30	1100	5	6.290 852

# Cooling Boxes, Icetime® Plus/Icetime® Plus Extreme

### CAMPINGAZ.

### **Cooling Bag Fold'N Cool™**





- Strong, high quality PU insulation
- Lockable lid, which clicks audibly when closing
- Handle for easy transport

### Icetime® Plus Extreme:

- Antimicrobial walls for smell, fungi and mould



The cooler Fold'N Cool $^{\rm m}$  30 L has a wide range of uses and can be laid flat after use. 1 large front pocket with zip, 2 carrying handles and hanging loop.

- 100 % polyester with PU coating on the back
- Easy-to-clean inner material, food-free PEVA
- Isolation: high-performance EPE foam
- Dark blue/grey

Туре	Capacity	External dimensions (W x D x H)	Weight	PK	Cat. No.
	litres	mm	g		
Icetime® Plus	26	407 x 313 x 424	2400	1	6.284 954
Icetime® Plus	30	410 x 310 x 460	2600	1	6.284 527
Icetime® Plus Extreme	29	410 x 310 x 460	2700	1	7.645 874

Capacity	External dimensions (W x D x H)	Weight	PK Cat. No.
litres	mm	g	
30	390 x 250 x 380	760	1 6.266 054

### **Isolation Box Icecatch®**





The standard thermo boxes made of Styrofoam® for temperature sensitive products used in the Pharmaceutical and food industries which have to be stored and transported within a specific temperature spectrum. In combination with the Icecatch cooling elements the perfect solution for the transport of temperature sensitive products.

Colour: white Weight of foam: 20 g/l.



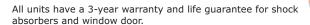
Capacity	External dimensions (W x D x H)	Wall thickness	PK	Cat. No.
L	mm	mm		
3.1	260 x 170 x 190	30	5	6.290 853
9.1	335 x 255 x 230	30	5	6.290 854

### Laboratory Mixers, BagMixer®



For sample preparation with easily adjustable paddle system. The BagMixer® is available in 3 sizes and blends all sample types prior to their microbial analysis. Thanks to their unique adjustable paddle system the blending chamber can be adjusted to the sample volume. Combined with the variable speed, a higher bacterial recovery rate is achieved. All BagMixer® units are fitted with a timer. Constructed in stainless steel. The fully opening door enables easy cleaning.

BagMixer® 400 P with stainless steel door. BagMixer® 400 W and 400 CC with see through glass door.





Туре	Volume ml	External dimensions (W x D x H) mm	PK	Cat. No.
BagMixer® 400 P	50 to 400	260 x 390 290	1	6.204 551
BagMixer® 400 W	50 to 400	260 x 390 290	1	6.224 287
BagMixer® 400 CC	50 to 400	260 420 265	1	9.570 098

### **Laboratory Mixer Bag Rotator Genie™**





### **Gentle and Efficient Mixing**

Powerful and rugged rotator for effective mixing of transfer packs or random sealed bags, maintaining platelets and other sample components in suspension without risk of damage.

- Wire basket holds up to 40 standard 300 ml transfer packs (5 packs per compartment)
- Specialized basket design prevents bag movement
- Gentle yet thorough mixing Bags rotate "end-over-end" with a fixed speed of 3 RPM regardless of the number of bags
- Heavy and durable base prevents unit from tipping over

### Specifications

Speed: 3 rpm Capacity: 40 x 300 ml Dimensions (W  $\times$  D  $\times$  H): 252 x 508 x 267 mm

7.7 kg Weiaht:

Туре	PK	Cat. No.
Bag Rotator Genie™, EU plug	1	6.272 988

### Blender Bags, BagSystem®

Sample bags for various applications. Available in different sizes, with or without filter function for keeping back particles.

BagPage® bags are eqipped with a membrane filter.

BagFilter® P bags are additionally divided: one area for the sample and one for taking the filtrated liquid.

RollBag® bags are equipped with a reinforced opening and therefore suitable for sample transportation and use in the BagMixer® (or other homogenizers).

BagLight® bags are filterless single bags.



Туре	Description	Width	Height	PK	Cat. No.
		mm	mm		
BagLight® 100	plain bag, sleeve 25	110	185	500	9.570 075
BagLight® 400	plain bag, sleeve 25	175	300	1000	9.570 097
BagLight® 3500	plain bag, sleeve 25	380	510	500	9.570 077
BagFilter® 400 P	side filter bag, sleeve 25	190	300	500	9.570 078
BagFilter® 3500 P	side filter bag, sleeve 10	380	510	100	9.570 079
BagPage® 100	full-size filter bag, sleeve 25	180	95	500	9.570 080
BagPage® Plus 400	full-size filter bag, sleeve 25	190	300	500	9.570 081
BagPage® 3500	full-size filter bag, sleeve 10	380	510	100	9.570 082
RollBag® 1300 ml	plain single bags	175	290	500	9.570 096













Type	Description	PK.	Cat. No.
BagOpen® 80/100	bag opener	1	9.570 083
BagOpen® 400	bag opener	1	9.570 084
BagOpen® 3500	bag opener	1	9.570 085
BagPipet®	pipette with 3 fixed graduations: 0.1, 0.9, 1.0 ml	1	9.570 091
BagTips® Regular	straws for BagPipet®, 19 cm, sterile	1000	9.570 092
BagTips® Jumbo	straws for BagPipet®, 24 cm, sterile	1000	9.570 093

### **Desiccator Star, PMMA**





Includes four transparent acrylic shelves, tray, hygrometer and desiccant, with positions for up to 26 shelves and stackable.

### **Specifications**

Panels:	clear
Material:	PMMA
Temperature resistance:	-20 °C to + 70 °C
Maximum all-over load per shelf:	10 kg
Total all-over load:	30 kg

Type	Volume	External dimensions (W x D x H)	Weight	PK	Cat. No.
	litres	mm	kg		
Star	42	310 x 375 x 525	7.0	1	9.042 651

### **Desiccators Auto Dry Box**





Automatic drying and storage without desiccant. Ideal for the long-term storage of e.g. Reference samples, electronic components or optical instruments under defined moisture conditions. Relative humidity adjustable in 3 steps between 25 % and 55 % relative humidity, very quiet operation. Includes 1 to 3 shelves, lockable glass door and analogue hydrometer. Model RT-48C with pull-out shelf.

### Specifications

Max. load shelfs: 10 kg Power: 220-240 V

Туре	Volume	External dimensions (W x D x H) mm	Max. number shelves	PK Cat. No.
HD-40GD	32	340 x 350 x 390	1	1 6.286 116
RT-48C	46	312 x 384 x 470	1	1 6.286 117
AD-75	72	400 x 412 x 555	3	1 6.286 118
AD-106	114	400 x 412 x 835	3	1 6.286 119

### LLG-Desiccant Drying Agents, silica gel, self-indicating

With orange indicator colour. Grain size 1 to 3 mm or 2 to 5 mm. The gel is naturally orange when active and at a 6 weight-% saturation level. As the gel adsorbs moisture, the colour develops into a dark shade. The range of application is identical with that of white silica gel. The colour change, however, represents a great advantage since it allows monitoring of the saturation level. The gel can be regenerated when heated at a temperature of maximum 120 °C until it turns to its original orange colour.

Adsorption capacity RH 2 (RH : residual moisture) RH 3

RH 20 % 12 weight % RH 35 % 20 weight % RH 50 % 27 weight % RH 90 % 40 weight %





Granulation	Package contents	PK	Cat. No.
1 to 3 mm	Tin, 1 kg	1	9.042 584
1 to 3 mm	Bucket, 3 kg	1	9.042 585
1 to 3 mm	Bucket, 8 kg	1	9.042 586
2 to 5 mm	Tin, 1 kg	1	9.042 581
2 to 5 mm	Bucket, 3 kg	1	9.042 582
2 to 5 mm	Bucket, 8 kg	1	9.042 583

# Disposable Gloves TouchNTuff®, Nitrile, Powder-Free





- 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.
- It contains no natural rubber proteins, which means no risk of Type I allergies for the wearer. Primary skin irritation studies and Insult Patch Tests have also shown no evidence of risk from irritation or allergic contact dermatitis.
- With a unique "Thin Nitrile Technology" formulation, this glove offers easy donning and strong grip in wet or dry conditions.
- Highly versatile and suitable for many different uses
- AQL 1.5 (EN374)
- Cat. III Low Chemical resistant.
- 100 % nitrile, green, powder-free, 0.1 mm thick.
- Supplied in dispenser box containing 100 gloves.

TouchNTuff® is anti-staticity tested (EN 1149-1 & 1149-3) and meets the requirements defined in EN 1149-5

Size	Length	PK	Cat. No.
	mm		
S (6 to 7)	240	100	9.005 400
M (7 to 8)	240	100	9.005 401
L (8 to 9)	240	100	9.005 402
XL (9 to 10)	240	100	9.005 403

## **Disposable Gloves Pearl, Nitrile, Powder-Free**





### 10 Boxes of 100 Gloves

Disposable gloves in different colours

- Nitrile gloves with rolling edges
- Micro-roughened finger tips
- Suitable for handling food
- Non-sterile
- AQL 1.5 (EN455), T. 1-3
- Cat. III Low Chemical resistant
- Powder-and latex-free
- Supplied in 10 dispenser boxes containing 100 gloves



Туре	Size	Colour	PK	Cat. No.
COBALT PEARL	XS	cobalt blue	1000	6.290 798
COBALT PEARL	S	cobalt blue	1000	6.290 799
COBALT PEARL	М	cobalt blue	1000	
COBALT PEARL	L	cobalt blue	1000	
COBALT PEARL	XL	cobalt blue	1000	
BLACK PEARL	XS	black	1000	6.290 803
BLACK PEARL	S	black	1000	6.290 804
BLACK PEARL	M	black	1000	6.290 805
BLACK PEARL	L	black	1000	6.290 806
BLACK PEARL	XL	black	1000	6.290 807
OPAL PEARL	XS	turquoise	1000	6.290 808
OPAL PEARL	S	turquoise	1000	6.290 809
OPAL PEARL	M	turquoise	1000	6.290 810
OPAL PEARL	L	turquoise	1000	6.290 811
VIOLET PEARL	XS	violet	1000	6.290 812
VIOLET PEARL	S	violet	1000	6.290 813
VIOLET PEARL	M	violet	1000	6.290 814
VIOLET PEARL	L	violet	1000	6.290 815
VIOLET PEARL	XL	violet	1000	6.290 816
PINK PEARL	XS	pink	1000	6.290 817
PINK PEARL	S	pink	1000	6.290 818
PINK PEARL	M	pink	1000	
PINK PEARL	Ĺ	pink	1000	6.290 820
MINT PEARL	XS	mint	1000	
MINT PEARL	S	mint	1000	
MINT PEARL	М	mint	1000	6.290 823
MINT PEARL	Ĺ.	mint	1000	
MINT PEARL	XL	mint	1000	6.290 825
PEACH PEARL	XS	apricot	1000	6.290 826
PEACH PEARL	S	apricot		6.290 827
PEACH PEARL	М	apricot	1000	6.290 828
PEACH PEARL	L	apricot	1000	
RED PEARL	XS	red	1000	6.290 830
RED PEARL	S	red	1000	6.290 831
RED PEARL	M	red	1000	6.290 832
RED PEARL	L	red	1000	6.290 833
RED PEARL	XL	red	1000	
KED FEAKL	ΛL	ieu	1000	0.230 634

# LLG-Safety Eyeshields basic + Very Lightweight - only 23 g

- CE approved to EN 166 and EN 170
- Economic Safety Eyeshields ideal for essential protection
- 180° field of vision
- Frame made of tested hypo-allergenic material
- 100 % UV protection (up to 380 nm)
- Very light
- Weight: 23 g

Colour	Lens	PK	Cat. No.
Clear	Clear, uncoated, 2-1.2 U 1 F CE	10	6.290 868

# Respirators Aura™ 9300+ Series, Folding Masks



Particle masks Series  $3M^{\text{\tiny{TM}}}$  Aura<sup>TM</sup> 9300+ offer effective respiratory protection in industrial applications where workers are exposed to dust and/or non-volatile liquid particles.

### Features and advantages of the Aura™ 9300+ series

- Clear vision: Embossed top panel helps reduce fogging of eyewear
- Low breathing resistance filter technology combines the benefits of 3M's electret particulate filter material with advanced low breathing resistance filter technology
- resistance filter technology
   3M™ Cool Flow™ Valve effectively removes heat build up to provide a cooler and more comfortable wear
- Innovative chin tab improves ease of donning and adjustment to help achieve a comfortable fit
- Ingenious 3-Panel design fits a wide range of face shapes and sizes to accommodate your facial movements
- Coloured headbands for easy identification: yellow for FFP1, blue for FFP 2 and red for FFP3
- Flat-fold; easy to store when not in use
- Hygienic individual packaging helps to protect the respirator from contamination before use

Authorization: EU construction test (CE mark)
Testing standards: EN 149:2001 + A1:2009

Туре	Description	Protection- level	PK	Cat. No.
Aura™ 9310+	without valve	FFP1	20	9.005 670
Aura™ 9312+	with Cool-Flow valve	FFP1	10	9.005 671
Aura™ 9320+	without valve	FFP2	20	9.005 672
Aura™ 9322+	with Cool-Flow valve	FFP2	10	9.005 673
Aura™ 9330+	without valve	FFP3	20	9.005 674
Aura™ 9332+	with Cool-Flow valve	FFP3	10	9.005 675

## Mini-Ultrasonic Cleaner LLG-uniSONIC 1





- Small and Compact
- For Glasses and Laboratory Parts

For convenient cleaning of goggles or smaller laboratory instruments. Eco-friendly, only needs warm water. By ultrasonic sound millions of small air bubbles are generated. Combined with very high pressure, these can achieve a fast, efficient and effortless cleaning.

- Ready to use, no assembly required
- Automatic 3-minute-operation can be stopped anytime
- Removable lid
- Stainless steel tank

### Specifications

Capacity: appox. 340 ml Frequency: 45 kHz Cleaning Performance: 30 Watt

Outer Dimensions (W x D x H) approx.:  $200 \times 115 \times 115 \text{ mm}$  Dimensions tank (W x D x H) approx.:  $155 \times 80 \times 40 \text{ mm}$ 

Weight: 630 g

Power supply: 220 - 240 V, 50 Hz



Туре	PK	Cat. No.
LLG-uniSONIC 1	1	6.263 560

### **Hood for Cleanroom, polyester**





- 100 % polyester
- Washable
- Suitable for cleanroom class ISO 5

Size	Colour	PK	Cat. No.
C /14	19		4 650 060
S/M	white	1	4.659 060
L/XL	white	1	4.659 061
S/M	blue	1	4.659 062
L/XL	blue	1	4.659 063

# Cleanroom Gloves Nitrilite® Silky, nitrile, powder-free









- High Chemical and Puncture Resistance
- For a Wide Range of Industrial Applications

Produced in a controlled powder-free environment, they feature low levels of extractables and particles for excellent product protection. The 100 % nitrile polymer prevents the risk of allergies related to latex proteins for the wearer. It also provides exceptional chemical and puncture resistance for further safety. All this, added to optimal electrical properties, makes Nitrilite® gloves ideal for a wide range of industrial sectors.

- AQL of 1.5
- Cat. III

Packaging: 50 gloves vacuum sealed in an unprinted polybag, two bags of 50 gloves per master polybag. All packaging and labeling is printed with IPA-resistant ink. The gloves are double bagged for superior contamination control. Packed in an ISO Class 5 cleanroom.



# Size Length PK Cat. No. cm S 30 100 6.253 290 M 30 100 6.253 291 L 30 100 6.253 292 XL 30 100 6.253 293 XXL 30 100 6.252 293 XXL 30 100 6.262 160

# Overall for Cleanroom, with lateral zip, polyester





The 100 % polyester overall is available in two different colour versions. Falling of hair, dust and other particles from the overall is prevented by double sleeves. In the area of the sleeves, the waist and the lower hem, rubber bands are incorporated. Oblique lateral zip. Washable. Suitable for cleanroom class ISO 5. Surface resistance:  $10^{\rm o}$  -  $10^{\rm s}\Omega$ .

Size	Colour	PK	Cat. No.
XS	white	1	4.659 040
S	white	1	4.659 041
M	white	1	4.659 042
L	white	1	4.659 043
XL	white	1	4.659 044
XS	blue	1	4.659 045
S	blue	1	4.659 046
M	blue	1	4.659 047
L	blue	1	4.659 048
XL	blue	1	4.659 049

### **Adhesive Mats Sticky Mat**





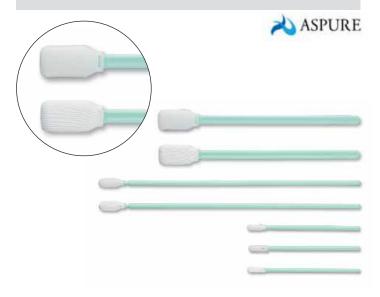


The Sticky Mat provides a fast, convenient, reliable way to clean shoe soles or other items before entering a clean and sanitary area. Sticky Mats significantly reduce traffic-borne contaminants.

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. A clear release sheet protects the top sheet of the sticky mat until it is ready to use. The corner tabs are consecutively numbered to show the number of remaining sheets.

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.)





Cleanroom Swabs with polypropylene shaft. Head made of almost particle-free polyurethane or polyester, rounded head.

Material shaft: PP Cleanroom class: ISO 5

Length	Head size	Material Head	PK	Cat. No.
mm	mm			
125	12.7 x 25	PU-foam	100	4.659 074
125	12.7 x 25	Polyester	100	4.659 075
162	6.8 x 16.8	PU-foam	100	4.659 076
162	6.8 x 16.8	Polyester	100	4.659 077
70	4.0 x 12.0	Polyester	100	4.659 078
70	3.5 x 11.0	PU-foam	100	4.659 079
70	3.5 x 11.0	Polyester	500	4.659 080

### **Cleanroom Wipes, Polyester**



Cleanroom wipes, knitted, 229 x 229 mm, laser cut. Extremely low particle number and evaporation residues, minimum formation of dust and lint from the cutting edges due to the use of laser cutting technique. The use of polyester long fibers prevents the generation of lint. Suitable for cleanroom class ISO 5.

150 wipes per bag. Packed in double layer foil.

Description	Colour	PK	Cat. No.
D   640   620   1	1.9	4.0	6 272 244
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
Frame for Cleanroom mats Sticky Mat	grey	1	6.272 245

Dimensions	Cleanroom Class	PK	Cat. No.
mm			
229 x 229	ISO 5	150	4.659 070



### • Extra Wide Range of Heights: 51-78 cm

### Infinitely Adjustable

The LLG-Lab Standing Rest is the practical solution for laboratory workplaces where people have to sit as well as stand. To cope with this, it has a particularly wide range of heights that can be adjusted steplessly. Its ergonomic backrest and non-slip wave seat surface ensure that you feel completely safe and comfortable when you sit on it.

- Resistant to all of the usual disinfectants and chemicals.
- Seat upholstery made of soft-touch PU foam (extremly robust, washable and antibacterial) in black.
- Adheres to biosafety level BSL1 and BSL2 of the Directive for Biological Agents.
- GMP-conform.
- Rippled wave seat surface: Slip-resistant, it offers very good support and excellent ventilation.
- Integrated backrest: Best support of the lumbar region.
- Its low weight provides maximum mobility and easy handling in the laboratory.
- Seat height adjustment by gas spring.
- Seat swivel range of 360°.
- Solid black plastic star base, flat design.
- The chrome-plated foot ring provides support through the wide tread area and can be easily and quickly adjusted in height.

## Laboratory Trolley Clax Mobil comfort with Box



### **Ideal for Quick Transport**

Stable, multi-use trolley with parking brake. Push-button collapsing/unfolding.

Made in Germany.

Load capacity:

Dimensions

Unfolded (L x W x H):  $900 \times 580 \times 1020 \text{ mm}$ Collapsed (L x W x H):  $710 \times 550 \times 190 \text{ mm}$ Folding box dimensions

Inner dimensions (W x D x H):  $335 \times 495 \times 258$  mm Outer dimensions (W x D x H):  $350 \times 500 \times 260$  mm

Type	PK	Cat. No.
Laboratory Trolley, incl. 1 folding box, 46 litres Folding box single, 46 litres		9.148 100 9.148 099

### **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.

Description	Seat height adjustment	PK	Cat. No.
	mm		
with Glides	510-780	1	6.288 956
with Glides and Foot Ring	510-780	1	6.288 957

Dimensions (W x D)	Min. height	Max. height	Max. stat.	
mm mn			kg	
00 x 200	60	270	25	1

### **Overhead Stirrers MICROSTAR control**

### **Overhead Stirrers MINISTAR control**











- **Temperature Measurement in Medium**
- **Vibration Detection**
- **With Timer**

Powerful overhead stirrers in a compact design for special applications.

- Hardened glass display for maximum visibility and chemical resistance
- Vibration sensors detect deviations from permissible thresholds and automatically stop the process
- USB interface, e.g. for documenting parameters or installing firmware updates
- Bluetooth interface
- Easy connection to labworldsoft®
- Temperature measurement directly in the medium with PT1000 temperature sensor
- Temperature reading on display
- Chemical resistant housing
- Continuously adjustable speed
- Microprocessor-controlled speed governor for constant rotational speed, even with changes in viscosity
- Key lock function
- Integrated timer
- 10 years warranty

Scope of supply: Overhead stirrers incl. Temperature sensor PT1000

**Specifications** 7.5 control // 15 control // 30 control

Stirring quantity max. (H<sub>2</sub>O): 5 | // 10 | // 20 |

Max. viscosity: 4000 mPas // 8000 mPas // 20000 mPas

Motor rating input/output: 32 W/22 W

Speed range: 0/30 to 2000 rpm// 0/30 to 1000 rpm//

0/30 to 500 rpm Temperature range min./max.: -10 to 350 °C

Temperature accuracy:  $\pm 0.5 \, \text{K}$ 

Max. torque: Display: LCD

7.5 Ncm // 15 Ncm // 30 Ncm

Chuck range: 0.5 to 8 mm Dimensions (W  $\times$  D  $\times$  H):

60 x 136 x 173 mm 1.18 kg // 1.26 kg // 1.26 kg

Weight: Protection class DIN EN 60529: IP 54

Power supply: 100-240 V, 50/60 Hz **Specifications** 20 control // 40 control // 80 control

Stirring quantity max. (H<sub>2</sub>O): 15 | // 25 | // 50 |

10000 mPas // 30000 mPas // 60000 mPas Max. viscosity:

60 W/46 W Motor rating input/output:

0/50 to 2000 rpm// 0/30 to 1000 rpm// Speed range:

0/30 to 500 rpm Temperature range min./max.: -10 to 350 °C

Temperature accuracy: ±0.5 K Max. torque: 7.5 Ncm // 15 Ncm // 30 Ncm

Display: LCD Chuck range: 0.5 to 8 mm Dimensions (W  $\times$  D  $\times$  H): 70 x 154 x 193 mm

Weight: 1.56 kg // 1.72 kg // 1.72 kg Protection class DIN EN 60529: IP 54

100-240 V, 50/60 Hz Power supply:

Type	Cat. No.
MICROSTAR 7.5 control 1	6.310 242
MICROSTAR 15 control 1	6.272 998
MICROSTAR 30 control 1	6.310 244

Туре	PK	Cat. No.
MINISTAR 20 control		6.289 511
MINISTAR 40 control MINISTAR 80 control		6.310 245 6.310 246

### Magnetic Stirrer IKA Plate (RCT digital)



With glass surface. The control can be optimized by regular firmware updates. The integrated timer and counter function supports the control of kinetics and sensitive reactions. The IKA SmartTemp® function protects users intelligently and predictably.

- Alteration of the stirring direction possible
- Heating plate made from aluminium alloy for optimum heat transmission
- Clearly arranged LCD display
- Housing made of glass for optimum cleaning and chemical resistance
- Temperature control directly in the medium with PT1000 temperature
- Adjustable safety circuit up to 360 °C
- IKA SmartTemp® function prevents users from burn injuries
- Timer
- USB-/RS232 interface



### **Specifications**

Max. stirring quantity  $(H_2O)$ : Motor rating input/output:

Speed range: Max. stirring bar length: Heating power: Heating rate (1 I H<sub>2</sub>O):

Temperature range: Heat control accuracy at 100 °C:

Safety circuit:

Connection for ext. temp. sensor: Control accuracy with sensor

PT1000, ETS-D5/ETS-D6: Set-up Plate Materal: Set-up Plate Dimensions:

Protection class acc. to DIN EN 60529:

Overall dimensions (W x D x H):

Weight:

Power supply:

20 I 50 W/9 W 50 to 1500 rpm 80 mm 600 W 7 K/min

ambient +10 to 310 °C

±5 K

50 to 360 °C

PT1000, ETS-D5, ETS-D6

±0.5 K/±0.2 K Aluminium alloy diam. 135 mm

IP 42

160 x 270 x 85 mm

220-230/115/100 V, 50/60 Hz



- **Changeable Rotation Direction**
- PT1000 Included
- **With Timer**

Туре	PK	Cat. No.
IKA Plate RCT digital	1	6.286 692

### **Magnetic Stirrer C-MAG HS 7 control**



The magnetic stirrer C-Mag HS 7 control has a square top made of ceramic which offers excellent chemical resistance.

The C-Mag HS 7 control improves over time with regular firmware updates. Control of kinetics and sensitive reactions are supported by the integrated timer and counter function.

- Powerful motor
- Alteration of the stirring direction possible
- Clearly arranged LCD display
- Temperature control directly in the media with PT1000 temperature
- Adjustable safety circuit up to 650 °C
- IKA SmartTemp® hot surface warning to prevent burns
   Elevated control panel for protection against leaking liquids
- USB/RS232 interface
- 10 years warranty





### **Specifications**

Max. stirring quantity  $(H_2O)$ : Motor rating input/output:

Speed range: Max. stirring bar length: Heating power: Heating rate (1 I H<sub>2</sub>O):

Temperature range:

Heat control accuracy at 100 °C:

Safety circuit: Connection for ext. temp. sensor: Control accuracy with sensor PT1000,

ETS-D5/ETS-D6:

Set-up plate Material: Set-up plate Dimensions (W  $\times$  D): Protection class acc. to DIN EN 60529:

Overall dimensions (W  $\times$  D  $\times$  H):

Weight:

Power supply:

20 I 1020 W/9 W

50 to 1500 rpm 80 mm 1000 W

5 K/min ambient +5 to 500 °C

±5 K

100 to 650 °C

PT1000, ETS-D5, ETS-D6

±0.5 K/±0.2 K

ceramic 180 x 180 mm

IP 21

220 x 354 x 88 mm

220-230/115/100 V, 50/60 Hz



- Changeable Rotation Direction
- PT1000 Included
- With Timer

Cat. No. Type 6.288 285 C-MAG HS 7 control

### Batch Mills Tube Mill control/Tube Mill 100 control

Suitable for disposable and reusable grinding chambers. By using the disposable grinding chambers the possibility of cross-contamination and the effort of cleaning is eliminated. The mills can be used for hard (Mohs hardness up to 5), dry and brittle materials. They are especially suitable for grinding seeds, such as corn and wheat. The operation of the mill is only possible with properly closed grinding chamber and closed lid, for increased safety.

- Clearly arranged, multilingual OLED-display
- USB interface for control and documentation of all the parameters
- Interval operation available
- Stepless adjustable speed
- Adjustable safety speed and time
- Programmable and storable test conditions
- Reproducible test results
- Timer
- Easy operation with touch keypad
- Dust proof sealed housing
- Quiet operation

### Scope of supply:

Tube Mill control: incl. 1  $\times$  disposable 40 ml grinding chamber and a multiple use 40 ml grinding chamber

**Tube Mill 100 control:** incl.  $1 \times 100 \times$ 





- **Prevents Cross-Contamination**
- Low Cleaning Effort
- With Timer

Specifications Tube Mill control // Tube Mill 100 control

Operating principle: cutting/impact
Motor rating input/output: 100/80 W
Speed: 5000 to 25000 rpm

Chamber volume:

40 ml // 100 ml
Timer:

5 s to 3 min
Interval timer:

5 s to 60 s
Overload protection:

Circumferential speed:

Max. feed hardness:

40 ml // 100 ml
yes
65 s to 60 s

Yes
65 m/s
5 Mohs

Dimensions (W x D x H): 180 x 300 x 170 mm // 180 x 300 x 212 mm

Weight: 2.7 kg // 2.8 kg

Protection class acc: to DIN EN 60529: IP 30

Power supply: 220-240 V, 50/60 Hz





9.737 791

Туре	PK	Cat. No.
Tube Mill control	1	9.737 790
Tube Mill 100 control	1	7.644 727

### Accessories for Batch Mill Tube Mill control/Tube Mill 100 control

Description	For	PK	Cat. No.
Disposable grinding chamber, 40 ml	Tube Mill control, Tube Mill 100 control	10	9.737 791
Disposable grinding chamber, 40 ml, sterile	Tube Mill control, Tube Mill 100 control	10	4.652 716
Disposable grinding chamber, 40 ml, big pack	Tube Mill control, Tube Mill 100 control	100	6.260 495
Disposable grinding chamber, 100 ml	Tube Mill 100 control	10	6.285 802
Disposable grinding chamber, 100 ml, sterile	Tube Mill 100 control	10	6.310 247
Disposable grinding chamber, 100 ml, big pack	Tube Mill 100 control	50	7.644 728

### **Digital Water Baths**









- Precise & Good Value
- Easy to Use
- Wide Range of Products

The PolyScience water baths are characterized by a user-friendly display, high precision, simple operation and an excellent price-performance ratio. The inclined display makes the readability and usage very comfortable. The user-friendly Digital Temperature controller features three temperature pre-sets, for one-touch selection of frequently used setpoints, plus a user settable high limit alarm that alerts if the bath temperature exceeds pre-set limits.

- Displays actual and set point temperature simultaneously
- Three push-button pre-sets for frequently used temperatures
- Integrated timer
- Calibration capability
- Five Reservoir sizes from 2 to 28 litres
- Reservoir drain (10, 20 and 28 liter baths)
- Primary and automatic safety thermostats
  Stainless steel tank with hinged gable lid
- 3.25" illuminated LCD-Display
- Maximum Ambient Temperature: 40 °C
- Sample tray included
- Temperature Range: Ambient: + 5 to 99 °C
- Temperature Uniformity: ±0.2 °C
- Temperature Stability: ±0.1 °C

Scope of supply: Wather bath with lid.



volume	External	Internal	Power	Р
	dimensions	dimensions	consumption	
	(W x D x H)	(W x D x H)	·	
litres	mm	mm	W	
2	229 x 305 x 343	109 x 99 x 152	120	
5	368 x 305 x 343	274 x 127 x 152	360	
10	393 x 432 x 393	269 x 295 x 152	1000	
20	572 x 432 x 393	432 x 241 x 152	1400	
28	572 x 432 x 457	432 x 241 x 203	1400	

### LabHEAT®- Heating Mantles Series KM-G





LabHEAT®- Heating mantles for flasks, round bottom. Flexible glass yarn heating element, outer jacket in glass silk, with diam. 60 mm, bottom out-let from 500ml. Max. heating element temperature 450 °C, 1.5 m power supply (earthed) cable with heating-zone switch and RCD (residual current detection), nominal voltage 230 V AC.

Capacity	Flask diam.	Rating	Heating zones	PK Cat. No.
ml	mm	W		
100	64	120	1	1 9.642 403
250	85	180	2	1 9.642 404
500	105	250	2	1 9.642 405
1000	131	450	2	1 9.642 406

### **LLG-Indicator Paper Sticks**



### Affordable!







Box of 100 indicator paper sticks of 80 mm length.

Range	PK	Cat. No.
pH		
0 - 14	100	9.129 807

### **LLG-Universal Indicator Paper, strips**



Vial with snap lid of 100 pre-cut indicator paper strips, of 65 mm length.  $\,$ 

Range	PK Cat. No.
- tango	111 00011101
wII	
pH	
1 - 14	100 9.129 805



### **LLG-Universal Indicator Paper, rolls**





Plastic dispensing reel with 1 roll of 5 m.

Range	PK	Cat. No.
pH		
1 - 11	1	9.129 800
1 - 14	1	9.129 802

### **Multiparameter Pocket Tester Eutech Elite PCTS**

The Elite PCTS pocket tester simultaneously displays pH, conductivity/TDS/salinity with temperature. With leakproof, transparent wide-base cap for upright standing with fill line indicator.

- 1-push calibration
- Large 4-digit double line display
- Backlit graphic display
- Auto-hold readings
- Easy-to-operate, intuitive keypad
- Auto-off

### Scope of supply:

Elite PCTS: Tester incl. batteries, lanyard Elite PCTS Kit: Tester incl. batteries, lanyard, soft carry case, buffer sachet set (pH 4.01, 7.00, 10.01, deionized water, 5 x 20 ml each), CTS conductivity Standard Sachets  $(5 \times 1413 \mu \text{S/cm KCl})$  and  $5 \times 2764 \mu \text{S/cm KCl})$ 



# ď

6.290 135

### **Specifications**

Resolution:

Accuracy:

pH range: -1.00 to 15.00 pH Resolution: 0.01 pH  $\pm 0.01 \text{ pH} + 1 \text{ LSD}$ Accuracy: point to point Calibration type:

0.0 to 200.0 μS/200 to 2000 μS/ Conductivity:

2.00 to 20.00 mS  $0.1~\mu\text{S}/1~\mu\text{S}/0.01~\text{mS}$ ±1 % full scale

Calibration points: 1 to 3 points 0.0 to 100.0 ppm/100 to 1000 ppm/ TDS:

0.10 to 10.00 ppt 0.1 ppm/1 ppm/0.01 ppt Resolution: ±1 % full scale

Accuracy: Calibration points: 1 to 3 points 0.00 to 10.00 ppt Salinity: 0.10 ppt Resolution: Accuracy: ±1 % full scale Calibration points: 1 point Temperature range: 0 to 60.0 °C 0.1 °C Resolution:

0 to 50 °C ( $\pm 0.5$  °C + 1 LSD) Accuracy: 50 to 60 °C (±1.0 °C + 1 LSD)

5 to 45 °C Operating temperature:

5 to 85 %, non-condensing Relative humidity:

Temperature compensation: ATC

Dimensions (W x L x H): 200 x 45 x 36 mm 160 g

Weight:

Power supply: 4 AAA 1.5 V batteries

Protection class: IP 67

### **pH Pocket Tester** Eutech Elite pH/Elite pH Spear







Simultaneously measure pH and temperature with a pocket sized tester designed to provide accurate measurements on the go for a variety of applications. The Pocket Tester Elite pH has a leakproof, transparent wide-base cap for upright standing with fill line indicator.

The Elite pH Spear pocket tester features a spear tip open pore sensor. This rugged and user-friendly tester is ideal for direct measurement of solid or semi-solid samples.

- 1-push calibration
- Large 4-digit double line display
- Backlit graphic display
- Auto-hold readings - Easy-to-operate, intuitive keypad
- Auto-off

### Scope of supply:

Elite pH and Elite pH Spear: Tester incl. batteries and lanyard Elite pH Kit and Elite pH Spear Kit: Tester incl. batteries, laynard, soft carry case, buffer sachets set (pH 4.01, 7.00, 10.01, deionized water, 5 x 20 ml each)

### Specifications

pH range: -1.00 to 15.00 0.01 pH Resolution: ±0.01 pH ±1 LSD Accuracy: pH calibration points: 1 to 3 points Temperature range: 0 to 60 °C Resolution: 0.1 °C

Accuracy: 0 to 50 °C ( $\pm 0.5$  °C + 1 LSD)

5 to 45 °C Operating temperature:

Relative humidity: Temperature compensation Elite

pH/pH Spear:

Dimensions (W x L x H) ElitepH/

pH Spear:

Weight Elite pH/pH Spear:

Power supply:

Protection class:

50 to 60 °C (±1.0 °C + 1 LSD)

5 to 85 %, non-condensing

ATC/MTC

200 x 45 x 36 mm/ 280 x 45 x 36 mm 160 g/150 g

4 x AAA 1.5 V batteries

IP 67

Type	PK	Cat. No.
./		
Elite PCTS	1	6.290 135
Elite PCTS Kit	1	6.290 140

Туре	PK	Cat. No.
Elite pH	1	6.290 131
Elite pH Spear	1	6.290 136
Elite pH Spear Kit	1	6.290 142

### **Dust Remover Spray, DRUCKLUFT 67**



Compressed air spray for contact-free removal of dust and dirt in hard-to-reach places using the capillary tube nozzles attached. Safe, clean, oil-free. Acc. to Aerosol policy 75/324/EWG no danger of inflammation or explosion when using as intended. DRUCKLUFT 67 contains pure and dry compressed gas and is very efficient.

Examples of use: photography, precision electronics, watchmaking, cameras, medical technology, microscopy, research.

4.2 bar (20 °C) Pressure: 1.00 g/cm3 (20 °C) Density:

Description	Capacity	PK Cat. No.	
	ml		
Dust remover spray	200	1 9.412 800	)
Dust remover spray	400	1 9.412 803	1

### Label Remover Spray, Solvent 50





SOLVENT 50 is a highly effective label solvent for the effortless removal of self adhesive labels, on the basis of natural orange terpenes. It works on the adhesive and quickly and gently dissolves adhesive labels on glass, porcelain, metal, wood, foil and cardboard. SOLVENT 50 also removes sticky residue of any kind, such as tar spots or glue residue from stickers. Check compatability when using on plastics. Not suitable for polystyrene.

0.74 g/cm3 (20 °C) Density: < 0 °C Ignition point:

Evaporation rate: 94 (DIN 53170 Ether = 1).

Туре	Capacity	PK Cat. No.
	ml	
Calvant FO Corny and		1 0 412 010
Solvent 50, Spray can	200	1 9.412 810
Solvent 50 Super, Spray can, with dosing brush	200	1 6.270 569

### Bunsen Burner, Labogaz® 206



CAMPINGAZ.

For operation with gas cartridge C 206 GLS

(Cat.-No.: 6.290 860, 6.261 010).

DVGW-authorised.

Weight: 380 g without cartridge 200 mm with cartridge Height:

Consumption: 55 g/h

Туре	PK	Cat. No.
Labogaz* 206	1	9.018 510

### Bunsen Burner, Labogaz® 470



CAMPINGAZ.

For operation with gas cartridges CV 470 Plus (Cat.-No.: 9.018 512, 6.261 011).

Weight: 380 g without cartridge Height: 190 mm with cartridge

Consumption: 55 q/h

Туре	PK	Cat. No.
Labogaz® 470	1	9.018 511

### **Gas Cartridges**





C 206 GLS pierceable cartridge Piercing cartridge with integrated gas lock system according to EN 417: 2012. For bunsen burner without safety valve. For bunsen burners Labogaz® 206.

### CV470 Plus valve cartridge

With safety valve. For bunsen burner Labogaz® 470.

Gas ratio 80/20 Butane/Propane.

Safety valve allows removal of partially used valve gas cartidges.

Туре	Height	Capacity	PK	Cat. No.
	mm	g		
C 206 GLS	90	190	5	6.290 860
C 206 GLS	90	190	36	6.261 010
CV 470 Plus	140	450	1	9.018 512
CV 470 Plus	140	450	12	6.261 011

### LLG-Microbiological Media, dehydrated

### Media for bacteria Luria Bertani (Miller):

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

### Luria Bertani (Lennox):

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

### **Terrific Broth:**

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

### 2xYT Broth:

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

### Agar

### Bact. Agar.:

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

### Luria Bertani Agar (Miller):

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

### Luria Bertani Agar (Lennox):

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





# Disposable Culture Tubes, soda-lime glass, with screw cap





### From Soda-lime glass. With DIN thread and PP1 screw cap.

Capacity	Outer diam.	Height	Wall thickness	DIN-Thread	P	Ϋ́	Cat. No.
ml	mm	mm	mm	GL			
6	12	100	1	14	10	00	7.021 547
12	16	100	1	18	10	00	7.021 548
22	16	160	1	18	10	00	7.021 549
32	18	180	1	18	10	00	7.021 550

### Media for yeasts YPD-Broth:

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



### **Media components**

### **Yeast Extract:**

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

### Tryptone:

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

### **Casein Peptone:**

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

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

### **Powder and Granulates**

Description	Capacity	PK	Cat. No.
	g		
Luria Bertani (Miller) Powder	500	1	6.271 000
Luria Bertani (Lennox) Powder	500	1	6.271 010
Terrific Broth Powder	500	1	6.271 007
2xYT Broth Powder	500	1	6.271 001
Bact. Agar Powder	500	1	6.271 003
Luria Bertani Agar (Miller) Powder	500	1	6.271 009
Luria Bertani Agar (Lennox) Powder	500	1	6.271 008
YPD Broth Powder	500	1	6.271 002
Yeast Extract Powder	500	1	6.271 004
Tryptone Powder	500	1	6.271 005
Casein Peptone Powder	500	1	6.271 011

### **LLG-Petridishes, PS**







Made of high quality optical clear polystyrene. Produced under aseptic conditions in an ISO 6 cleanroom.

- Stable thickness to prevent any deformations while using
- Stackable
- With or without vents
- Aseptic (90 mm diam.) or beta irradiated sterile versions (all sizes)
- Contact plate with counting grid
- Packed in sleeves á 10 dishes or 20 dishes (90 mm diam. dishes)

Description	Height approx.	PK	Cat. No.
	mm		
with triple vents, aseptic	16	480	6.285 823
without vents, aseptic	16	480	6.285 824
with triple vents, sterile	16	480	6.285 816
without vents, sterile	16	480	6.285 817
with triple vents, sterile	14	1000	6.285 818
without vents, sterile	14	1000	6.285 819
with triple vents, sterile	19	180	6.285 822
contact plate, sterile	17	1000	6.285 821
	with triple vents, aseptic without vents, aseptic with triple vents, sterile without vents, sterile without vents, sterile with triple vents, sterile	with triple vents, aseptic 16 without vents, aseptic 16 with triple vents, sterile 16 with triple vents, sterile 16 with triple vents, sterile 14 with triple vents, sterile 14 with triple vents, sterile 19	approx.

### **Gel Electrophoresis Tank MultiSUB Mini DUO**

### Cleaver

### **Gel Electrophoresis Tank MultiSUB Midi DUO**





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

### Scope of delivery:

MultiSUB Mini DUO: 7 x 7 cm and 7 x 10 cm UV Tray, 2 x 8 sample

With additional loading guides and dams.

With gel tray options of 10 x 7 cm and 10 x 10 cm, the MultiSUB Midi DUO has been designed for routine horizontal gel electrophoresis. Extending only the width of this unit allows more samples to be resolved per gel, than the MultiSUB Mini, without a significant increase in buffer or gel volumes. A maximum of 100 samples per gel can be resolved making this unit ideal for those routinely checking medium numbers of samples over short to medium gel run lengths.

### Scope of delivery:

MultiSUB Midi DUO: 10 x 7 cm + 10 x 10 cm UV tray, 2 x 16 sample

With additional loading tank guides and dams.

### **Specifications**

Gel dimensions (W x L): Unit dimensions (W x L x H): Max. sample capacity:

Buffer volume:

7 x 7 cm and 7 x 10 cm 21 x 9 x 9 cm 7 x 7 cm tray, 32 samples 7 x 10 cm tray, 64 samples

225 ml



### **Specifications**

Gel dimensions (W x Ll): Unit dimensions (W x L x H): Max. sample capacity:

Buffer volume:

10 x 7 cm and 10 x 10 cm 22 x 12.5 x 9 cm

10 x 7 cm tray, 50 samples 10 x 10 cm tray, 100 samples

300 ml



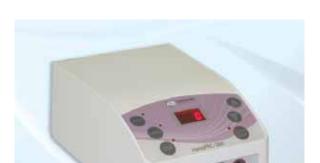
Description	Thickness mm	Sample volume µl	PK	Cat. No.
MultiSUB Mini DUO			1	7.920 043
Comb 8 sample	1,50	37	1	6.227 144
Comb 8 sample	1,00	25	1	9.584 655
Comb 12 sample MC	1,00	14	1	6.232 523
Comb 12 sample MC	1,50	20	1	6.233 617
Comb 16 sample	1,00	10	1	6.227 253
Comb 16 sample	1,50	15	1	9.584 656
MC = Multichannel con	npatible.			

Description	Thickness	Sample volume	PK	Cat. No.
	mm	μl		
MultiSUB Midi DUO			1	6.238 115
Comb 8 sample	1,00	41	1	9.584 657
Comb 10 sample MC	1,00	27	1	9.584 658
Comb 12 sample	1,00	23	1	9.584 659
Comb 16 sample	1,00	16	1	9.584 660
Comb 20 sample MC	1,00	14	1	9.584 661
Comb 25 sample	1,00	10	1	9.584 662
MC = Multichannel com	patible.			

### Power Supply NanoPAC-300P Mini for Gel Electrophoresis Tanks



# Ideal for Electrophoresis Chambers, e.g. Cleaver Scientific MultiSUB Systems





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

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

Туре	Rating	PK Cat. No.
	W	
NanoPAC-300P Mini	60	1 6.272 711

### **UV Lamps**

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

### Please order lamp holder separately.





Туре	Description	Size	Wave-	Power		PK	Cat. No.
			length				
		mm	nm	W			
BVL-6.LC	wavelength selector	145 x 48	365 / 254	1 x 6		1	9.971 918
BVL-8.LM	wavelength selector	220 x 48	365 / 312	1 x 8		1	9.971 937
BVL-115.L	Single wavelength	295 x 66	365	1 x 15		1	9.971 936
BVL-208.G*	UV sterilization lamp	230 x 70	254	2 x 8		1	9.971 935
BVL-215.G*	UV sterilization lamp	495 x 120	254	2 x 15		1	9.971 915

### **Lamp Holder for UV lamps**





Туре	For Type	PK	Cat. No.
SVL-6	BVL-6, BVL-8, BVL-208.G	1	9.971 921
SVL-30	BVL-115, BVL-215	1	9.971 922

### Disc Rotator LLG-uniLOOPMIX 2

Analogue Disc rotator for gentle and effective sample mixing. Suitable for all biological samples. With easily interchangeable clamps that allow a **quick cleaning** of the rotator.

For a maximum of  $48 \times 1.5$  ml,  $16 \times 5$  or 15 ml,  $8 \times 50$  ml tubes. Also for parallel use of different sizes, can be equipped individually.

- Variable speed 0 80 rpm
- Compact design
- Housing easy to clean
- Non-slip, adjustable screw feet

Scope of delivery: Disc rotator incl. 12 clamps each for 2 ml, 15 ml and 50 ml tubes



Type of movement: rotating
Variable speed: 0 - 80 rpm
Rotation angle of disc: 360°
Permissible shaking weight (incl. attachment): 2 kg

rel. Moisture: up to max 80 % Working temp.: + 5 - 40 °C

Motor rating input/output: 20 W
Dimensions (W x D x H): 220 x

Dimensions (W x D x H): 220 x 300 x 310 mm Power supply: 100 - 240 V, 50/60 Hz

Protection class: IP 21

Туре	PK Cat. No.
LLG-uniLOOPMIX 2 with EU-plug	1 6.263 665





### **LLG-Centrifuge Tubes economy, PP**



- With flat caps, PE
- With conical bottom (15 and 50 ml) or with self-standing bottom (50 ml).
- Easy-to-read black volume graduations
- With a large frosted writing area
- Engraved graduation at the conical bottom of each tube
- Max rotate speed up to 12.000 x g for conical bottom tubes and  $6.000 \times g$  for self-standing tubes
- Autoclavable at 121 °C and freezable to -80 °C
- Leak-proof
- DNAse and RNAase free, aseptically
- Bulk packed

orm	Capacity	Height	PK
	ml	mm	
conical	15	119.6	500
conical	50	113.9	500
with rim	En	116 5	EOO



- Leak-Proof
- DNAse and RNAse free



### Vortexer LLG-uniTEXER with Universal Attachment









- One Cap for Many **Tubes & Vessels**
- Touch- and Permanent Operation
- 3 Speeds Selectable



Vortexer with single carrier head, accommodating the most popular consumables and tubes:

for 1 x assay plate, 2 x 50 ml conical tubes, 2 x 15 ml conical tubes, 2 x 5 ml conical tubes, 4 x 1.5/2 ml microcentrifuge tubes, 6 x 0.5 ml and 24 x 0.2 ml microcentrifuge tubes.

- Touch function for short-term operation
- Very easy to clean
- Elastomeric feet ensure excellent stability on the bench
- Modern design
- Robust housing made of ABS

### **Specifications**

Type of movement: orbital/vortex Orbital diameter: 3.7 mm

Speed: 1000, 2000 und 3000 rpm

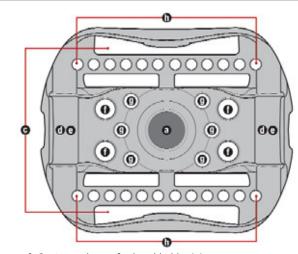
Dimensions (W x D x H): 173 x 198 x 198 mm

3.8 kg Weight:

Power supply: 220 V, 50/60 Hz

Protection class: IP 20

Туре	PK	Cat. No.
LLG-uniTEXER	1	6.261 826



- a) Center pad area for hand held mixing
- **b)** 1 x Assay plate (to be used with retention cords)
- c) 2 x 50 ml conical tubes (horizontally mounted)
- d) 2 x 15 ml conical tubes (horizontally mounted)
- e) 2 x 5 ml tubes (horizontally mounted in the same retention space as 15 ml)
- **f)** 4 x 1.5/2 ml microfuge tubes (vertically mounted)
- **g)** 6 x 0.5 ml microfuge tubes (vertically mounted)
- **h)** 24 x 0.2 ml microfuge tubes (strip tubes)

(vertically mounted)

### LLG-Test Tube Racks, wire/nylon

White nylon-coated wire. Opening size 18 x 18 mm  $(6.286 \ 416 = 30 \times 30 \ mm)$ 

Length	Width	Height	Array	PK Cat. No.
mm	mm	mm		
130	54	70	2 x 6	1 6.286 410
248	55	70	2 x 12	1 6.286 411
248	73	70	3 x 12	1 6.286 412
130	95	70	4 x 6	1 6.286 413
248	94	70	4 x 12	1 6.286 414
215	208	70	10 x 10	1 6.286 415
235	85	80	6 x 2	1 6.286 416



### Wipes, Wypall\*L20/L30





Perforated, blue Airflex\*material. Bulky wipes with excellent absorption capacity and wet strength. For cleaning-up large spillages and suitable for most surfaces.

### Material:

AIRFLEX\*, 2-ply AIRFLEX\*, 3-ply L20: L30:

Width	Length	Package contents	Colour	Туре	PK	Cat. No.
mm	mm					
235	380	1 roll x 500 wipes	blue	L20	1	9.413 054
330	380	1 roll x 500 wipes	blue	L20	1	9.413 044
205	380	6 rolls x 300 wipes	white	L20	6	9.413 091
330	380	1 roll x 750 wipes	blue	L30	1	9.413 046

### Wipes Multiclean®, 3-ply





Handy cleaning cloths,
resistant and with high wet
strength, they are ideal for
light and coarse dirt work.

Width	Length	Weight	Package contents	PK	Cat. No.
mm	mm	g / m²			
220	380	60	2 rolls with 500 tears	2	7.618 013
380	380	54	2 rolls with 500 tears	2	7.618 212
360	360	54	Roll with 1000 tears	1	7.671 903

### Multitex® Roll Ultra z 70, white, disposable tissues



The high-quality viscose fleece with textile characteristics is suitable for wet and dry cleaning tasks, thanks to its incredible strength. The cloths are very soft and yet lint-free, they can absorb large amounts of liquid and remain tear-resistant, they are solvent-resistant and they meet food safety requirements. Silicone free.



### Unitex® Roll, turquoise, disposable Tissues





- Without binders, chemicals or adhesives
- Resistant to solvents and silicone free
- Particularly tear-resistant and lintfree
- Useable dry and wet, high absorption capacity
- Excellent for cleaning and degreasing

wiatn	Length	Inickness	weignt	contents	PK	Cat. No.
mm	mm	mm	g / m²			
410	380	0.36	80	roll with 500 tears	1	6.266 675

Width	Length	Thickness	Weight	Package contents	PK	Cat. No.
mm	mm	mm	g / m²			
390	325	0.28	68	roll with 500 tears	1	6.266 677

polyester fibers.

### **Roll Holders**





With waste bag holder for rolls up to 42 cm width.

Description	PK	Cat. No.
Floor stand	1	6.266 990
Wall bracket	1	6.266 991

### **LLG-Absorbent, Oil and Chemical** Binder, granules



**Universally Applicable** 





Universal chemical and oil binder for all liquids, also for solvents. Very high absorption capacity (up to 1:75 of aqueous solutions).

Almost dust-free granules with colour indicator:

- 1 colour changes to yellow in contact with acids,
- 2 to red in contact with alkalis.

Disposal according to the pollutant recorded.

Capacity	Package	PK	Cat. No.
kg			
0.7	Laboratory bottle	1	6.283 036
1.5	Square handle bottle	1	6.283 037
5.0	Bucket	1	6.270 479

### **Chemical Sorbents Emergency Kits**



Туре	Dimensions	Absorption*	Capacity	PK	Cat. No.
SK5	7 x 40 x 28 cm	approx. 5 l	10 wipes, 1 pillow, 1 waste bag	1	9.264 104
SK26	40 x 63 cm	approx. 26 l	10 wipes, 5 pillow, 5 mini socks, 1 waste bag	1	9.264 105
*Capacity per kit					

### Waste Disposal Unit Standard, PE-HD



### **Complete Set**

Disposal unit for liquid waste, PE-HD, useful for the collection of solvent and sample waste. With funnel, hinged lid and removable sieve to collect magnetic stirrers and residues. The sieve is detachable for cleaning. Delivered with container and funnel, ready to use.



Capacity	Dimensions (W x D x H)	PK	Cat. No.
L	mm		
2.5	115 x 150 x 305	1	9.139 892
5.0	150 x 195 x 345	1	9.139 893
10.0	190 x 230 x 395	1	9.139 894

### **Chemical Sorbents**









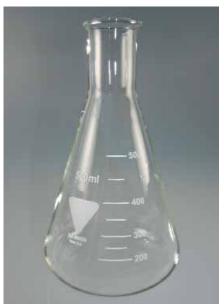
The sorbents have a high performance. Due to their new microfibre structure, they provide very high absorbing capacities. The light and absorbent material is easy to use and committed to absorb quickly and store the liquid. The absorbed liquid can be extracted, to be used again or to be disposed of separately. The optimal combination of features such as lightweight, low volume, very high absorbance, easy handling and low sorbent disposal weight, significantly reduce disposal costs in comparison to conventional binding materials. To reduce the final waste content, the used sorbets can be burnt.

Can be used to absorb a variety of lab chemicals:

- acids, such as acetic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid
- alkalis, such as sodium hydroxide, potassium hydroxide
- hydrazine: N<sub>2</sub>H<sub>4</sub>
- hydrogen peroxide

Туре	Dimensions (W x D)	Absorption*	PK	Cat. No.
PF 2001 Multi-Format	1520 cm x 12 cm	39 I	1	9.264 101
P 110 Wipes	33 cm x 28 cm	0.25	50	9.264 102
P 300 Pillows	28 cm x 18 cm	2	16	9.264 103
*Capacity per piece				

### Erlenmeyer Flasks, Borosilicate glass 3.3, narrow neck





DIN ISO 1773. With graduations and beaded rim.

Capacity	Neck diam.	Bottom diam.	Height	PK Cat. No.
ml	mm	mm	mm	
25	22	42	70	10 9.141 079
50	22	51	90	10 9.141 080
100	22	64	105	10 9.141 081
200	34	79	135	10 9.141 085
250	34	85	145	10 9.141 082
300	34	87	160	10 9.141 086
500	34	105	180	10 9.141 083
1000	42	131	220	10 9.141 084
3000	50	187	310	1 6.270 118

### LAB Rings, lead



LAB-Rings to stabilise glassware and plasticware on shakers or to immerse in water baths. Vinyl-coated lead rings will not mark or scratch benchtops and labware.

Туре		Int. diam.	PK	Cat. No.
	ml	mm		
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
C-Shape	1000 - 4000	66	1	9.149 907

### LLG-Mortars, porcelain



Description	Capacity	Ext. diam.	Height	DIN	PK	Cat. No.
	ml	mm	mm			
rough inside	70	63	41	12906	1	6.227 149
rough inside	160	90	56	12906	1	6.243 865
rough inside	400	125	71	12906	1	9.164 413

### LLG-Pestles, porcelain

Description	Head diam.	Length	DIN	PK	Cat. No.
	mm	mm			
rough	24	115	12906	1	9.164 420
rough	30	135	12906	1	6.232 574
rough	36	150	12906	1	9.164 421

# LLG-Sample Containers, PP, Heavy Duty, with screw cap, PE-HD



Ideal for collection, transportation and storage.

- Ideally suited for histological samples
- Container made of non-cytotoxic polypropylene
- Very solid quality
- Top and bottom gripping assures easy opening and closing when wearing gloves
- Half-transparency containers
- With graduation and label
- Leak proof

Capacity	Diam. with cap	Height	Grad. up to	PK	Cat. No.
ml	mm	mm	ml		
30	37	42	15	1000	6.265 649
60	50	40	30	500	6.265 650
80	50	60	60	500	6.265 651
100	50	77	70	300	6.265 652
140	58	80	120	300	6.265 653
250	97	58	150	154	6.265 654
500	97	112	350	132	6.265 655
1000	120	140	700	64	6.265 656

# Volumetric Trapezoidal flasks, DURAN®, class A, blue graduation

# K 18 C

### **HIRSCHMANN**°

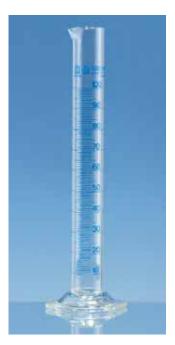
IN (TD) calibrated. With dated batch identification. Declaration of conformity acc. to DIN 12600. NS ground with poly stopper. Ring mark and graduation in high contrasting blue enamel. According to DIN EN ISO 1042.





Capacity	Tolerance	Height	Joint size (NS)	PK	Cat. No.
ml	± ml	mm			
1	0.025	60	7/16	2	6.290 843
2	0.025	70	7/16	2	6.290 844
5	0.025	70	7/16	2	6.290 845
5*	0.04	70	10/19	2	6.290 846
10	0.025	90	7/16	2	6.290 847
10*	0.04	90	10/19	2	6.290 848
20	0.04	110	10/19	2	6.290 849
25	0.04	110	10/19	2	6.290 850
50	0.06	140	12/21	2	6.290 851
* wide necl	ζ.				

### Measuring Cylinders, borosilicate glass 3.3, tall form, class A, blue graduated





With spout, tall form. BLAUBRAND®. To DIN EN ISO 4788.
DE-M marking with works certified batch number. With spout and hexagonal foot. Graduations and inscriptions in highly contrasting blue enamel. Calibrated to contain (IN). All BLAUBRAND® cylinders are delivered with batch number and batch certificate.





Capacity	Grad.	Tolerance	Height	Pk	Cat. No.
ml	ml	± ml	mm		
10	0.2	0.10	140	2	6.290 836
25	0.5	0.25	170	2	6.290 837
50	1	0,5	200	2	6.290 838
100	1	0,5	260	2	6.290 839
250	2	1,0	335	2	6.290 840
500	5	2,5	365	2	6.290 841
1000	10	5,0	465	2	6.290 842

# Graduated Pipettes, soda glass, class AS, blue graduation, type 3





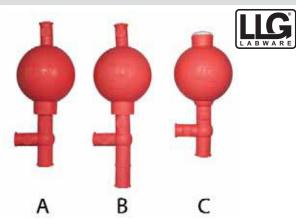
Soda glass. Conformity-certified. With batch date identification. DIN EN ISO 835, DIN 12699 and BS700 - 1583. Calibrated to deliver (EX). Ring marks and graduations in permanent blue enamel.





Volume	Graduations To	lerance	Length	PK	Cat. No.
ml	ml	± ml	mm		
1	0.01	0.007	360	12	6.290 861
2	0.02	0.010	360	12	6.290 862
5	0.05	0.030	360	12	6.290 863
10	0.1	0.050	360	12	6.290 864
20	0.1	0.100	450	12	6.290 865
25	0.1	0.100	450	12	6.290 866
50	0.1	0.200	720	12	6.290 867

# LLG-Safety Pipette Bulb, rubber, red



Chemically resistant rubber. With valves for suction, emptying and air release, controlled by thumb and finger pressure.

Туре	Figure	PK	Cat. No.
LLG-Safety pipette bulb, normal	A	1	6.270 265
LLG-Safety pipette bulb, universal	В	1	6.270 266
LLG-Safety pipette bulb, "Flip"	С	1	6.270 267



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e-mail: info@kefo.si www.kefo.si



# LABORTOPS



### Complete sets, consisting of 10 x 100 ritips $^{\circ}$ and a Serial Dispenser LLG-uniDISPENS

12.5 ml / Standard

- Dispensertips ritips®:
- Three sizes, standard and bioclean  $\!\!\!^{\rm (sterile)}.$
- Maximum of safety and repeatability as all tips are individually and mechanically tested.

bioclean® steril

- Bioclean®: sterile, pyrogen free, DNA-, RNase- and ATP-free.
- A quality certificate per lot can be obtained upon request.

- Made in Germany in double pack
- · Perfectly matched Quality

### Manual Serial Dispenser LLG-uniDISPENS

The ergonomically designed manual dispenser LLG-uniDISPENS enables single handed volume selection, loading and dispensing. Due to its light weight it is ideally suited for serial dosing. You can flexibly select your desired dosing volume from 120 dosing programs, to 12 tip sizes and with 10 stroke adjustments. You can view all settings and volumes at a single glance through the viewing window of the manual dispenser. The dispenser can be used with a huge variaty of different dispenser tips. Thanks to a purely mechanical, maintenance-free construction, the manual dispenser is a practical and convenient device for daily laboratory use. 3 years warranty.

Scope of delivery:  $1000 \text{ ritips}^{\circ}$ , paked  $10 \times 100 \text{ pcs}$ , plus Serial Dispenser LLG-uniDISPENS

Description	PK	Cat. No.
Set of 10 x 100 ritips®, 0.05 ml / standard + LLG-uniDISPENS	1	6.272 982
Set of 10 x 100 ritips®, 1.25 ml / standard + LLG-uniDISPENS	1	6.272 983
Set of 10 x 100 ritips®, 12.5 ml / standard + LLG-uni <i>DISPENS</i>	1	6.272 984
Set of 10 x 100 ritips®, 0.05 ml / bioclean®sterile + LLG-uniDISPENS	1	6.272 985
Set of 10 x 100 ritips®, 1.25 ml / bioclean® sterile + LLG-uni <i>DISPENS</i>	1	6.272 986
Set of 10 x 100 ritips®, 12.5 ml / bioclean® sterile + LLG-uniDISPENS	1	6.272 987