

# LABORTOPS

valid until 31.12.2022

# **LLG-Pipette controller** *easy*



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## Single channel microliter pipettes LLG-proMLP









- High quality Made in France

- Extremely light weight while the robustness still remains
- Perfect ergonomics for highest comfort
- Colour-coded push-button for quick operation
- Extremely low pipetting forces
- Built-in volume locking for error-free results
- Tip ejector button\*, adjustable for right- and left-handed users
- Completely autoclavable at 121 °C
- Including individual calibration certificate (according to EN ISO 8655)

\*not available for 5 ml and 10 ml pipettes

Scope of supply: microliter pipette, calibration tool



Capacity	Increments	Accuracy max. vol.	Precision max. vol.	Colour code	PK	Cat. No.	Price
μΙ	μl	(± R%)	(≤ CV%)				EUR
0.2-2	0.002	1.65	0.75	dark orange	1	6.270 420	133,60
0.5-10	0.02	1.10	0.44	red	1	6.270 421	133,60
2-20	0.02	1.00	0.33	light yellow	1	6.270 422	133,60
10-100	0.2	0.80	0.17	light orange	1	6.270 423	133,60
20-200	0.2	0.80	0.17	dark yellow	1	6.270 424	133,60
100-1000	2	0.80	0.17	dark blue	1	6.270 425	133,60
500-5000	2	0.66	0.18	purple	1	6.270 426	133,60
1000-10000	20	0.60	0.18	light blue	1	6.270 427	133.60

### **LLG-Pipette carousel, ABS**

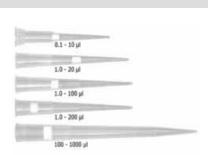


LLG-Pipette carousel made of ABS for safe and comfortable storage of microlitre pipettes. Rotating stand allows quick access to the desired pipette.

- Space-saving storage of up to 6 single channel or multi-channel ninettes
- Suitable for common pipette brands of BRAND, GILSON®, Eppendorf®, Thermo Fisher Scientific and RAININ
- Easy to clean

Description	PK	Cat. No.	Price
			EUR
LLG-Pipette carousel	1	6.490 522	59,20

## **LLG-Filter tips 2.0 Low Retention, PP**





The new generation of LLG Labware filter tips with low liquid retention. Available in easy-to-open boxes with color coded racks. Compatible with all common pipette brands. You can find the appropriate compatibility list on www.llg-labware.com in the Downloads section.

- Improved optical clarity and pipette fit
- Colored coded rack inserts for easy identification
- Graduated
- Sterile
- DNase and RNase free

Colour	Capacity	Package contents	PK	Cat. No.	Price
	μΙ				EUR
Clear	0.1 10	10 x 96	960	4.668 784	54,60
Clear	0.1 10*	10 x 96	960	4.668 785	54,60
Clear	1 20	10 x 96	960	4.668 786	54,60
Clear	1 100	10 x 96	960	4.668 787	54,60
Clear	1 200	10 x 96	960	4.668 788	54,60
Clear	100 1000	8 x 96	768	4.668 789	52,60
* Tip XL					

### **LLG-Pipette controller** *easy*



- **Intuitive operation**
- **Autoclavable cone tip**
- **Eco-friendly rechargeable NiMH batteries**

The LLG-Pipette controller easy enables fast and exact pipetting with glass and plastic pipettes.

- Ergonomic and lightweight construction for constant ease of use over prolonged usage
- Unique nose cone angle for enhanced flexibility in operation e.g. in fume hoods
- Eco-friendly rechargeable NiMH batteries, offering up to 8 hours of continuous working
- Easily replaceable batteries
- Autoclavable tip cone for avoiding cross-contamination

Scope of supply: Pipette controller, manual, charger, wall-mount, desktop stand



Description	Plug type		PK	Cat. No.	Price
					EUR
LLG-Pipette controller easy	EU		1	6.263 683	126,90
LLG-Pipette controller easy	UK		1	6.263 684	126,90

### LLG-Serological pipettes, PS, sterile





All LLG serological pipettes are plugged, sterile, pyrogen-free and have an increased volume capacity through extra graduations.

- 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

<b>Pipette</b>	stand,	vertical,	PP
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The pipette carousel can be rotated 360° and can hold up to 94 pipettes.

Туре	PK	Cat. No.	Price
			EUR
Pipette stand, vertical	1	9.273 895	15,10

## Pipette tray, PVC





ml					EUR	
1/100	yellow	0.3	500	9.380 440	51,10	PVC. Tidy tray. With 4 long compartments for
1/50	green	0.6	500	9.380 441	61,30	approx. 30 graduated pipettes (1 ml to 20 ml).

Width	Length	Height	PK Cat. No.	Price
mm	mm	mm		EUR
300	426	30	1 9.200 394	20,00

Volume	Grad.	Colour code	Negative graduations	PK	Cat. No.	Price
ml	ml					EUR
1	1/100	yellow	0.3	500	9.380 440	51,10
2	1/50	green	0.6	500	9.380 441	61,30
5	1/10	blue	3	200	7.930 401	28,60
10	1/10	orange	3	200	6.268 240	32,70
10	1/10	orange (wide mouth)	3	200	9.380 442	40,90
25	2/10	red	8	150	7.930 403	46,00
50	5/10	purple	10	100	9.380 443	51,10

### Aluminium bottles, with UN approval







The aluminium bottle is particularly suited for storing, transport or sending substances and reference samples which have to be stored completely unaltered.

- With UN approval
- Pure aluminium (AL 99.5 material)
- PP screw cap with internal aluminium seal included

Description	Capacity	Diam.	Height	PK	Cat. No.	Price
	ml	mm	mm			EUR
Bottle	60	40	88	10	6.291 403	20,40
Bottle	120	57	97	10	6.291 404	24,80
Bottle	300	57	160	10	6.291 405	32,70
Bottle	600	74	192	10	6.291 406	47,40
Bottle	1200	88	248	10	6.291 407	56,50

## Laboratory bottles, Borosilicate glass 3.3, GL45, with retrace code





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. Price
ml	mm	mm	EUR
100	56	100	10 9.072 331 <b>17,10</b>
250	70	138	10 9.072 332 <b>20,60</b>
500	86	176	10 9.072 334 <b>27,90</b>
1000	101	225	10 9.072 335 <b>41,50</b>
2000	136	260	10 9.072 336 <b>88,80</b>

## Pressure atomizer LaboPlast®, HDPE



The pressure sprayer is ideal to spray a wide range of liquids uniformly. The pressurised spray has a working pressure of 4 bar. Extension for spray lance 30 cm available as accessory.

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

Capacity	Ext. diam.	Neck diam.	Height	PK Cat. No.	Price
ml	mm	mm	mm		EUR
1500	142	45	315	1 9.223 162 <b>3</b>	9,60

## Jars, PP with PP screw cap





White, complete with red PP screw cap, in safe pack with certificate of analysis.

Nominal capacity	Ø with Cover	Height	PK	Cat. No.	Price
ml	mm	mm			EUR
25	34	40	25	7.077 661	9,20
60	41	56	25	6.254 446	10,70
90	56	52	25	7.077 852	15,90
125	56	68	25	7.085 372	18,40
250	73	79	20	7.053 933	20,90
625	96	113	6	7.051 092	10,50
1000	112	129	3	7.052 895	7,10
1250	112	159	3	7.053 930	10,40

# Automatic burettes with splinter protection, Schilling pattern, Borosilicate glass 3.3



Burette according to Dr. Schilling with splinter protection, with Schellbach stripes, automatic zero point extraction and Bürkle dosing device. The dosing device allows precise dosage via the pushbutton or via the micro-screw as well as precise dispensing via a fine spout tip.

- With splinter protection
- Adjusted to Ex
- Shatterproof, resistant to chemicals
- Exact spout tip, fine droplet formation - Parts in contact with the medium: PE,
- natural rubber, PP, Borosilicate glass

# Bottletop Dispenser LLG-uniTOPDISPENS 2







- Springless PTFE valve, PTFE piston with chemically resistant ETP
- O-ring enables high chemical compatibility
- Glass cylinder from borosilicate glass 3.3
- Re-circulation valve enables easy priming and bubble free dispensing
- 360° rotation possible due to specially designed bottle adapter
- Flexible and adjustable delivery nozzle provides dispensing angle flexibility to the user
- Specially designed volume adjustment knob for quick and easy volume setting
- The telescopic extractable intake tube can be easily adjusted to varying bottle heights
- Five bottle adaptors included (28 mm, 32 mm, 37 mm, 40 mm and 45 mm).
- Standard thread: 30 mm.
   Fully autoclavable at 121 °C, 15 psi for 10 to 15 min
- Individually calibrated in accordance with ISO 8655 standards and each unit is supplied with an individual calibration certifica
- You can find the appropriate compatibility list or www.llg-labware.com in the Downloads section

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THE REAL PROPERTY.			3			
	Capacity	Grad.	Tolerance	Height	PK	Cat. No.
	ml	ml	± ml	mm		
	15	0.1	0.045	520	1	6.280 403

Bur	ettes	with s	straight cock	ζ,	
50	0.1	0,075	920	1	6.280 405
25	0.1	0,075	650	1	6.280 404
13	0.1	0,015	320	_	0.200 103

## Burettes with straight cock, Borosilicate glass 3.3, class AS, DE-M marking





Price

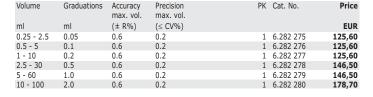
EUR

69,10

69,10

BLAUBRAND®, DE-M marking, removable PTFE stopcock. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Burette tube with Schellbach stripe, stopcock with precision tip. Incl. one batch certificate.

Capacity	Grad.	Length	Tolerance	PK	Cat. No.	Price
ml	ml	mm	± ml			EUR
10	0.02	795	0.02	1	4.000 014	55,30
25	0.05	800	0.03	1	7.617 437	55,30
50	0.1	800	0.05	1	4.000 015	55,30



## LLG-Surface protector DescProtect





DescProtect is a durable paper which quickly absorbs liquid spills. The PE-coated base layer stops liquids reaching the work surface.

- Stays flat, does not ripple or curl to de-stabilise vessels
- White surface can be written on using pens or pencils
- Rapid absorption of liquid spills

Туре	Size	PK	Cat. No.	Price
				EUR
Sheets	460 mm x 570 mm	50	9.160 270	33,60
Spool	400 mm x 50 m	1	9.160 271	68,60

## **LLG-2in1 KITs with Short Thread Vials ND9** (wide opening)





2in1 KITs contain 100 vials (1.5 ml) and 100 closures in an orange PP-Box. As both components are always required at the same time, 2in1 KITs are a convenient way to obtain and store all required items for analysis. All advantages of the individual components (cleanroom packaging of the vials, recloseability of the packaging, etc.) remain unchanged.

Description	Cover type	PK	Cat. No.	Price
				EUR
clear	Short Thread Cap, blue, hole, Silicon white / PTFE red	100	9.003 560	27,60
clear	Short Thread Cap, blue, hole, Silicon white / PTFE blue, slitted	100	7.621 765	35,70
clear	Short Thread Cap, transparent, hole, Silicon white / PTFE red	100	9.003 561	26,80
clear, labelling field	UltraClean Short Thread Cap, blue, hole, Silicon white / PFE red	100	7.970 892	28,10

## **Capillary columns**



#### **BP5MS**

5 % Phenyl Polysilphenylene-siloxane. For 5 % GC-MS analysis and general purpose MS analysis. Suitable replacement for: DB-5ms, ZB-5ms, Rxi-5Sil MS, VF-5ms, CP-Sil 8 CB.

diam.	Length	thickness	range	PK	Cat. No.	Price
mm	m	μm	°C			EUR
0.25	30	0.25	-40 330 / 350	1	4.676 266	532,00

#### **HT8/Fast PCB**

 $8\ \%$  Phenyl Polycarborane-siloxane. Ultra high temperature columns for polychlorinated biphenyl compounds (PCB), nitro-substituted aromatics, polynuclear aromatic hydrocarbons, pesticides and herbicides.

Int. diam.	Length	Film thickness	Temp. range		Туре	PK	Cat. No.	Price
mm	m	μm	°C					EUR
0.10	10	0.10	-20	360 / 370	Fast PCB	1	6.233 627	316,90
0.22	25	0.25	-20	360 / 370	HT8	1	6.205 318	610,00
0.25	30	0.25	-20	360 / 370	HT8	1	6.207 027	610,00
0.25	60	0.25	-20	360 / 370	HT8-PCB GC	1	4.676 265	1.073,30

#### **HPLC Starter Kits Generation 2.0, GL 45**





Complete set for one HPLC system with up to 4 solvent reservoirs

- Price advantage compared to ordering piece by piece
   Suitable for all current HPLC systems
- Use the supplied blind plugs to tighten connectors which are temporarily inactive or not in use

#### Contents of the different sets:

HPLC SafetySet 1: 3 x SafetyCaps I (V 2.0), 1 x SafetyCap II (V 2.0), 1 x SafetyCap II (V 2.0), 1 x blind plug UNF 1/4" 28G, 4 x air valve

**HPLC SafetySet 2:** 4 x SafetyCaps II (V 2.0), 4 x blind plug UNF 1/4" 28G, 4 x air valve

**HPLC SafetySet 3:**  $4 \times SafetyCaps III (V 2.0)$ ,  $8 \times blind plug UNF 1/4" 28G, 12 \times fitting 1.6 mm, <math>12 \times fitting 2.3 mm$ ,  $12 \times fitting 3.2 mm$ , 4 x air valve, 8 x insertion label

Type		PK	Cat. No.	Price
				EUR
HPLC sa	afety set 1	1	4.669 378	224,70
HPLC sa	afety set 2	1	4.669 379	239,10
HPLC sa	afety set 3	1	4.678 694	273,50

### **Ferrules for Agilent GC and Perkin-Elmer GC**



High quality ferrules made of 100 % Graphite or 15 % Graphite/ 85 % Vespel.

Type A: 15 % Graphite/85 % Vespel Type B: 15 % Graphite/85 % Vespel Type C: 100 % Graphite

Туре	Column ID	Ferrule ID	For	PK	Cat. No.	Price
	mm	mm				EUR
Α	0.1 - 0.25	0.4	Agilent GC	10	6.223 558	69,90
Α	0.32	0.5	Agilent GC	10	9.221 278	69,90
В	0.1 - 0.25	0.4	Agilent GC	10	6.088 109	62,00
В	0.32	0.5	Agilent GC	10	6.059 976	62,00
В	0.53	0.8	Agilent GC	10	6.059 977	62,00
C	0.1 - 0.32	0.5	Agilent GC	10	7.652 355	50,70
C	0.45 - 0.53	0.8	Agilent GC	10	9.221 280	50,70
C	0.1 - 0.32	0.5	Perkin-Elmer GC	10	9.221 284	50,70
С	0.45 - 0.53	0.8	Perkin-Elmer GC	10	9.221 285	50,70

### LLG-Syringe filters SPHEROS, PVDF





Hydrophilic membrane for aqueous polar and light unpolar solutions. Very low protein binding, suitable for high flow rates. Ideal for use with biological macromolecules, water soluble oligomers and polymers. With female Luer-Lock inlet and male Luer-Slip outlet. Sterile products in individual hard blister packaging and dispenser box.

Filter diam.	Pore size	Housing	Sterile	PK	Cat. No.	Price
mm	μm					EUR
13	0.22	PP, blue	-	100	4.685 651	32,30
13	0.45	PP, blue	-	100	4.685 652	32,30
25	0.22	PP, blue	-	50	4.685 653	29,60
25	0.45	PP, blue	-	50	4.685 660	29,60
13	0.22	PP, blue	+	100	4.685 654	38,10
13	0.45	PP, blue	+	100	4.685 655	38,10
25	0.22	PP, blue	+	45	4.685 656	29,40
25	0.45	PP, blue	+	45	4.685 657	29,40

## Syringe filter Minisart® RC





Male Luer Slip. Housing PP. Regenerated cellulose (RC). Ready-to-use units with a hydrophilic, solvent-resistant membrane made of regenerated cellulose, making sample preparation quick and easy. Suitable for aqueous/organic solutions.

Filter diam.	Pore size	Colour	Sterile	PK	Cat. No.	Price
mm	μm					EUR
25	0.20	White, Printed	+	50	7.076 270	93,00
25	0.20	White, Printed	-	50	9.049 094	70,40
25	0.20	White, Printed	-	500	9.049 095	614,30
25	0.45	White, Printed	-	50	9.049 097	70,40
25	0.45	White, Printed	-	500	9.049 098	614,30
15	0.20	White, Printed	+	50	7.075 954	70,40
15	0.20	White, Printed	-	500	9.049 088	499,60
15	0.45	White, Printed	-	50	9.049 091	77,30
4	0.20	Blue Tray	-	50	9.049 081	52,40
4	0.45	Yellow Tray	-	50	9.049 084	52,40

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





- Barrel: PP, Plunger: PP and Polyisoprene rubber
- Latex-free, pyrogen-free, DEHP-free, non-toxic
- Suitable for all syringe filters with Luer connection
- Non-sterile, bulk packed in box of 500
- Luer-Lock according to DIN EN 1707
- Luer-Slip according to DIN EN 20594-1

Capacity	Nozzle type	PK	Cat. No.	Price
ml				EUR
2	Luer-Slip	500	6.267 267	18,70
5	Luer-Slip	500	6.267 268	20,60
10	Luer-Slip	500	6.267 269	31,90
20	Luer-Slip	500	6.267 270	52,70
2	Luer-Lock	500	6.286 616	18,80
5	Luer-Lock	500	6.286 617	20,80
10	Luer-Lock	500	6.286 618	32,10
20	Luer-Lock	500	6.286 619	51,10

#### **LLG-Inline filters, PTFE**







LLG-Inline filters with PP housing. The PTFE membrane is particularly suitable for filtration of aggressive chemicals, including acids and non-aqueous solutions. Also ideal for clarifying filtration of organic solutions, sterile filtration of gases, as well as sterile aeration and deaeration.

- Multiple autoclavable at 121 °C for 20 minutes at 2 bar, max. 3 cycles
- High throughput with low pressure drop
- For air and gases in both directions

Diam.	Pore size	PK Cat. No.	Price
mm	μm		EUR
50	0.45	20 4.685 659	38,10



The 50 mm inline filter with it's ultra pure Polypropylene housing (ultrasonic welded) is designed to contain 47 mm membranes. The filter comes with 6-12 mm hose connectors (tapered) at the inlet and the outlet side.

- Hydrophobic PTFE diaphragm, polypropylene housing.
- Autoclavable at 121 °C for 20 minutes at 2 bar, max. 3 cycles
- Stepped tubing olive of 6-10 mm on both sides
- For air and gases in both directions
- Max. operating pressure 4.0 bar

Diam.	Pore size	PK Cat. No.	Price
mm	μm		EUR
50	0.2	5 9.059 513	40,50

### **AccuSeal Semi-Automated Plate** Sealer





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

#### **Specifications**

Dimensions (W  $\times$  D  $\times$  H): 171 x 324 x 362 mm

Weight: 12 kg

Sealing Temperature: Off, 100 to 190 °C (increments of 1.0 °C)

±1.0 °C Temperature Accuracy:

Temperature Uniformity: ±1.0 °C Sealing Time:

0.5 to 10 sec (incements of 0.1 sec) Compatible Plate Materials: PP (Polypropylene), PS (Polystyrene),

PE (Polyethylene)

Standard Assay Plates, Deep-Well Storage Compatible Plate Types:

plates, PCR Plates (Non-Skirted,

Semi-Skirted, Full-Skirted)

45 mm Maximum Plate Height:

Compatible Sealing Film

Types:

Foil Polypropylene laminate,

Clear Polyester-polypropylene laminate,

Clear polymer, Thin clear polymer,

Foil-laminate, Foil

Type	Description	PK	Cat. No.	Price
				EUR
AccuSeal	includes adapters for standard and deepwell microplates, 230 V	1	9.595 290	3.415,80
AccuSeal	adapter for sealing PCR plates	1	9.595 291	269,50

## **LLG-96-well PCR Plates, PP**







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

Description	Capacity	PK Cat. No.	Price
	μl		EUR
96 Well Plate, skirted	200	50 6.313 409	168,50
96 Well Plate, non-skirted	200	100 6.313 408	199,70
96 Well Plate, half skirted	200	50 6.313 394	163.60

### **Gel Documentation Workflow Kit** gelLITE



The starter package for working with agarose gels in the laboratory. It includes everything necessary from gel loading to gel documentation and quantification.

- Gel documentation system **gelLITE** with pre-focused camera and blue light converter screen. Acquisition and analysis software is already included licence-free
- Electrophoresis tank **multiSUB Midi** is an injection-moulded tank for up to 100 samples and each platinum electrode is recessed in a removable cassette to protect it from damage
- Power supply PowerPro can be operated in constant mode or programmed. Stores preset protocols for each Cleaver Scientific gel

Scope of supply: Gel documentation system gelLITE, electrophoresis tank multiSUB Midi DUO, power supply PowerPro 300, UV to blue light converter (21 x 26 cm), UV fluorescent ruler, UV gel scoop, agarose (100 g), DNA ladder (100 bp to 10 Kb), DNA staining reagent runSAFE (50 bp to 20 Kb), TAE running buffer (1 l)

Description	PK Cat. No.	Price
		EUR
Gel Documentation Workflow Kit gell ITE	1 4.671 801	6.191.70

### **Plasmid Purification-Kits Hi-Speed** MINI/MIDI Fast Ion





For rapid and efficient extraction of plasmid DNA from bacterial cells. The method is based on a combination of alkaline lysis and RNase treatment to obtain a clear lysate with minimal genomic DNA and RNA contamination. The bound plasmid DNA is washed and finally eluted by adding a buffer.

**Specifications** Hi-Speed MINI/MIDI Fast Ion Spin column // Anion-Exchange Method: 1 - 5 ml // 50 ml high-copy plasmid/ Sample size: 100 ml low-copy plasmid 30 μg // 800 μg Binding capacity:

1 - 15 kb // 1 - 20 kb Fragment size: Typical yield:  $10 - 30 \ \mu g \ // \ 200 \ - \ 800 \ \mu g$ <15 min. // <120 min. Operation Time:

Туре	Description	For	PK	Cat. No.	Price
					EUR
Hi-Speed MINI	Spin column	100 preps	1	4.661 765	116,40
Hi-Speed MINI	Spin column	300 preps	1	4.661 767	309,60
MIDI Fast Ion	Gravity flow	25 preps	1	4.661 763	237,60

#### **LLG-Petri dishes, PS**



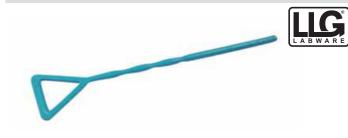


Produced under aseptic conditions in an ISO 6 cleanroom.

- With a smooth surface for an optimal distribution of the transport medium
- Stackable
- With or without vents
- Packed in sleeves of 10 dishes or 20 dishes (90 mm diam. dishes)

Ext. diam.	Description	Height approx.	PK	Cat. No.	Price
mm		mm			EUR
90	with triple vents, aseptic	16	480	6.285 823	52,70
90	without vents, aseptic	16	480	6.285 824	52,70
90	with triple vents, sterile	16	480	6.285 816	60,70
90	without vents, sterile	16	480	6.285 817	60,70
60	with triple vents, sterile	14	1080	4.678 371	112,80
60	without vents, sterile	14	1080	4.678 372	112,80

### LLG-Drigalski spatula, PS, sterile



For easy plating.Individually packed.

Diam.	Width	Length	PK Cat. No.	Price
mm	mm	mm		EUR
4	51.5	174	100 6.251 768	8,60

## **Inoculating Turntable**





The manually operated turntable allows smooth and even rotation in both directions for easy and fast distribution of bacteria on the Petri dish surface. Due to the double-sided design, the turntable can accommodate Petri dishes from 60 to 150 mm in diameter. Non-slip stand.

Description	PK Cat. No.	Price
		EUR
Inoculating Turntable	1 6.286 850	190,20

#### Incubator Lovibond® DI 10





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

- Low voltage, in-car operation possible
- Holds up to 12 dipslides or 10 quanti-discs
- Programmable incubation period setting
- Rapid heating times for fast testing

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

Temperature range: ambient  $+5 \dots +40$  °C ( $\pm 0.5$  °C ) Dimensions (W x D x H): 246 x 215 x 162 mm 
Weight: 1.7 kg

Power supply: 110/220-240 V or 12 V

Туре	PK Ca	t. No. Price
		EUR
Lovibond® DI 10	1 6.2	291 192 <b>553,10</b>
Dipslide-Holder	1 6.2	274 399 <b>126,00</b>

## Microbiological rapid tests Lovibond® Dipslides





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

Description	PK	Cat. No.	Price
			EUR
TTC/TTC for total viable count (TVC)	10	6.282 520	17,90
TTC/MALT for Yeast, Moulds, Fungi, TVC	10	6.282 521	17,90
TTC/ROSE for Yeast, Moulds, Fungi, TVC	10	6.282 522	17,90
TTC/MAC for coliforms, TVC	10	6.282 523	17,90
TTC/E.COLI for E. coli/coliforms, TVC	10	6.282 524	32,00
PDM/MAC for Pseudomonas species, coliforms	10	6.282 525	32,00
TTC/PDM for Pseudomonas species, TVC	10	6.282 526	32,00
SRB for Sulphate reducing bacteria	10	6.282 527	48,60
R2A/R2A - TTC for testing of potable water	10	6.282 529	17,90

## Disposable liquid samplers, HDPE

## 咒





They are clean room-manufactured, individually-packed and always ready-to-use.

For high viscosity-media up to 100000 mPas.

Туре	Description	Capacity	Length	PK	Cat. No.	Price
		ml	mm			EUR
ViscoDispo	non-sterile	100	500	20	9.303 732	138,50
ViscoDispo	non-sterile	200	1000	20	9.303 734	169,90

# LLG-Sample containers, PS, with screw cap, sterile





With PE or /PP screw cap. Ideal for many applications as sample collection, transportation or storage.

- Non-cytotoxic
- EO sterilized
- 30 ml container with conical skirted bottom
- Ideal for small volume samples
- Leakproof-tested
- Unique leak tight cap ensures exceptional leak proof seal
- With plain label

Nominal capacity	Ø with Cover	Height	Material Lid	PK	Cat. No.	Price
ml	mm	mm				EUR
7	22	48	PP	700	6.265 646	88,90
30	30	90	PP	50	6.265 647	12,20
60	43	58	PE	60	6.265 648	18.30

### Sampler ViscoSampler, PTFE/FEP







Highly transparent. Ultra-pure sampler with powerful suction for viscousmedia. Specially developed for viscous substances, such as slurries, silt, wet clay and soil samples, sediments, oils, emulsions and creams.

The suction flask sucks up and discharges the material. All surfaces are non-porous and crevice-free, preventing dirt accumulation. Only round-profile threads, suitable for food hygiene applications, are used. Allow easy dismantling and cleaning.

Nominal capacity	Length	Diam.	Material	PK	Cat. No.	Price
ml	mm	mm				EUR
160	600	32	PTFE/FEP	1	6.803 102	359,70
300	1000	32	PTFE/FEP	1	9.303 960	408,40
650	2000	32	PTFE/FEP	1	9.303 961	577,30

# Tubes, culture, Soda-lime glass, screw cap







Autoclavable. For culture growth, transport and storage. Complete with aluminium or plastic screw cap and rubber sealing gasket. The 5 ml size has a frosted marking area.

Further sizes available on request.

Diam.	Nominal capacity	Length	PK Cat. No. <b>Price</b>
mm	ml	mm	EUR
12	3	35	100 9.010 608 <b>61,90</b>
14	5	50	100 9.010 602 <b>179,10</b>
27	15	45	100 6.266 815 <b>188,00</b>
27	20	50	100 6.264 629 <b>182,40</b>
27	30	75	100 6.266 816 <b>190,20</b>
14	5	50	100 9.010 603 <b>98,40</b>
27	15	45	100 9.010 610 <b>122,70</b>
27	20	50	100 9.010 611 <b>134,90</b>
27	30	75	100 9.010 601 <b>141,50</b>

#### Spatula set, 14-pieces



In zipper case, spatula attached with loops. Containing:

- 2 Spoon spatula, 150, 180 mm
- 3 Micro-spatula, spoon 5 x 7 mm, 100, 150, 185 mm
- 3 Double spatula, rigid, 130, 150, 185 mm
- Micro-powder spatula, flexible, 150 mm
- Pharmacist spoon, double-ended, 170 mm
- Chemical spoon, double-sided, 150 mm
- Weighing spatula, 170 mm
- 2 Micro-double spatula, spoon-shaped, 130, 150 mm

Туре	PK Cat. No.	Price
		EUR
HSO 132-00	1 6.312 442	83,40

# Spatulas, PS





Impact resistant polystyrol. Available as double-ended flat spatula or one end flat and the other with spoon.

Туре	Length	PK Cat. No.	Price
	mm		EUR
Double-ended	150	10 6.323 098	17,40
Double-ended	180	10 6.323 099	17,90
With spoon	180	10 6.323 100	18,70
With spoon	210	10 6.323 101	19,80

# **Chemist's large instrument set,** 13-pieces



In zipper case, instruments attached with loops. Containing:

- 2 Micro-double spatula, flexible, 150 mm
- Spoon spatula, 150 mm
- Micro-spatula, 150 mm, spoon 5 x 7 mm
- Weighing spatula, 170 mm
- Micro-powder spatula, flexible, 150 mm
- Dissecting needle with plastic handle, 140 mm
- Pharmacist spoon, 150 mm
- Splinter forceps, curved, 105 mm
- Forceps, anatomical, 145 mm
- Forceps, pointed, 105 mm
- Scissors, pointed/pointed, 145 mm
- Microscope scissors, 115 mm

Туре	PK Cat. No.	Price
		EUR
HSO 131-00	1 6.312 441	91,10

# Forceps, stainless steel, anti-magnetic, anti-acid





BOCHEM



Form	Length	PK	Cat. No.	Price
	mm			EUR
Straight, strong, fine	110	1	4.668 564	16,50
Curved, fine	120	1	4.668 562	10,20
Curved, very fine	120	1	4.668 572	15,30
Straight, fine, blunt	150	1	4.668 571	16,50
Straight, strong, fine, Nickel plated with guide-pin	i, 155	1	4.668 563	14,90

## Measuring jugs with handle, stainless steel, heavy duty



9.275 850

18/10 steel. Graduated 200 ml. With spout and handle, straight\* or conical shape.

Nominal	Ext.	Height	foot	PK	Cat. No.	Price
capacity	diam.					
ml	mm	mm				EUR
500	90	125	-	1	6.072 687	21,80
1000 *	100	140	-	1	9.275 850	114,00
1000	125	140	-	1	7.400 857	24,30
2000 *	130	170	-	1	9.275 852	132,90
2000	140	170	-	1	6.204 504	39,40
500	115	115	+	1	9.275 860	14,50
1000	140	160	+	1	9.275 861	19,80
1500	150	160	+	1	9.275 862	33,30
2000	160	185	+	1	9.275 863	48,20

### **Chemical protective gloves** AlphaTec® 58-128

EN ISO 374-1











- Chemical protection glove with ergonomics certificate
- Palm with profile for better grip
- Anatomical fit for natural movements
- Good finger dexterity and touch sensitivity
- Excellent mechanical resistance
- Support material made of a flexible, open knit fabric with an elastic nitrile coating
- Pack of 1 pair

320 - 328 mm Length: Thickness: 0.175 mm Colour: grey/green

Size	PK	Cat. No.	Price
			EUR
7	1	6.318 070	5,10
8	1	6.318 071	5,10
9	1	6.318 072	5,10
10	1	6.318 073	5,10
11	1	6.318 074	5,10

## **Chemical Protection Glove Ultranitrile 492, Nitrile**

EN ISO 374-1 Type A











Green nitrile glove with cotton flock liner. Anatomical shape. Good grip finish on palm and fingers. High mechanical resistance. Excellent chemical protection against alcohols, oils, greases and hydrocarbons. Thin material for increased dexterity. Comfort, due to the quality of the flock-lining. Cat. III

#### **Specifications**

320 mm Lenath: Thickness: 0.38 mm Colour: green

Size	PK	Cat. No.	Price
			EUR
XS (6)	10	4.686 092	22,80
S (7)	10	4.686 093	22,80
M (8)	10	4.686 094	22,80
L (9)	10	4.686 095	22,80
XL (10)	10	4.686 091	22,80

### LLG-Disposable Gloves ergo, Nitrile, **Powder-Free**

EN ISO 374-1 Type B

EN ISO 374-5 EN 420











Disposable protective gloves made of nitrile, which combines the pleasant wearing properties and high tactile sensitivity of latex with the protective function of nitrile. No allergy risk! The ideal glove for all applications where good tactile sensitivity and protection against chemicals is desired.

- Thin very comfortable to wear!
- Very good factile sensitivity comparable to latex
- Proven quality product made of nitrile excellent resistance to skinirritating substances in foodstuffs
- Higher durability due to special formulation
- Free of phthalates/plasticisers and allergenic latex proteins
- Easy to put on and particularly skin-friendly due to special aftertreatment
- Suitable for all areas subject to HACCP standards
- Cat. III against low chemical hazard. AQL 1.5.

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 420 Food safe.

Glove shape: flat with rolled edge (ambidextrous) Material: nitrile

lavender blue Colour: textured fingers Outside:

Inside: powder-free halogenated

Size: XS, S, M, L, XL Thickness (measured in double layer): 0.12 mm

Size PK Cat. No. Price EUR 200 9.006 370 13,40 200 9.006 371 13.40 200 9.006 372 13,40 200 9.006 373 13.40

## LLG-Glove dispenser for 1 or 3 boxes, acrylic glass



High-quality, sturdy design. Mounting material included.

Description	For	PK	Cat. No.	Price
				EUR
side slot, sturdy material	1 Box	1	6.286 594	18,10
front insert, flexible material	3 Boxen	1	9.405 373	40,40
side slot, sturdy material	3 Boxen	1	9.405 374	34,20

#### Basket mask with valve





Particle-filtering mask with valve

- Protection class FFP3 NR D
- EN149:2001+A1:2009
- Metal free
- Textile headband for a comfortable and secure fit, adjustable
- Preformed nose area
- Soft sealing lip (PVC foam) for more comfort
- Mask fulfils the requirements of the dolomite dust test (D)

Description	Protection- level	PK	Cat. No.	Price
				EUR
Basket mask with valve	FFP3	10	6.316 169	39,10

## **Eye-Wash Bottle, Barikos KS**





According to DIN EN 15154-4. The water fillings have a shelf life of at least 2 years when sealed. With protective cap and tilt valve suitable for use with upright as well as downward spray

- pH-neutral water-based eye wash without chemical additives
- Ergonomically shaped eye recess

### **LLG-Safety Eyeshields lady**







- CE approved to EN 166 and EN 170
- Panoramic wrapping lens
- 180° visual field
- Frame made of tested hypo-allergenic material Temples with rubber tips, adjustable in length and inclination
- Nosepad and terminal tips made from soft, moldable material for optimal comfort and individual customisation
- 100 % UV protection (up to 400 nm)
- Weighs only 25 g

Lens	PK	Cat. No.	Price
			EUR
clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	9.006 007	9,00
clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	9.006 008	9,00
clear, AF, AS, 2C-1.2 U 1 FT CE	1	9.006 009	8,00

## **LLG-Dispenserbox, Acrylic Glass**





With hinged lid. For storage of laboratory tools, e.g. laboratory goggles, gloves or other small items.

Wall mounting possible (mounting material included) - for about 12 goggles

Description	PK Cat. No.	Price
		EUR
Barikos KS, 620 ml, filled	1 9.005 009	18,30
Mini Barikos KS, 175 ml, filled	1 9.005 008	13,50

Description	Dimensions (W x D x H)	PK	Cat. No.	Price
	mm			EUR
LLG-Dispenserbox	216 x 216 x 200	1	6.286 593	27,90

#### **PU Coated Gloves, nylon**





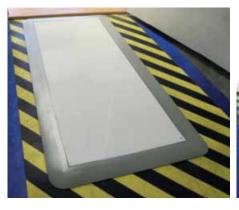
The PU-coated nylon gloves are processed on the cuffs in a fraying preventing way.

- Very flexible
- Lint-free
- Palm PU-coated
- Particularly handy and suitable for handling smooth and slippery objects
- Colour coding of the cuffs
- Pack of 10 pairs

Size	Colour	PK	Cat. No.	Price
				EUR
S	white	10	4.659 030	8,50
M	green	10	4.659 029	8,50
L	grey	10	4.659 028	8,50
XL	brown	10	4.659 027	8,50

### **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.

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.	Price
				EUR
Frame for Cleanroom mats Sticky Mat	grey	1	6.272 245	79,50
1 mat of 30 sheets	white	10	6.272 241	103,50
I mai or so sneets	WITHCE	10	0.2/2 241	103,50
1 mat of 30 sheets	blue	10	6.272 242	103,50
Set of 10 mats of 30 sheets + 1 frame	white	- 1	6 272 243	156.80
Set of 10 mats of 30 sheets + 1 frame	blue	1	6.272 244	156,80
Set of 10 mats of 30 sheets + 1 frame Set of 10 mats of 30 sheets + 1 frame	white blue		6.272 243 6.272 244	156,80 156,80

### Cleanroom Gloves AdvanTech 529, nitrile

EN ISO 374-1 Type B

EN ISO 374-5











Reinforced mechanical resistance for short-term operations. Manufacturing process guarantees a very low level of contaminants: rates of particles, powder-free, non-volatile residue, extractables; compatible with ISO 5 class (Class M3.5 for International system). 100 % nitrile formula enables anti-static properties. Protection against accidental chemical splashes. Recommended for people who are sensitive to the proteins in natural latex. Thickness: 0.1 mm. Packaging: 100 gloves/bag

#### - Cat. III

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 421

Size	Length	PK	Cat. No.	Price
	mm			EUR
6	300	100	6.270 501	36,00
7	300	100	6.270 502	36,00
8	300	100	6.270 503	36,00
9	300	100	6.270 504	36,00
10	300	100	6.270 505	36,00

## **Cleanroom Wipes Sontara®** MicroPure, polyester/cellulose



Specially designed for use in cleanrooms. The fleece combines the absorbency of natural fibres with the purity and strength of a synthetic material. Neither binders nor chemicals are used in the production process.

Туре	Dimensions	Cleanroom Class ISO	PK	Cat. No.	Price
	mm				EUR
Sontara® MicroPure 100	305 x 305	5 + 6	150	9.390 185	32,70
Sontara® MicroPure 100	224 x 224	5 + 6	300	9.390 186	32,40
Sontara® MicroPure AP	305 x 305	6 - 9	150	9.390 187	33,60
Sontara® MicroPure AP	224 x 224	6 - 9	300	9.390 188	28,30
Sontara® MicroPure SV	305 x 305	7 - 9	250	9.390 189	34,80
Sontara® MicroPure SV	224 x 224	7 - 9	500	9.390 190	43,00

# Hand brush, PP



- Soft bristles To remove fine particles Food-safe
- For colour coding
- Autoclavable

Dustpan, PP	
₹	Vikan

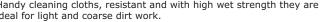
- Ergonomically designed
- Food-safeFor colour codingAutoclavable

Bristle length	Overall length	Width	Height	Colour	PK	Cat. No.	Price
mm	mm	mm	mm				EUR
50	330	35	110	green	1	4.666 176	7,40
50	330	35	110	blue	1	4.666 177	7,40
50	330	35	110	red	1	4.666 178	7,40
50	330	35	110	white	1	4.666 179	7,40
50	330	35	110	yellow	1	4.666 180	7,40

Length	Colour	PK	Cat. No.	Price
mm				EUR
330	green	1	4.666 171	8,80
330	blue	1	4.666 172	8,80
330	red	1	4.666 173	8,80
330	white	1	4.666 174	8,80
330	yellow	1	4.666 175	8,80

## Wipes Multiclean®, 3-ply







contents	
mm mm g/m²	EUR
220 380 60 2 rolls with 500 tears 2 7.618 013	28,70
360 380 54 2 rolls with 500 tears 2 7.618 212	41,30
360 380 54 Roll with 1000 tears 1 7.671 903	38,40

## **Roll holders**



Description	PK	Cat. No.	Price
			EUR
Floor stand with waste bag holder for rolls up to 42 cm width	1	6.266 990	78,60
Wall bracket with waste bag holder for rolls up to 42 cm width*	1	6.266 991	65,10
* incl. mounting material			

# Overhead stirrer LLG-uniSTIRRER OH2, digital





Laboratory stirrer designed for simple stirring tasks for quantities up to 20 l ( $H_2O$ ). Automatic speed adjustment in the range between 50 and 2200 rpm via microprocessor-controlled technology. Safety circuits ensure automatic cut-off in an anti-stall or overload situation. Actual and set speed are constantly monitored ensuring no undesired speed variations, even if the sample viscosity changes.

- Brushless, maintenance-free motor
- Digital speed display
- Display for speed or torque changeable
- Infinitely adjustable speed
- Overload protection
- Non-slippery mat
- Slim casing
- Quiet operation
- Error code display
- RS232 port

**Stand:** Stainless steel stand incl. boss head, dimension (W x D x H):  $200 \times 310 \times 780$  mm, non-slippery mat **Stirrer:** 4-blade propeller stirrer, stainless steel, shaft length 400 mm, stirrer diameter 50 mm

**Scope of supply:** Overhead stirrer LLG-uni*STIRRER* OH2, stand, non-slippery mat and 4-blade-propeller stirrer

IP 21

#### Specifications

Max. stirring quantity (H<sub>2</sub>O): Speed range: Max. viscosity: Motor rating input/output: Speed display accuracy: Max. torque at stirring shaft: Display: Chuck range:

Dimensions (W x D x H): Power supply:

IP code:

20 I 50 ... 2.200 rpm 10.000 mPas 60/50 W ±3 rpm 40 Ncm LCD 0.5 ... 10 mm 83 x 186 x 220 mm 110 ... 240 V, 50/60 Hz

Туре	Plug type	PK	Cat. No.	Price
				EUR
LLG-uniSTIRRER OH2	EU	1	6.263 455	677,80
LLG-uniSTIRRER OH2	UK	1	6.263 456	677,80

# **LLG-Magnetic Stirring Bar Retrievers, PTFE**



PTFE-encapsulated stirring bar retriever with strong permanent magnet (Alnico 5), universal chemical resistance.

Diam.	Length	PK Cat. No.	Price
mm	mm		EUR
8	150	1 9.197 717	11,50
8	250	1 9.197 725	12,30
8	270	1 4.008 501	12,40
8	350	1 9.197 735	13,30

# 4-Position-Magnetic Stirrer LLG-uniSTIRRER 1/M4



An **Ultra-flat** inductive magnetic stirrer without heating with timer. The modern magnet coil technology consists only of non-moving parts and therefore guarantees a wear-free drive.

For a better mixing of samples it is possible to change the direction of rotation every 30 seconds.

- Max. stirring quantity per stirring position 400 ml
- **Timer** (1 to 99 min, infinitely)
- 100 % wear- and maintenance-free inductive drive
- LED-display for an exact adjustment of the rotation speed
- Digital regulated rotation speed
- Alteration of the stirring direction
- High Protection class IP 65
- Stainless steel surface

Scope of supply: magnetic stirrer, 1 mains adapter each US, AUS, UK, 1 stirring rod 25 x 8 mm

#### **Specifications**

Stirring positions: Distance between Stirring postions: 95 mm Max. Stirring quantity (H<sub>2</sub>O): 4 x 0.4 l = 1.6 l 15 ... 1200 rpm Speed range: Permissible ambient temperature: 5 ... 40 °C max. 25 mm Magnetic bar: Display: Heating plate  $(W \times D)$ : 122 x 385 mm Dimensions (W x D x H): 126 x 457 x 13.5 mm Weight: 1.9 kg Power supply: 100 ... 240 V, 50/60 Hz IP code: IP 65

Туре	Plug type	PK	Cat. No.	Price
				EUR
LLG-uniSTIRRER 1/M4	EU	1	6.263 425	474,40
LLG-uniSTIRRER 1/M4	UK	1	6.263 426	474.40

# LLG-Magnetic stirring bars, cylindrical, PTFE, eco pack





Circular, smooth and PTFE-coated.

Diam.	Length	PK Cat. No.	Price
mm	mm		EUR
6	10	10 9.198 910	4,50
3	12	10 9.198 766	4,10
6	15	10 9.198 919	5,10
6	20	10 9.198 920	6,20
6	25	10 9.198 925	8,20
8	25	10 9.198 767	8,40
6	30	10 9.198 930	9,10
6	35	10 9.198 935	11,80
8	40	10 9.198 940	15,20
8	45	10 9.198 945	16,80
8	50	10 9.198 950	20,10
9	60	10 9.198 960	24,90
9	70	10 9.198 970	29,50
9	80	10 9.198 980	33,40

## **Magnetic stirrer TWISTER**



Without heating. The TWISTER is a universal and particularly compact mixing device with magnetic drive, which can be expanded into a multi-position magnetic stirrer with a wide range of applications by connecting up to 30 devices in series. The stirring points can be controlled either separately or simultaneously (leader-follower principle).

- Intuitive 360° LED glass display for conveying all information without alpha-numerical display
- Integrated beaker detection
- Significant improvement of the mixing result with samples that are difficult to mix by changing the direction of rotation at definable time intervals (reverse function)
- Display of speed or power required for stirring for observation and percentage display of viscosity change
- Suitable for operation in incubators up to 40 °C
- Cleaning under the tap possible

Set 1 Scope of delivery: 1 x TWISTER magnetic stirrer,

1 x plug-in power supply unit with adapter,

1 x IKAFLON 25 round magnetic stirring bar

Set 2 Scope of delivery: 2 x magnetic stirrers TWISTER,

1 x plug-in power supply unit with adapter,

2 x magnetic stirring bars IKAFLON 25 round

Set 3 Scope of delivery: 3 x TWISTER magnetic stirrers,

1 x plug-in power supply unit with adapter,

3 x IKAFLON 25 round magnetic stirring bars

Set 4 Scope of delivery: 4 x TWISTER magnetic stirrers,

1 x plug-in power supply unit with adapter,

4 x IKAFLON 25 round magnetic stirring bars

#### **Specifications**

Max. stirred volume per postion:

Speed range: 100 ... 3000 rpm Permissible ambient temperature: 5 ... 40 °C Permissible relative humidity: 80 % Material Top plate: Glass

Dimensions Top plate (W x D): 124 x 124 mm Dimensions (W  $\times$  D  $\times$  H): 135 x 135 x 24 mm

Weight: 0.6 kg 100 ... 240 V, 50/60 Hz Power supply:

IP code: IP 66

Туре	Stirring capacity	PK	Cat. No.	Price
	T			EUR
TWISTER Set 1	5	1	4.685 997	424,80
TWISTER Set 2	10	1	4.685 998	797,50
TWISTER Set 3	15	1	4.685 999	1.170,10
TWISTER Set 4	20	1	4.686 000	1.487,70

### **LLG-Magnetic stirrer** RCT standard 2.0, Set



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

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

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

#### **Specifications**

Max. stirring quantity (H<sub>2</sub>O):

Speed range: 50 ... 1500 rpm Ø 135 mm Heating plate

RT + device self-heating ... 310 °C Temperature range:

Heat output: 600 W

50 ... 360 °C Safety temperature range: Dimensions (W  $\times$  D  $\times$  H): 160 x 270 x 85 mm

2.4 kg Weight: Power supply:

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

IP code: IP 42

Description	Plug type	PK	Cat. No.	Price
				EUR
LLG magnetic stirrer RCT standard 2.0, set	EU	1	6.320 411	1.196,60
LLG magnetic stirrer RCT standard 2.0, set	CH	1	6.322 748	1.196,60
LLG magnetic stirrer RCT standard 2.0, set	UK	1	6.322 749	1.196,60

# Thermo shaker LLG-uniTHERMIX 1 pro and 2 pro



The LLG-uni*THERMIX* pro is ideal for shaking and temperature control of a variety of tubes or plates (depending on the block used).

- Easy and quick change of heating blocks due to magnetic fastening
- Precise temperature control system
- Efficient mixing up to 1500 rpm (depending on the heating block)
- Up to 9 storable programs

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

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

Blocks must be ordered separately.

Scope of supply: thermal shaker, 4 suction feet

#### **Specifications**

Temperature range LLG-uniTHERMIX 1 pro: RT + 5 °C ... approx. 100 °C LLG-uniTHERMIX 2 pro: 15 °C below RT ... approx. 100 °C Temperature control:  $\pm 0.5$  °C (at 20 ... 45 °C) Uniformity:  $\pm 0.5$  °C (at 20 ... 45 °C) Max. heating rate: 5.5 °C/min 100 °C ... RT)

(LLG-uni*THERMIX* 2 pro only): 0.5 °C/min (below RT)
Electrical heating/cooling power: 200 W
Speed range: 300 ... 1500 rpm

Orbit: 3 mm
Display: LCD

Programs: 6 stages, 9 programs
Timer: 1 ... 99 hours or continuous
Capacity: 1 exchangeable block
Dimensions (W x D x H): 200 x 235 x 120 mm
Weight: 7.3 kg

Weight: 7.3 kg
Power supply: 220 ... 240 V, 50/60 Hz

Туре	Plug type	PK	Cat. No.	Price
				EUR
LLG-uniTHERMIX 1 pro	EU	1	6.263 482	940,80
LLG-uniTHERMIX 1 pro	UK	1	6.263 483	940,80
LLG-uniTHERMIX 2 pro	EU	1	6.263 484	1.564,90
LLG-uniTHERMIX 2 pro	UK	1	6.263 485	1.564,90

# Heating blocks for Thermo shaker LLG-uniTHERMIX 1 and 2 pro



For	PK	Cat. No.	Price
			EUR
24 tubes, 1.5 ml	1	6.263 487	174,40
24 tubes, 2 ml	1	6.263 494	174,40
8 tubes, 5 ml	1	6.263 495	174,40
8 tubes, 15 ml	1	6.263 496	290,90
4 tubes, 50 ml	1	6.263 497	290,90
96 well PCR plates, 0.2 ml tubes	1	6.263 498	174,40
96/384 microplate	1	6.263 499	174,40

### **Benchtop Shaking Incubator 222DS**





- Useable in cold rooms
- Easy changeable platforms



The Benchtop Shaking Incubator is a combination of a shaker and a temperature chamber, designed for shaking and heat treatment of sensitive samples. It replaces two devices, reduces time and space needed. It is very suitable for biochemistry, microbiology and medicine laboratories in which thermal and shaking treatment of samples is a daily used routine.

- Can be used in cold rooms too
- Digital readout of all parameters read temporary or preset RPM, temperature, time, acceleration
- HOLD and STEP time function with 1 minute resolution

Univeral attachement and non-slip mat please order separately.

#### **Specifications**

Temperature range: Ambient +5 °C ... 70 °C

Precision:  $\pm 0.5$  °C Speed range:  $\pm 0.5$  °C 20 ... 300 rpm

Timer: 1 min - 99 hours or continuous

Platform size: 300 x 300 mm Supply requirements: 230 V, 50 Hz

Price	Cat. No.	PK	Type
			71
EUR			
0 540 50	C 250 070		22200
2.543,70	6.259 079	1	222DS

# Accessories for Benchtop Shaking Incubator 222DS

Description	PK Cat. No.	Price
		EUR
Universal platform 30 x 30 cm	1 6.259 080	249,90
Non-slip mat	2 6.259 082	41,70

### **LLG-Test tube rack, PP**











Made of PP. Stackable. The LLG racks are supplied in three parts and are easy to put together. With alphanumeric position marking for quick and easy identification of samples. Autoclavable.

For tubes diam.	Colour	Dimensions (W x D x H)	Array	PK	Cat. No.	Price
mm		mm				EUR
16	white	251 x 106 x 71	60	1	6.286 169	4,20
16	blue	251 x 106 x 71	60	1	6.286 170	4,20
16	red	251 x 106 x 71	60	1	6.286 171	4,20
20	white	252 x 108 x 72	40	1	6.286 172	4,20
20	blue	252 x 108 x 72	40	1	6.286 173	4,20
20	red	252 x 108 x 72	40	1	6.286 174	4,20
30	white	252 x 107 x 71	21	1	6.286 175	4,20
30	blue	252 x 107 x 71	21	1	6.286 176	4,20
30	red	252 x 107 x 71	21	1	6.286 177	4,20

## LLG-Centrifuge Tubes economy, PP







- With flat PE caps
- With conical bottom (15 and 50 ml) or with self-standing bottom (50 ml)
- Easy-to-read black volume graduations
- With a large frosted writing area
- Engraved graduation at the conical bottom of each tube
- Max. rotate speed up to 12000 x g for conical bottom tubes and 6000 x g for self-standing tubes
- Autoclavable at 121 °C and freezable to -80 °C
- Leak-proof
- Free of heavy metals, pyrogens and endotoxins
- DNase/RNase-free
- Aseptically or sterile

Capacity	Description	Form	PK	Cat. No.	Price
ml					EUR
15	Sterile, in bag of 25 pieces	conical	500	4.668 482	66,30
50	Sterile, in bag of 25 pieces	conical	500	4.668 483	82,10
50	Sterile, in bag of 25 pieces	with rim	500	4.668 486	91,10
15	Aseptically, bulk pack	conical	500	6.270 403	53,60
50	Aseptically, bulk pack	conical	500	6.270 404	67,30
50	Aseptically, bulk pack	with rim	500	6.270 405	71,70

# Vortex mixers WIZARD with IR sensor





- Touchless start due to infrared sensor
- Safe stand due to non-slip feet
- High chemical and corrosion resistance



Vortexers with patented IR sensor for sample recognition: the shaking process starts automatically when the sample tube approaches the mixing cup head. This enables fatigue-free working, as the sample doesn't have to be pressed on the device.

- For IR sensor and continuous operation
- Electronic speed control
- Adjustable shaking speeds up to 3000 rpm
- Very good chemical resistance
- Broad range of accessories available

Scope of delivery: Vortex mixer with mixing head

#### **Specifications**

Type of movement: orbital
Orbital diameter: 4.5 mm
Speed range: 0 ... 3000 rpm
Input power 15 W
IP code: IP 42
Power supply: 100 ... 240 V, 50 ... 60 Hz
Warranty: 3 years

Туре	Plug type	PK Cat. No. Pr	ice
		E	UR
WIZARD	FII	1 4.666 536 <b>243</b> .	.30

## LLG-Centrifuge tubes, 5 ml, PP







The LLG-Centrifuge tubes, 5ml, represent the perfect solution for all laboratory applications requiring incubation, centrifugation and sample handling in an intermediate volume range.

- Max. 25000 x g, suitable for high speed centrifugation
- Graduations every 0.25 ml for easy volume estimation
- A flat, frosted cap and large writing pad for sample labeling and identification
- Autoclavable
- Fits all rotors and racks that hold 15 ml conical tubes, no adapters needed
- Certified free of RNase and DNase

Description	Package contents	PK	Cat. No.	Price EUR
Clear	1 bag of 250 pieces	250	6.281 113	28,90
Amber	1 bag of 250 pieces	250	6.281 115	24,70

### Refrigerated circulators CORIO™ CP

With insulated stainless steel bath tanks, flexible performance and an operating temperature range of up to 200 °C.

- Suitable for internal and external applications
- Stainless steel bath tanks
- External pump connections M16x1
- Early warning system for low level
- Simple switchover between internal and external circulation
- Powerful, infinitely variable pump
- Natural refrigerant
- USB connection
- RS232 interface
- Class III (FL) according to DIN 12876-1

Scope of supply: Refrigerated circulator, mains power cable, connection box, bath cover, connecting cable, refrigerator, hose connectors 8 and 12 mm



Julabo

#### **Specifications**

Setting accuracy: Temperature range: Temperature uniformity: Pump output: Pump pressure: Heat output: Timer:

Hose connector inner width: Permissible ambient temperature: Power supply:

0.01 °C 30 ... 200 °C ±0.03 °C 8 ... 27 l/min 0.1 ... 0.7 bar 2 kW 0 ... 999 min 8/12 mm 5 ... 40 °C 230 V/50 Hz

Туре	Capacity of the bath litres	Cooling capacity kW at 20/0/-20°C	PK	Cat. No.	Price
CP-310F	4	0,3 / 0,27 / 0,12	1	4.685 630	5.537,10
CP-450F	4	0,44 / 0,37 / 0,16	1	4.685 632	6.056,10

## **Digital water baths JB Nova**

General-purpose water baths with stable temperature control and fast heating rate. Base tray and lid included as standard.

- Ambient +5 °C to 95 °C
- Unique Set and Forget™ technology, fast reliable temperature control
- Drain tap on 12 L, 18 L and 26 L haths
- Practical front panel lock, deactivated **OPERATING UNIT**
- 3-year warranty

Accessory polypropylene spheres or a lid must be used at temperatures between +60 °C and +99 °C.





grant@

Туре	Capacity of the bath	External dimensions (W x D x H)	PK	Cat. No.	Price
	litres	mm			EUR
JBN5	5	335 x 215 x 200	1	9.905 870	704,60
JBN12	12	360 x 380 x 225	1	9.905 871	815,20
JBN18	18	335 x 590 x 275	1	9.905 872	966,00
JBN26	26	335 x 590 x 275	1	9.905 873	1.131,40

### Digital dry bath LLG-uniBLOCKTHERM







Suitable for use in microbiological, histological, clinical, industrial and environmental laboratories.

- Digital control with LED display
- Can be used up to 120 °C
- For timer and continuous operation
- 1 x block unit
- With overheating protection

Scope of supply: LLG-uniBLOCKTHERM, removal tool, lid

#### Please order heating blocks separately.

#### **Specifications**

Temperature range: RT ... 120 °C ±0.5 °C Temperature uniformity: ±0.5 °C Temperature accuracy: Timer: 0 ... 99:59:00 min

Block material: Aluminium 175 x 290 x 85 mm

Dimensions (W  $\times$  D  $\times$  H): 3 kg

Weight:

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

Туре	Plug type	PK	Cat. No.	Price
				EUR
LLG-uni <i>BLOCKTHERM</i>	EU	1	6.263 460	292,30
LLG-uniBLOCKTHERM	UK	1	6.263 461	292.30

#### Heating blocks for LLG-uniBLOCKTHERM

Dimensions Heating blocks (W x D x H): 95 x 150 x 50 mm

Description	Diam.	PK	Cat. No.	Price
	mm			EUR
54 x 0.2 ml	6.4	1	6.263 462	106,50
40 x 1.5 ml	11	1	6.263 464	106,50
40 x 2.0 ml	11	1	6.263 465	106,50
28 x 5/15 ml	17	1	6.263 466	106,50
8 x 50 ml	29.8	1	6.263 467	106,50
for 96/384 Microplate	-	1	6.263 468	106,50
for each 18 x 0.2 ml, 0.5 ml and 1.5/2.0 ml	-	1	6.263 469	85,90

## LLG- Floating pellets, PP





Pellets with 20 mm diameter. Can cover 0.1 m<sup>2</sup>. Temperature stable up to 100 °C.

Description	PK Cat. No.	Price
		EUR
Floating pellets	250 6.266 611	26,60

#### Rotary vane pump CRVpro 2



#### **Specifications**

Ultimate pressure without gas ballast partial: Ultimate pressure without gas ballast total: Ultimate pressure with gas ballast total:

Connection: Motor rating 50/60Hz: Nominal speed 50/60Hz: Dimensions (L x W x H):

Weight:

3 x 10 <sup>-4</sup> mbar
3 x 10 <sup>-3</sup> mbar
9 x 10 <sup>-2</sup> mbar
DN 16 KF
0.29/0.3 kW
1440/1720 rpm
384 x 138 x 211 mm
15 kg

Туре	Suction rate (50/60Hz)	Oil capacity	Plug type	PK	Cat. No.	Price
	L / min.	ml				EUR
CRVpro 2	38/47	450	EU, UK	1	6.313 234	1.669,30

# Diaphragm vacuum pump LABOPORT® N820G, chemically-resistant



# For very aggressive corrosive gases/vapours



For rotary evaporation, distillation, gel drying, degassing as well as the use with vacuum ovens and vacuum concentrators. Due to the manual rotational speed control, the pumps are quiet, very energy efficient, and can be optimally adjusted in accordance with the application.

- Easy-to-clean surface
- Adjustable in flow rate due to manual rotational speed control
- Combination of PTFE pump head and PTFE-coated diaphragm makes the pump ideal for extremely aggressive/corrosive gases and vapors
- High level of compatibility with vapor and condensation
- Integrated gas ballast valve
- 3-color status display: In operation/ Stand-by/Error
- ATEX-compliant in accordance with II 2/-G IIB+H2 T3 internal atmosphere only
- 100~% oil-free transfer

#### **Specifications**

Ultimate vacuum (abs.):
Operating pressure:
Connectors for tube:
Permissible ambient temperature:
Pump head:
Diaphragm:

Pump head: Diaphragm: Valves: 6 mbar 0.1 bar ID 9/10 mm 5 ... 40 °C TFM™ PTFE PTFE-beschichtet FFPM

Туре	Flow rate	Dimensions (W x D x H)	PK	Cat. No.	Price
	L / min.	mm			EUR
N820G	20	163 x 259 x 220	1	4.672 375	1.494,30

#### Rotary vane pump CRVpro 4/6/8





The CRVpro pumps are powerful, two-stage vacuum pumps. They impress with their long service life, reliability and low maintenance requirements.

- Lower oil consumption due to low heat generation during operation.
- Corrosion protection through coating of the inner surface of the oil housing
- Low maintenance costs due to extended oil change intervals

**Scope of delivery:** Each pump is supplied with vacuum pump oil, centring rings, clamping rings and motor overload protection.

#### **Specifications**

Ultimate pressure without gas ballast partial: Ultimate pressure without gas ballast total: Ultimate pressure with gas ballast total:

Connection: Motor rating 50/60Hz: Nominal speed 50/60Hz: Dimensions (L x W x H): 5 x 10<sup>-4</sup> mbar 2 x 10<sup>-3</sup> mbar 7 x 10<sup>-2</sup> mbar DN 16 KF 0.37/0.4 kW 1450/1740 rpm 463 x 157 x 230 mm

Туре	Suction rate (50/60Hz)	Oil capacity	Plug type	PK	Cat. No.	Price
	L / min.	ml				EUR
CRVpro 4	63/77	1150	EU, UK	1	6.290 993	1.831,60
CRVpro 6	85/122	1150	EU, UK	1	6.290 994	2.164,60
CRVpro 8	122/143	1000	EU, UK	1	6.290 995	2.625,70

## Vacuum tubing, rubber (NR)



## **DEUTSCH & NEUMANN**

Red. Durometer 45 Shore A. Charge per metre.

Int.	Wall	PK Cat. No.	Price
diam.	thickness		
mm	mm		EUR
4	4	10 4.679 011	53,10
5	5	10 9.205 811	53,80
6	5	10 9.205 812	60,30
7	4	10 4.679 012	58,00
7	5	10 9.205 813	66,40
8	5	10 9.205 814	79,20

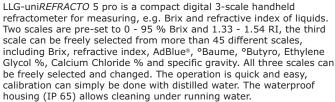
# Hand Refractometer LLG-uniREFRACTO 5 pro











- Easy switching between the three scales
- 4-digit LCD display
- Automatic temperature correction
- Sample plate made of stainless steel

Scope of supply: Refractometer, protective cover

#### **Specifications**

Resolution: 0.1 % Brix/0.0001 RI ±0.2 % Brix/±0.0003 RI Accuracy: Operating temperature: 5 ... 40 °C 5 ... 80 °C Measuring temperature sample: < 95 % Rel. Humidity: Dimensions (W  $\times$  D  $\times$  H): 120 x 55 x 35 mm Weight: 180 g Power supply: 2 x AAA/LR03 IP code: IP 65

Туре	PK Cat. No.	Price
		EUR
LLG-uniREFRACTO 5 pro	1 6.263 632	358,70

## Sucrose (Brix) Standards





Certified stabilized Sucrose (Brix) Standards.

- ISO 17025 accredited
- Uncertainty of measurement of 0.11 % for all Brix values at 20  $^{\circ}\text{C}$
- Equivalent Nominal Refractive Index values from ICUMSA published tables reported on Certificate of Analysis
- Compatible with any brand of Refractometer
- 12 month shelf life
- Provided in high quality HDPE 15 ml dropper bottles

Brix	Refractive Index at 20 °C	PK Cat	. No. Price
%			EUR
0	1.332986 nD	1 6.2	64 212 <b>72,20</b>
5	1.340264 nD	1 6.2	65 876 <b>72,20</b>
10	1.347824 nD	1 6.2	57 923 <b>72,20</b>
14.9	1.355519 nD	1 6.2	90 413 <b>130,30</b>
15	1.355679 nD	1 6.2	63 260 <b>72,20</b>
20	1.363842 nD	1 6.2	64 889 <b>72,20</b>
30	1.381149 nD	1 6.2	58 368 <b>72,20</b>
40	1.399860 nD	1 7.6	60 408 <b>72,20</b>
50	1.420087 nD	1 6.2	58 369 <b>72,20</b>
60	1.441928 nD	1 6.2	65 875 <b>72,20</b>
67.5	1.459290 nD	1 6.2	64 213 <b>72,20</b>

#### **Gloss meter TG 268**





Versatile, portable gloss meter designed for fast and accurate measurement of low, medium or high gloss levels of coatings, plastics and related materials. The device is also suitable for large-scale uniformity checks in continuity mode.

- Basic, statistical and continuous measurement methods
- Display of 5 data rows including storage capacity of more than 5000 data sets
- TFT 3.5 inch, capacitive touchscreen
- Intuitive, integrated software with icon guide
- USB and RS 232 interfaces
- Supports ASTM D523, ASTM C584, ASTM D2457, BS3900 D5, DIN 67530, DIN EN ISO 2813, EN ISO 7668 and JI Z 8741 standards

**Scope of supply:** Gloss meter, OnGloss software (PC), calibration plate, USB cable, external DC power supply, user manual (USB stick), carrying case, battery

#### **Specifications**

Measuring angle: 20°/60°/85°

Measuring range: 20°: 0 ... 2000 GU xA;60°: 0 ... 1000 GU xA;85°: 0 ... 160 GU

Resolution: 0.1 GU

Storage: Basic Mode: 1000 xA; Statistical Mode:

5000 xA;Continuous Mode: 5000 Environmental conditions: 0 ... 40 °C, 85 % RH

Dimensions (W x D x H):  $0 \dots 40 \, ^{\circ}$ C, 85 % RI  $160 \times 75 \times 90 \, \text{mm}$ 

Weight: 350 g

Power supply: 3200 mAh Li-ion battery

Pr	Cat. No.	Pl	Description	Des
Е				
2.288	4.672 490		TG 268	TG :

#### Cells W600





Cells made of optical glass or Borosilicate glass 3.3, 21 mm x 40 mm, for instument Models Fs, PFXi/PFX195, 880, 950 and 995. (Note: PFXi/PFX-195 max. path length 50 mm).

W600/OG/xx for unheated samples (up to 40 °C) W600/B/xx for heated samples (up to max. 100 °C)

Туре	Path length	Material	PK	Cat. No.	Price
	mm				EUR
W600/OG/10	10	optical glass	1	6.207 120	42,50
W600/OG/1"	25.4	optical glass	1	9.947 342	48,80
W600/OG/33	33	optical glass	1	6.093 322	58,30
W600/OG/50	50	optical glass	1	6.207 119	66,20
W600/OG/100	100	optical glass	1	6.235 055	122,90
W600/OG/51/4"	133.35	optical glass	1	9.947 343	91,40
W600/B/100	100	Borosilicate glass 3.3	1	6.253 940	157,50
W600/B/51/4"	133.35	Borosilicate glass 3.3	1	9.947 345	118,20

#### **Microscopes B1 Elite**





- High performing laboratory microscope
- · Quadruple revolving nosepiece
- Widefield eyepieces

The B1 Elite series covers a wide range of the daily work for schools and laboratories.

- Binocular head 45°, trinocular head 30°, 360° rotating
- Widefield eyepieces
   WF 10X/18 mm
- Quadruple revolving nosepiece
- Semi-Plan objectives SP 4X, 10X, 40X S
- Diopter adjustment on both eyepiece sockets
- Coaxial coarse and fine focusing system with tension adjustment
- Built-in low position coaxial rackless mechanical stage
- Focusable 1.25 N.A. Abbe condenser with iris diaphragm
- LED illumination 3 W with intensity control
- Mains supply: 110 ... 240 V





Туре	Description	PK Cat. No.	Price
			EUR
B1-220E-SP	Binocular	1 4.685 486	454,50
B1-223E-SP	Trinocular	1 4.685 487	587,60

## **LLG-Slide dispenser**





Slide dispenser can dispense 91 slides, individually. By turning the knob, one slide is dispensed. Only dry slides should be inserted into the storage magazine. With transparent, removable upper section for easy viewing of remaining slides and clean storage. For microscope slides with dimensions 75 x 25 mm and 76 x 26 mm.

Type	PK	Cat. No.	Price
			EUR
LLG dispenser for slides	1	9.161.000	18.80

#### **Microscope Camera MOTICAM S3**





- Fast frame rates with large viewing field
- For applications with low light output
- Extremely quiet background noise



The next generation of Moticams offers solutions for a wide variety of applications in digital microscopy. Compact and robust, equipped with high-quality sCMOS sensors with many different resolutions and fast USB 3.1 connection.

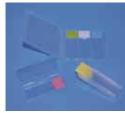
Price	Cat. No.	PK	Sensor format	esolution	Resol
EUR					
EUK					
449,70	4.672 119	1	1/2 8" cCMOS	MP (max. 2448 x 1536 px)	3 MP
47,70	7.072 113	_	1/2.0 301103	111 (111ax, 2440 x 1330 px)	2 1.11

# C-Mount camera adapter for B1-223E-SP



Description	PK	Cat. No.	Price
			EUR
C-Mount camera adapter 0.5X for 1/3"	1	6.237 216	57,40

#### **LLG-Slide** mailers





Manufactured from high density polypropylene, for shipping, storing or staining slides. Flat mailers can hold 1, 2, 3 or 5 standard (up to 76 mm  $\times$  26 mm) slides securely.

- Light weight and flat
- With marking area and "Top" printed on top surface
- With large, easy-to secure snaps
- Slotted channels inside mailer keep slides safely separated

To hold microscope slides	PK Cat. No.	Price EUR
1	10 9.161 29	
2	10 9.161 29	
3	10 9.161 29	
5	10 9.161 29	4 <b>7,40</b>

### **Density meters DMA 35**





- Only 2 ml sample liquid needed
- Quick filling due to built-in pump/syringe



Portable, digital measuring device for the determination of density, relative density and concentration. DMA 35 EX and DMA 35 EX Petrol are certified according to ATEX for applications in hazardous environments.

- Oscillator principle (borosilicate glass oscillator)
- Viscosity correction for measurements also on highly viscous samples
- Measuring of density, relative density, alcohol concentration, sugar/extraction concentration, API functions, H2SO4 concentration, ten programmable custom-specific measuring units
- Robust case with exchangeable cell
- 3 years warranty

Scope of supply: Density meter, filling tube, adapter for syringe filling, syringes, transportation case, rubber protection for measuring cell, 3 x batteries, allen key, instructions.

#### **Specification**

Density range: 0 ... 3 g/cm<sup>3</sup> Resolution: Accuracy: 0 ... 100 °C Sample temperature range: Temperature measurement range: 0 ... 40 °C 0.1 °C Resolution: Accuracy:

Reproducibility standard deviation (acc. to ISO 5725):

Sample volume: Data memory:

Display: Interfaces:

Dimensions (W x D x H):

Weight:

Power supply:

IP code:

0.0001 g/cm<sup>3</sup> ±0.001 g/cm3 ±0.2 °C 0.0007 g/cm<sup>3</sup>

2 ml 1024 measurement results, 250 sample IDs, 30 measuring methods coloured LCD, self-rotating Bluetooth®, RFID 103 x 245 x 126 mm 660 g

3 x Mignon alkaline batteries, 1.5 V LR06 AA

IP 54

#### Туре PK Cat. No. Price **EUR** DMA 35 Standard 6.313 803 3.025,90 DMA 35 EX DMA 35 EX Petrol 6.313 804 3.615,70 1 6.313 805 3.615,70

### **Turbidity meter TB350**





The mobile turbidimeters are characterised by the use of Multipath 90° BLAC® technology. Here, samples with low and high turbidity can be analysed purely nephelometrically with the highest accuracy over the entire measuring range up to 4000 NTU.

- elimination of stray light by light-absorbing traps (BLAC®)
- Data logger for 250 measurements plus all calibrations,
- 3 different modes: single, signal average, fast setting
- USB-C interface
- Optional operation with battery pack or mains connection

TB350 IR: With infra red LED light source (860 nm), acc. to ISO 7027. Incl. Turbidity standards with 5, 20, 800 and 4000 NTU.

TB350 WL: With white light LED light source, acc. to EPA (pending). Incl. Turbidity standards with 5, 20, 800, 2000 and 4000 NTU

Scope of delivery: Instrument, carrying case with plastic insert, T-CAL® calibration and verification standards, silicone oil, sample vials with black lids, cleaning cloth, brush for sample vials, screwdriver, AA batteries

**Specifications** TB350 IR || TB350 WL

Measuring range: 0 ... 4000 NTU

Resolution: 0.01 NTU Accuracy:  $\pm 1.8 \% + < 0.014 \text{ NTU}$ Reproducibility: <1 %, ±0.01 NTU Dimensions (W  $\times$  D  $\times$  H): 155 x 225 x 83 mm

Weight: 898 g

100 ... 240 V, 50/60 Hz, 4 x AA batteries || Power supply:

4 x AA batteries

IP code: **TP 67** 

Туре	PK	Cat. No.	Price
			EUR
TB350 IR	1	6.322 835	1.687,90
TB350 WL	1	6.321 184	1.687,90

## **Turbidity Standards**





Suitable for checking all turbidimeters. Stable, shelf life of 2 years (from date of manufacture). Traceable to NIST, US EPA approved and tested in accordance with ISO 7027.

Non Ratio for Non Ratio Turbidity Measuring instruments will measure the scattered light from the sample at a 90° angle from the incident light (one detector)

Description	Volume	PK	Cat. No.	Price
	ml			EUR
Non Ratio 0.0 NTU	100	1	6.233 961	68,80
Non Ratio 0.1 NTU	100	1	6.075 473	68,80
Non Ratio 20 NTU	100	1	6.233 962	96,30
Non Ratio 200 NTU	100	1	4.012 096	157,20
Non Ratio 800 NTU	100	1	4.012 099	157,20

# **Chemical Oxygen Demand (COD) Standards**

## Reagecon

### **Osmolality standards**

## Reagecon



These standards are ideal for use as control standards to verify that correct analysis for COD has taken place. Extensive range (10 to 60000 ppm), NIST traceable, 2 years shelf-life. HDPE bottle of 500 ml.

Osmolality Standards for calibration and control, compatible with all types of osmometers. Extensive range: 50 to 3000 mOsmol/kg  $H_2O$ , ISO 17025 certified. Values from 100 to 700 mOsmol/kg  $H_2O$  according to European Pharmacopoeia 2.2.35 and US Pharmacopeia 785. 12 ampoules of 5 ml each.

Туре	Measuring range	PK	Cat. No.	Price
	mg / I			EUR
COD50	50	1	6.234 998	88,30
COD100	100	1	6.234 999	88,30
COD200	200	1	6.206 516	88,30
COD500	500	1	6.234 552	88,30
COD600	600	1	6.206 517	88,30
COD1000	1000	1	6.232 202	88,30
COD1500	1500	1	6.238 379	88,30
COD5000	5000	1	4.012 236	88,30
COD10M	10000	1	6.233 809	88,30

туре	Description	PK	Cat. No.	Price
				EUR
RE-OSM-100	100 mOsmol/kg H <sub>2</sub> O	12	6.286 324	112,60
RE-OSM-200	200 mOsmol/kg H <sub>2</sub> O	12	6.286 325	112,60
RE-OSM-300	300 mOsmol/kg H <sub>2</sub> O	12	6.284 310	112,60
RE-OSM-400	400 mOsmol/kg H <sub>2</sub> O	12	7.970 554	112,60
RE-OSM-500	500 mOsmol/kg H <sub>2</sub> O	12	6.270 201	112,60
RE-OSM-600	600 mOsmol/kg H <sub>2</sub> O	12	6.286 327	112,60
RE-OSM-700	700 mOsmol/kg H <sub>2</sub> O	12	6.286 328	112,60
RE-OSM-900	900 mOsmol/kg H <sub>2</sub> O	12	6.286 335	112,60

## Cryoscope standards

Reagecon





## **LLG-Conductivity Solutions**



Compatible for use on all Cryoscopes compliant to International Reference Standard ISO5764/IDF108 for the determination of Freezing Point in milk. High accuracy, 1 year shelf-life (from Date of Manufacturing). Supplied in 250 and 100 ml HDPE bottle and a convenient cap with collapsible filling nozzle

Туре	Measuring range	Capacity	PK	Cat. No.	Price
		ml			EUR
MTR01025	0.000 °C	250	1	4.012 189	15,30
MTR02025	-0.408 °C, 422 m°H	250	1	4.012 190	15,30
MTR020X	-0.408 °C, 422 m°H	100	1	6.286 186	11,90
MTR03025	-0.512 °C, 530 m°H	250	1	4.012 191	15,30
MTR030X	-0,512 °C, 530 m°H	100	1	6.286 187	11,90
MTR03525	-0.557 °C, 577 m°H	250	1	4.012 192	15,30
MTR04025	-0.600 °C, 621 m°H	250	1	4.012 193	15,30
MTR040x	-0.600 °C, 621 m°H	100	1	6.286 188	11,90

- Values stated at 25 °C: Accuracy  $\pm 1~\%$
- Directly traceable to NIST
- Certificate including actual value, expiration date and uncertainty of measurement

Туре	Capacity	PK Cat. No. Pric	е
	ml	EU	R
84 µS/cm	500	1 9.040 861 <b>14,4</b>	0
147 µS/cm	500	1 9.040 862 <b>14,4</b>	0
1.413 µS/cm	500	1 9.040 863 <b>10,5</b>	0
12.880 uS/cm	500	1 9.040 864 <b>14.4</b>	0

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### Ultra pure water system OmniaTap xstouch 8 Sets





- Display of all operating parameters in real time
- Extremely compact design
- Resource saving and completely independent



For pure and ultrapure water type I + II. OmniaTap is the ideal system when both pure and ultrapure water are required in small quantities for analytical and life science applications in the laboratory. The system can be connected directly to the drinking water line. With the standard OptiFilltouch operating and monitoring unit, type I ultrapure water is drawn off and can be conveniently and precisely filled into laboratory vessels. The integrated 7 I tank with recirculation keeps the water quality permanently at type II.

Scope of supply: Ultra pure water system, RO cartridges, ultra pure water cartridges, sterile filter capsule (0.2  $\mu m$ ), sterile overflow, sterile vent filter

#### **Specifications**

Pure water type II:

Pure water output (at 15 °C): 15 ... 10  $\text{M}\Omega$  x cm Resistivity: Conductivity:  $0.067 \dots 0.1 \, \mu S/cm$ 

Ultra pure water type I:

Ultra pure water output: Dispensing volume: 0.05 ... 25 l Resistivity:  $18.2~\text{M}\Omega~\text{x}~\text{cm}$ Conductivity: 0.055 µS/cm Bacteria (with filter): <0.01 CFU/ml Particles (with filter): <1/ml RNase (with UF module): <1 ng/ml DNase (with UF module): <5 pg/µl Proteases (with UF module): <0.15 µg/l

Feed water requirements:

Dimensions incl. OptiFilltouch dispenser (W  $\times$  D  $\times$  H):

Weight incl. OptiFilltouch dispenser:

Power supply:

Up to 2 I/min

Drinking water acc. to DIN 2000

253 x 520 x 530 mm

19 kg 90 ... 240 V,

50 ... 60 Hz

Туре	TOC value	Endotoxins	PK	Cat. No.	Price
	ppb	EU/ml			EUR
OmniaTap xs <sup>touch</sup> 8 UV-TOC Set	<2	-	1	6.490 550	4.900,90
OmniaTap xs <sup>touch</sup> 8 UV-TOC/UF Set	<5	<0,001	1	6.490 551	5.522,00

#### **Distilled water**





Deionized and UV irradiated. Acc to DIN 43530/EN 385. In plastic canister.

#### **Specifications**

pH value: < 7.0 Conductivity: <5 µS/cm <0.02 mmol/l Hardness: Chlorine content: <2 mg/l

Capacity	PK Cat. No.	Price
L		EUR
10	1 6.273 852	7,80
20	1 6.280 900	17,60

#### Water, nuclease-free





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

Туре	Nominal capacity	PK	Cat. No.	Price
	ml			EUR
Water, nuclease-free	1000	1	4.675 029	34,20

#### Water, ultra pure





Water for a variety of applications in analytical chemistry.  $H_2O$  - LF < 1  $\mu$ S/cm - 0.4  $\mu$ m, UV filtrated.

Туре	Nominal capacity	PK Cat. No.	Price
	ml		EUR
Water, ultra pure	5000	1 4.675 028	12,30

## Digital thermometer testo 915i Set



The testo 915i temperature measuring instrument is suitable for wireless temperature measurements in various applications. With the free testo Smart App, all measurement data can be logged and results sent as PDF or CSV files.

- 1 measuring channel
- Automatic Bluetooth® connection to smartphones, tablets or testo measuring devices
- Secure fixation of the pluggable measuring probes

**Scope of supply:** Thermometer 915i, air probe, immersion/penetration probe, surface probe, stoage bag testo Smart Case, batteries, calibration protocol

#### Temperature range

Immersion/penetration probe: -50 ... 400 °C
Air probe: -50 ... 400 °C
Surface probe: -50 ... 350 °C

**Accuracy** 

 $\begin{tabular}{ll} Immersion/penetration & $\pm 1.0\ ^{\circ}C\ (-50\ ...\ 100\ ^{\circ}C),\ \pm 1\ \%\ of \\ probe: & measurement\ value\ (remaining\ range) \\ $\pm 1.0\ ^{\circ}C\ (-50\ ...\ 100\ ^{\circ}C),\ \pm 1\ \%\ of \\ measurement\ value\ (remaining\ range) \\ \end{tabular}$ 

Surface probe:  $\pm 1.0 \, ^{\circ}\text{C} + 1 \, \%$  of measurement value

Resolution: 0.1 °C

Sensor: Type K (NiCr-Ni)

Power supply:  $3 \times AAA$ 

Description	PK Cat. No.	Price
		EUR
testo 915i Set	1 4.681 906	174,20

# Infrared thermometer, DualTemp Pro, with penetration probe





- Non-contact measurement and core temperature measurement in one device
- Double display: both measured values in view
- Large temperature range:Infrared: -33 to 250 °C
- Insertion probe: -55 to 250 °C
- Max, min, hold function
- Incl. calibration certificate

Resolution: 0.2 °C

Accuracy (IR):  $-33 \, ^{\circ}\text{C} \text{ to } 0 \, ^{\circ}\text{C} \pm 1.0 \, ^{\circ}\text{C} \pm 0.1/1 \, ^{\circ}\text{C}$ 

0 °C to +65 °C ±1.0 °C +65 °C to +200 °C ±1.5 %

Accuracy (penetration probe): below -5 °C  $\pm 1.0$  °C

-5 °C to +65 °C  $\pm 0.5$  °C above +65 °C  $\pm 1$  %

Operating temperature: 0 to 50 °C

Power supply: Lithium cell CR2032

Туре	PK Cat. No.	Price
		EUR
DualTemp Pro	1 9.851 023	74,50

# Thermometer testo 440 Laboratory kit







Laboratory kit with Pt100 probe for reliable and precise temperature measurement and documentation. Particularly suitable for use in corrosive media due to the laboratory probe, whose coating is made of the tried-and-tested DURAN® laboratory glass.

- Internal data storage and USB port for flexible data export
- Parallel connection of up to three probes possible: one Bluetooth® probe, one wired probe and one temperature probe with thermocouple type K connection
- Versatile, expandable with an extensive selection of digital probes

**Scope of supply:** Measuring instruments, 3x AA batteries, USB cable and calibration protocol, glass-coated digital Pt100 laboratory probe, basic case for testo 440 and 1 probe

#### Specifications

Temperature measuring range -50 ... +400 °C

(NTC): Accuracy: ±0.3 °C (-50 ... 300 °C) ±0.4 °C (300.01 ... 400 °C)

Resolution: 0.01 °C

Memory: 7500 measurement protocols

testo 440

Operating/storage temperature:  $-20 \dots +50$  °C Power supply: 3 x Mignon, Type AA

Pt100 probe

Operating/storage temperature: -5 ... 45 °C/-20 ... 60 °C

Cable length: 1.6 m Dimensions (L  $\times$  Ø): 200  $\times$  6 mm

Туре	PK Cat. No.	Price
		EUR
testo 440 Laboratory kit	1 6.314 325	560,70

# LLG-Digital pocket thermometer Type 12050





Measuring range -50 to +150 °C, accuracy  $\pm 1$  °C. Probe made of stainless steel, 120 x 3.5 mm, with protective plastic sleeve and clip, with battery 1 x 1.5 V (LR44).

Туре	PK Cat. No.	Price
		EUR
LLG-Digital pocket themometer Type 12050	1 9.236 706	21,10

## pH meter FiveEasy™ pH F20/ FiveEasy Plus™ pH FP20



FiveEasy™ and FiveEasy™ Plus 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
- Fast and easy connectivity for simple and secure data transfer (FP only)

Scope of supply:

F20-Meter: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate, power supply

FP20-Meter Standard Kit: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate, power supply plus plastic LE438 3-in-1 pH electrode, 1 each x 4.01 pH, 7.00 pH, 9.21 pH buffer sachets

FP20-Bio: as FP20 Standard-Kit, plus glass LE410 3-in-1 pH electrode, 1 each x 4.01 pH, 7.00 pH, 9.21 pH buffer sachets

#### **Specifications** Measuring range (Accuracy)

pH F20/FP20: 0.00 ... 14.00 pH/-2.00 ... 16.00 pH (±0.01 pH)

-2000 ... 2000 mV (±1 mV) mV: Temperature

F20/FP20: 0 ... 100 °C (0.5 °C)/-5 ... 105 °C (0.3 °C)

BNC, Cinch (NTC 30  $k\Omega$ ) Input:

Temperature

compensation: ATC and MTC

100 ... 240 V/50 ... 60 Hz/12 V DC Power supply: 3 points, linear, 4 predefined buffer groups Calibration F20:

Calibration FP20: 5 points, linear/segmented,

4 predefined buffer groups

FP20 only

200 measurements Memory:

Interface: RS232, USB, Reference input

Туре	PK	Cat. No.	Price
			EUR
F20-Standard Kit	1	6.280 101	584,80
FP20-Standard Kit	1	6.280 103	786,90
FP20-Bio	1	6.280 104	808,40

## **LLG-Indicator paper sticks**





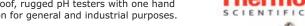


For pH determination. Box of 100 indicator paper sticks of 80 mm length.

Range	PK	Cat. No.	Price
рН			EUR
5.5 9	100	6.322 832	4,20
0 6	100	6.322 833	4,70

### Pocket tester Eutech™ pHTestr 30, waterproof

Waterproof, rugged pH testers with one hand operation for general and industrial purposes.



- Large LCD display
- Replaceable, rugged sensor
- Double junction sensor
- Push-Button calibration with up to 3 points and Auto-Buffer recognition
- Hold function, the last measured value remains on the display
- Up to 500 hours operation time with single battery set

#### **Specifications**

IP code:

pH calibration points: 3 points 0 ... 50 °C Temperature range: Resolution: 0.1 °C ±0.5 °C Accuracy: 0 ... 50 °C Operating temperature: Temperature compensation: ATC Power supply: 4 x 1.5 V A76 batteries

Туре PK Cat. No. Price EUR pHTestr 30 1 6.222 767 139,50

IP 67

## LLG pH electrode





Low maintenance combination electrode with integrated temperature sensor. Robust design with plastic shaft, protective basket and fixed cable connection. Made in Germany.

\*Basic pH combination electrode with plastic shaft, gel reference system and temperature sensor.

Suitable for all pH meters with DIN plug and 4-mm banana plug.

#### **Specifications**

0 ... 80 °C Temperature range: Temperature sensor: NTC 30  $k\Omega$ pH range: 0 ... 14

Diaphragm: 2 x ceramic || \*Fibre Cylindrical Membrane shape:

Electrolyte: Gel, 3M Min. immersion depth: 15 mm Cable length: 1 m Length/Ø: 120/12 mm Electrode connection: **BNC** Temperature sensor connection: Cinch 3 mm

	туре	PK	Cdl. NO.	Price
				EUR
1	LLG pH electrode	1	6.263 602	89,50
I	LLG-pH electrode with gel electrolyte*	1	4.681 924	151,70

#### Conductivity meter ProfiLine Cond 3310



Convenient and versatile conductivity meter with built-in time-controlled data logger. With backlit graphic display. Waterproof and robust. For measuring conductivity, resistivity, salinity and TDS. Large selection of connectable measuring cells, extended cell constant selection, automatic and manual temperature compensation (can also be switched off) with linear and non-linear function for ultrapure water and natural water according to EN 27 888.

#### **Specifications:**

Measuring ranges/Resolution

Conductivity: 0.00  $\mu$ S/cm ... 19.99  $\mu$ S/cm (when K=0.1 cm<sup>-1</sup>)

 $0.000 \ \mu \text{S/cm} \dots 1.999 \ \mu \text{S/cm} \text{ (when K=0.01 cm}^{-1}\text{)}$ 

TDS: 0 ... 1999 mg/l, 0.0 ... 199.9 g/l

Spec. resistance:  $0.0 \dots 999 \text{ M}\Omega/\text{cm}$ 

Memory: 5000 records (measured value,

temperature, date, time, ID)

Туре	Description		Cat. No.	Price
				EUR
Cond 3310	Meter only	1	9.774 409	814,30
Cond 3310 Set 1	Case set including TetraCon 325 and accessories	1	9.774 400	1.249,90

# Conductivity meter inoLab® Cond 7310





Cond 7310

Conductivity measurement with reliable documentation, also with built-in printer on request. The inoLab® Cond 7310 can be connected to a wide range of standard and special conductivity measuring cells and has automatic and manual temperature compensation (can also be switched off for measurements according to pharmacopoeia) with linear and non-linear functions for ultrapure water and natural water according to EN 27 888. The scope of delivery includes the device, stand, data transmission cable and plug-in power supply unit.

#### Specifications

Ranges: All values ±1 digit

Conductivity

additional: 0.00 ... 1000 mS/cm  $\pm$ 0.5 % of measured value

0.000 ... 1.999  $\mu$ S/cm, K= 0.01 cm<sup>-1</sup> 0.00 ... 19.99  $\mu$ S/cm, K= 0.1 cm<sup>-1</sup>

 Spcific resistance:
 0.00 ... 20 MOhm cm

 Salinity:
 0.0 ... 70.0 (acc. IOT)

 TDS:
 1 ... 1999 mg/l, 0 ... 199.9 g/l

 Temperature:
 -5.0 ... 105.0 °C ±0.1 °C

Cell constants: Fix 0.01 cm<sup>-1</sup>, calibratable 0.450...0.500 cm<sup>-1</sup>,

0.800 ... 0.880 cm<sup>-1</sup>, calibratable 0.09 ... 0.110 cm<sup>-1</sup>, 0.250 ... 25.0 cm<sup>-1</sup>

 $\begin{array}{ll} \text{Calibration:} & 1 \text{ point} \\ \text{T}_{\text{ref}}\text{:} & 20 \text{ °C/25 °C} \end{array}$ 

Calibration memory: Up to 10 calibrations recallable

Display: LCD Graphic, backlit
Memory: Manual 200/5000 automatic
Logger: Manual/time controlled

Interface: Mini USB-B

Power supply: Universal power supply,

100V ... 240 V, 50/60 Hz, 4 x 1.5 V AA or 4 x 1.2 V NiMH

Туре	Description	PK	Cat. No.	Price
				EUR
Cond 7310	Meter incl. accessories	1	9.920 114	1.267,10
Cond 7310 Set 1	Meter incl. TetraCon® 325 and accessories	1	9.920 115	1.654,30
Cond 7310P	Meter with built-in printer and accessories	1	9.920 117	1.695,70

## **Conductivity meter SD 325 CON**



The portable instrument with data logger is ideal for determining electrical conductivity in aqueous media.

- Automatic recognition of conductivity standards
- Auto hold function
- Selectable reference temperature (20 °C/25 °C)
- Automatic temperature compensation
- Data transfer and evaluation via

software possible

#### Scope of supply:

SD 325 CON (Set 1): Conductivity meter, protective covering, transport case, 4-pol graphite electrode (diam. 12 mm, < 200 mS/cm) SD 325 CON (Set 2): as set 1 but with, 4-pol graphite electrode (diam. 16 mm, < 1000 mS/cm), conductivity standards, batteries, manual

SD 325 CON (Set 3): as set 1 but with, 2-pol stainless steel electrode (diam. 10 mm, < 200  $\mu$ S/cm, pure water), flow through cell for pure water

#### Specifications

 Specifications

 Conductivity:
 0.000 ... 1000.0 mS/cm

 Temperature:
 -5.0 ... 100.0 °C

 TDS:
 0.000 ... 5000 mg/l

 Resistance:
 0.000 ... 50.0 MOhm/cm

Salinity: 0.0 ... 70.0 PSU

Datalogger: 10000 Data sets automatically

1000 Data sets manually

Interface: USB

Dimensions (W x D x H):  $100 \times 164 \times 37 \text{ mm}$ 

Weight: 302 g

Power supply: 2 x AAA batteries (incl.)

IP code: IP 67

PK Cat. No.	Price
	FUD
	EUR
1 4.678 226	812,00
1 4.678 227	926,40
1 4.678 228	926,40

#### Analytical balance ABP



This new generation of analytical balances combines the highest level of precision with large weighing capacities. Thanks to the new Single-Cell Generation, the weighing result is displayed in a fraction of the time with comparable models. Together with the intuitively structured menu, this means that you can work efficiently and rapidly.

- OLED display
- Navigation pad for super quick navigating through the menus
- Automatic internal adjustment in the case of a change in temperature ≥1 °C or timecontrolled every 4 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- The minimum weight of sample can be manually stored in the balance or automatically calculated, with warning message when the weighing is below this value
- Dosage aid: High-stability mode and other filter settings can be selected
- Simple recipe weighing and documenting with a combined tare/print function
- Menu language DE, GB
- Automatic data output to the PC/printer each time the balance is steady
- USB data interfaces and RS-232
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Incl. protective working cover

#### **Specifications**

Overall dimensions, incl. draught shield (W x D x H): 213 x 407 x 344 mm Weighing space (W x D x H): 166 x 156 x 220 mm Net weight: 8 kg Power supply: 220 ... 240 V AC, 50 Hz

Туре	Weighing range	Readability	/ Plate diam.	PK	Cat. No.	Price
	g	mg	mm			EUR
ABP 100-5M	135	0.01	91	1	6.321 067	2.770,90
ABP 200-5M	220	0.01	91	1	6.321 068	3.942,70
ABP 100-4M	120	0.1	91	1	4.667 748	1.540,40
ABP 200-4M	220	0.1	91	1	4.667 749	1.835,60

## **LLG-Sample dishes, Aluminium**







High quality aluminium sample dishes, for moisture determination.

Description	Diam.	Height	PK Cat. No. Price
	mm	mm	EUR
Sample dishes	90	7	80 6.282 670 <b>13,30</b>
Sample dishes	100	7	80 6.265 408 <b>13,50</b>
Sample dishes with rim	100	7	80 6.281 537 <b>13,50</b>

#### Portable Balances, Scout® SKX



- Very robust due to integrated overload protection
- Space-saving design





- Superior overload protection and practical stackable design for convenient storage
- Bright backlit LCD and 4 button operation make the new scout easy to see and use
- Fast weighing speed and high resolution delivers repeatable and reliable results
- Communication: Optional RS232, USB host, USB device, Bluetooth or Ethernet
- Construction: ABS housing, stainless steel pan, replaceable in-use cover
- Design Features: Fast stabilization time, menu lock switch, stackable design, security slot, integral weigh below hook for below balance weighing applications, transportation lock, removable stainless steel weighing platform, stability indicator, overload and underload indicators, low battery indicator, auto shut-off

Price	Cat. No.	PK	Plate dimensions	Readability	Capacity	Туре
EUR			mm	g	g	
350,00	6.281 344	1	diam. 93	0.001	120	SKX123
260,00	6.281 345	1	diam.120	0.01	220	SKX222
300,00	6.281 346	1	diam. 120	0.01	420	SKX422
250,00	6.281 347	1	diam. 120	0.01	620	SKX622
399,00	6.281 348	1	170 x 140	0.01	1200	SKX1202
435,00	6.281 349	1	170 x 140	0.01	2200	SKX2202
258,00	6.281 352	1	170 x 140	0.1	2200	SKX2201
228.00	6.281 354	1	170 x 140	1	8200	SKX8200

# Calibration weights, class E2, compact shape





Stainless steel, polished. Plastic boxes with internal foam support or wooden boxes and internationally recognised DAkkS certificates are available separately.

Weight	Accuracy	PK Cat. No.	Price
g	± mg		EUR
1	0.03	1 6.233 989	31,80
2	0.04	1 6.234 003	31,80
5	0.05	1 7.639 008	32,60
10	0.06	1 7.653 221	33,40
20	0.08	1 7.653 222	38,30
50	0.10	1 6.233 196	41,60
100	0.16	1 6.233 990	46,50
200	0.30	1 6.233 991	54,60
500	0.80	1 6.233 992	88,00
1000	1.60	1 4.652 699	129,60
2000	3.00	1 7.653 223	224,10
5000	8.00	1 7.671 083	370,80

#### Universal centrifuge Z 307





The small universal centrifuge Z 307 is suitable for use in clinical, research and industrial laboratories.

- Maintenance-free induction drive
- Microprocessor control with LCD display
- "Quick" key for short runs
- Memory for 99 complete runs, incl. rotor type
- Automatic rotor identification system with overspeed protection
- Active imbalance identification and cut-off (rotor-specific)
- Audible signal at the end of each run
- Imbalance tolerant drive
- Manufactured according to international safety regulations, e.g. IEC 61010
- Easy rotor change
- Air cooling
- Stainless steel chamber

#### Please order rotors separately.

#### **Specifications**

Max. RCF: 18624 x g 14000 rpm Max. speed: Max. capacity: 4 x 200 ml

Timer: 59 min 50 sec, 10 sec increments/ 99 h 59 min, 1 min increments

Dimensions (W  $\times$  D  $\times$  H): 355 x 474 x 330 mm

30 kg Weight:

230 V, 50 ... 60 Hz Type of auxiliary energy:

No. Price	Cat. No.	PK	Type
EUR			
<b>2.499,50</b>	6.321 971	1	Z 307

### **Rotors for Centrifuges Z 307**



Туре	PK	Cat. No.	Price
			EUR
Angle rotor for max. 24 x 1.5/2.0 ml, aerosol tight	1	4.665 882	685,50
Angle rotor for max. 30 x 15 ml (round bottom) or 20 x 15 ml (conical)	1	9.945 940	1.023,20
Angle rotor for 12 x 5 ml, with lid	1	9.945 945	987,50
Angle rotor for max. 12 x 15 ml	1	9.945 950	566,20
Angle rotor for max. 6 x 50 ml	1	9.945 951	604,90

### Microlitre centrifuges, Heraeus™ Pico™ and Fresco™





- Acceleration of up to 17,000 x g in only 12 sec
- **Small footprint**
- **Aerosol-tight**



- High Productivity Fast acceleration and deceleration time (12 seconds) means you can process more samples in less time
- User-friendly fast and simple changes of rotors and tubes by a new user friendly design
  - Safe - singular "Click CLOSE" - cap system for aerosol-tight inclusion
- of the biological substances guarantees the security of the user
- Comfortable simple fast attitude of the run parameters and a clearly arranged display
- Multifunctional selecting it from a broad pallet of rotors, which includes a Biocontainment rotor, a PCR rotor and a micro litre rotor
- with high sample capacity incl.  $24 \times 1.5/2.0$  ml rotor

Туре	Max. rcf	Max. speed	Dimensions (W x D x H)	PK	Cat. No.	Price
	x g	rpm	mm			EUR
Pico™ 17	17000	13300	243 x 352 x 225	1	9.945 100	1.839,20
Fresco™ 17	17000	13300	295 x 445 x 330	1	9.945 101	4.272,50



SIA Saint-Tech Maskavas iela 418 LV-1063, Rīga

ph. 27705200 e-mail: llg@saint-tech.lv



# LABORTOPS

### Air purifier ap360



- Destroys DNA and RNA in bacteria and viruses by UV air sterilisation.
- Removes aerosols, pollen, dust and other particles

The Air purifier ap360 protects from airborne infection by removing aerosols and also cleans the air from dust, pollen and many other allergens. Suitable for personal protection in laboratories, medical settings and production rooms.

- Efficient 360° air recycling of a 90 m³ room four times in an hour, eliminating 99.95 % of known viruses (including coronaviruses)
- With a medical grade, high capacity HEPA13 filter (acc. to EN 14644)
- 2 powerful UVC lamps for destroying bacteria and viruses by damaging their RNA and DNA, which avoids replication
- Ozone free
- Low noise level
- With lockable castors for safe and easy handling

**Specifications** 

Filters: Pre-filter H13 (EN 1822)
UV radiation source: 2 UV lamps, 55 W bactericidal,

TU PL-L 55W UV-C

UV irradiance: 156 uW/cm²/s at 1 m (Philips)

Radiation type: UV ( $\lambda$  = 253.7 nm)

UV lamp service life 9000 h
Air flow: 360 m³/h
D90 dose: 280 J/m²

Timer: 1 min ... 24 h, continuous

Noise level: max. 66 db

Dimensions (W x D x H):  $350 \times 350 \times 1050 \text{ mm}$ 

Weight: 13.4 kg

Power supply: 120/230 V, 50/60 Hz



Туре	PK	Cat. No.	Price
			EUR
ap360	1	4.679 869	3.118,10

Service Pack (Cat. No. 6.323 287) for replacing HEPA filters and UV lamps can be found online.