

# LABORTOPS

valid until 30.09.2021

# **Density meters DMA 35**



# Page 3

Weighing	2	pH and redox Measurement	16-17
Material analysis	3	Sample preparation	18-19
Mixing and shaking	4-5	Occupational safety	20-21
Sample analysis	6	Reaction tubes	22
Turbidity	7	Cleaning	23
Spectrometry	8	General laboratory products	24
Refractometer	9	Liquid handling	25-26
Cooling/Temperature measurement	10-11	Genomics	27
Glassware	12	Microbiology	28-29
Centrifugation	13	Temperature control	30-31
General laboratory aids	14	Water baths	32
Vacuum technology	15		

## Precision balances type EG-NM, calibratable





- Internal adjustment circuit
- High mechanical robustness

The housing is made of shockproof plastic. A rising luminous band indicates the still available weighing range. The scales are equipped with an LCD display, internal automatic calibration, draft shield as standard on models with readability  $d=0.001\,g$ , piece counting programme, percentage weighing function, under-balance weighing facility, Weighing with tolerance range (an optical signal supports portioning, dosing or sorting), RS-232 data interface.

Туре	Capacity	Readability	Reproduci- bility	Linearity	Plate dimensions	External dimensions (W x D x H)	PK	Cat. No.
	g	g	g	± g	mm	mm		
EG620-3NM	620	0.001	0.001	0.004	Ø 118	182 x 235 x 75	1	9901015*LLG
EG2200-2NM	2200	0.01	0.01	0.01	180 x 160	192 x 275 x 87	1	9901016*LLG
EG4200-2NM	4200	0.01	0.01	0.02	180 x 160	192 x 275 x 87	1	9901017*LLG
Outer dimensions w	vithout wind shield.							

## **Analysis- and precision balances Secura®**





- Automatic internal calibration
- Real time leveling support

Besides providing highly accurate weighing results and operating convenience, Secura® also features built-in protection systems for complete reliability and regulatory compliance, the safe and secure way. Real-time guidance prompts for leveling, automatic internal adjustment and 100 % traceable, clear documentation with sample and batch identifiers make your lab work more efficient.

- Intuitive Operation
- Ergonomic Draft Shield
- Automatic Internal Adjustment
- Real-Time Level Support
- Type CEU is factory verificated (EU)

#### **Specifications Secura®**

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

Weight:

Height weighing space:

Power supply:

#### 225D-1/324-1

218 x 376 x 316 mm

7.8/7.9 kg

218 mm

100-240 V, 50/60 Hz



Туре	Capacity	Readability	Reproducibility	Linearity	Plate diam.	PK	Cat. No.
	g	mg	± mg	± mg	mm		
SECURA225D-1S	220	0,1	0,07	0,2	80	1	6274273*LLG
SECURA225D-1CEU	220	0,1	0,07	0,2	80	1	7644579*LLG
SECURA324-1S	320	0,1	0,1	0,3	90	1	6286753*LLG
SECURA324-1CEU	320	0,1	0,1	0,3	90	1	6311015*LLG

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





High-quality aluminium sample dishes for moisture determination.

Description	Diam.	Height	PK Cat. No.
	mm	mm	
Sample dishes	90	7	80 6282670*LLC
Sample dishes	100	7	80 6265408*LLC
Sample dishes with rim	100	7	80 6281537*LLC

## Shore hardness testers, analogue, **HB 100-0**

Compact handheld durometer for plastics with drag indicator.

- Material thickness of the sample, min. 4 mm
- Max mode: Holds the maximum value in the display
- Point mode: Shows one instant value
- Screws to screw on to the TI: M7 fine thread
- Delivered in a plastic carrying case

Shore A for rubber, elastomers, neoprene, silicone, vinyl, soft plastics, felt, leather and similar materials

Shore A0 for foams, sponges Shore D for plastics, formica, epoxides, plexiglass etc.









Shore D

Shore A0 Shore A

#### **Specifications**

Precision: 3 % of max. measured value

Dimensions (W  $\times$  D  $\times$  H): 60 x 25 x 115 mm Net weight: approx. 160 g

Measuring range	Readability	PK	Cat. No.
HS	HS		
100 HA	1,0 HA	1	6284083*LLG
100 HA0	1,0 HA0	1	6312365*LLG
100 HD	1,0 HD	1	6270975*LLG

## Leeb hardness testers, mobile, HMM

Advanced features for demanding applications.

- Impact (rebound) sensor
- External impact sensor (Type D) included
- Automatic sensor recognition
- All measurement directions possible (360°) thanks to an automatic compensation function
- Standard block for calibration included (approx. 790 ±40 HL)
- Internal memory for up to 9 data groups
- Measurement value display: Rockwell (B & C), Vickers (HV), Brinell (HB), Shore (HSD), Leeb (HL), tensile strength (MPa)
- Delivered in a hard carrying case





### **Density meters DMA 35**





# Anton Paar

- **Portable**
- Incl. free-of-charge rubber protection for measuring cell
- 3 year warranty





Portable, digital measuring device for the determination of density, relative density and concentration.

- Sample filling via manual filling pump or syringe
- Viscosity correction for measurements also on highly viscous samples
- Measuring of density, relative density, alcohol concentration, sugar/extraction concentration, API functions, H<sub>2</sub>SO<sub>4</sub> concentration, ten programmable custom-specific measuring units
- 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.

#### **Specifications**

Measuring range: Readability: Precision:

Measuring range tensile

strength (steel):

Min. sample weight on a solid and stable support:

Minimum sample thickness: Minimum sample radius (concave/convex):

Dimensions (W x D x H):

Net weight: Power supply: 170 to 960 HL

1 HL

1 % at 800 HLD (±6 HLD)

375 to 2639 MPa

3 kg 8 mm

(with support ring: 10 mm)

80 x 30 x 150 mm approx. 200 g Power adapter, external or

3 x 1.5 V AAA batteries

Туре	PK	Cat. No.
Leeb hardness testers HMM	1	6270976*LLG

#### **Specification**

Density range: Resolution: Accuracy: Sample temperature range: Resolution:

Accuracy: Sample volume: Display:

Interfaces: Dimensions (W  $\times$  D  $\times$  H):

Weight:

Power supply: IP code:

0 ... 3 g/cm<sup>3</sup> 0.0001 g/cm<sup>3</sup> ±0.001 g/cm<sup>3</sup> 0 ... 100 °C

0.1 °C ±0.2 °C 2 ml

coloured LCD, self-rotating Bluetooth®, RFID

103 x 245 x 126 mm 660 g LR06 AA

IP 54

Type Cat. No.

DMA 35 Standard + free rubber protection 1 4681436\*LLG for the measuring cell

### Rocking shaker 35 EZ



- **Large Platform**
- 5 year warranty



The Rocker 35 EZ is the next generation large capacity rocker from Labnet, available with single and double platform. **Scope of supply:** Shaker, ribbed non-slip rubber mat

#### **Specifications**

Type of movement: rocking adjustable, ±20° Rocking angle:

Max. Load (incl. attachment): 5 kg

Timer: 10 to 120 min or continuous

Speed range: 10 to 120 rpm

Power: 6 W

Dimensions (W x D x H) 360 x 360 x 170 mm/ 360 x 360 x 260 mm single/double platform: 6.5 kg/7.8 kg Weight single/double platform: Power supply: 230 V, 50/60 Hz

Warranty: 5 years

Туре	Description	Plug type	PK	Cat. No.
35 EZ	Single platform	EU/UK	1	6283296*LLG
25 57	Double platform	EII/IIV	1	6202200*IIC

### Universal shakers, SM 30 A control



- New touch display control
- Up to 30 kg load
- For long-term use



Powerful shakers for large loads. Choice of orbital or reciprocating action models. Suitable for continuous operation. Various attachments for different requirements are available as accessories. Programmable controller with Touch-Display and advanced features for control devices.

Scope of supply: supplied with shaking rack and rubber mat. Attachments required, please order separately.



Type of movement: orbital Speed range: 15 ... 300 rpm

stepless, electronic adjustment, control devices in steps of 5

26 mm

Orbit or travel: Max. loading: 30 kg

Timer: 0 ... 120 min/continuous,

control devices programmable/continuous

Platform (W x D): 560 x 400 mm Overall (W  $\times$  D  $\times$  H): 680 x 610 x 160 mm

Weight: 33 kg

230 V, 50/60 Hz Supply requirements:



#### Туре SM 30 A control 9838121\*LLG

### Accessories for universal shaker SM 30



Туре	PK	Cat. No.
Rack system Combifix SM, Set A	1	9838201*LLG

#### **Orbital Shaker PSU-10i**

# grant@



Microprocessor controlled shaking platform.

- Continuous or timed operation with automatic switch-off
- Reliable direct drive system
- Automatic load balancing system

#### **Specifications**

Type of movement: orbital
Orbit: 10 mm
Max. Load: 3 kg

Speed range: 50 to 450 rpm/10 rpm increments Timer range: 1 min to 96 hours or continuous

Overall dimensions (W x D x H):

(W x D x H): 220 x 205 x 90 mm Power supply: 100 - 240 V, 50/60 Hz

Туре	PK	Cat. No.
PSU-10i	1	9721019*LLG
PSU-10I	1	9/21019*LLG

# Accessories for Orbital shaking platform PSU-10i



Туре	Description	PK	Cat. No.
PUP-12	Universal platform, working area 270 x 195 mm	1	9721021*LLG

#### **Mini Vortex Mixer VXMN series**





# For gentle to reliable high-speed mixing With timer (VXMNDG)

The analogue model provides variable speed control, and the digital model allows the exact speed and time to be entered for repeatable results.

**VXMNAL:** Auto/Off/On Rocker switch, Speed Knob: Variable 1 to 10 Dial Marks, continuous or TOUCH mode operation

**VXMNDG:** Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control, continuous or TOUCH mode operation

Scope of supply: Vortexer incl. Cup head and 76 mm head with cover

#### **Specifications**

Power supply:

Type of movement:
Orbit:
4.9 mm
Timer (DG only):
1 s to 160 h
Permissible ambient conditions:
4 to 40 °C
Dimensions (L x W x H):
211 x 122 x 165 mm
Weight:
4.5 kg

Туре	Min. speed	Max. speed	PK	Cat. No.
	rpm	rpm		
VXMNAL	500	2500	1	4659499*LLG
VXMNDG	300	2500	1	4659500*LLG

230 V, 50/60 Hz

# behrotest® Karlsruhe bottles with stoppers





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

Capacity	Length*	PK	Cat. No.
,	. 3		
ml	mm		
100	20	1	9920514*LLG
100	60	1	9920515*LLG
250	20	1	9920513*LLG
250	60	1	9920509*LLG
		-	3320303 EEG
* Stopper h	andle height		

# Oxygen bottle according to Winkler, soda-lime glass



For determination of dissolved oxygen in the water. The measured capacity is specified to  $\pm 0.01$  ml. With white labelling area. Solid, bevelled glass stopper, secured with an accessory spring clip. Each bottle is adjusted to the relevant stopper. Stoppers and bottles are therefore not interchangeable. Each bottle and its stopper is marked with a unique, matching identification number.

Nominal capacity ml	NS	PK	Cat. No.
100 to 150	14/23	1	9304038*LLG
250 to 300	19/26	1	9304048*IIG

## Spring clips, Steel nickel plated



FOR	PK	Cat. No.
bottles		
ml		
100 - 150	1	9304050*LLG
250 - 300	1	9304051*LLG

## **BOD** sensor system









 Mercury-free and reliable BOD analyses

 Complete system and single bottles

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

- The sensor heads are screwed directly onto the BOD bottles
- Automatic storage of 5 results in 24-hour intervals
- Measured readings in mg/l (ppm) can be read directly on the sensor at any time
- Class 3 IEC 1010 conformity

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

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

#### **Specifications**

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

Туре	Description	PK	Cat. No.
BOD sensor BOD sensor set	Single sensor 500 ml brown glass bottle with BOD sensor, KOH reservoir, stirring rod	1 1	4666790*LLG 4666791*LLG
BOD sensor system 6 BOD sensor system 10	6 positions 10 positions	1 1	6317212*LLG 6317213*LLG

## Sedimentation cone, plastic, SAN



## Kartell

Imhoff pattern. DIN 12672. Transparent SAN (Styrene acrylonitrile). With a screw cap for draining the contents. Temperature-resistant up to max. 85 °C.

Graduations, ml:	Subdivisions, ml
0 to 2	0.1
2 to 10	0.5
10 to 100	1.5
100 to 300	10
300 to 1000	50

Туре	PK	Cat. No.
With screw cap	1	9304280*LLG

## Sedimentation cones, accessory stand, Acrylic/PP



Kartell

Reagecon

Acrylic/PP. Holds two Imhoff sedimentation cones.

## **Turbidity Standards**



Highly accurate turbidity standards composed of suspended microspheres, suitable for Instrument calibration and control of all turbidity meters. Stable, shelf life of 2 years (from Date of Manufacturing). NIST traceable, US EPA approved and tested in compliance with ISO 7027. HDPE bottles of 100 ml.

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.
	ml		
Non Ratio 0.0 NTU	100	1	CRS-0.0-100*REA
	100		
Non Ratio 0.1 NTU	100	1	CRS-0.1-100*REA
Non Ratio 20 NTU	100	1	CRS-20-100*REA
Non Ratio 200 NTU	100	1	CRS-200-100*REA
		1	
Non Ratio 800 NTU	100	1	CRS-800-100*REA

## **Turbidity meter Eutech™ TN-100**





- Automatic Push-Button Calibration (4 points) for unprecedented full-range accuracy
- Meets Performance Criteria as specified by ISO 7027 (DIN EN 27027) method

Scope of supply: Turbidity meter with 4 calibration standards, 3 empty cuvettes, sturdy carrying case, batteries and instruction manual

#### **Specifications**

Turbidity range: 0 to 2000 NTU

Resolution: 0.01 NTU (0 to 19.9 NTU) 0.1 NTU (20.0 to 99.9 NTU)

1 NTU (100 to 2000 NTU) Accuracy: ±2 % of reading ±1 LSD (0 to 500 NTU) ±3 % of reading ±1 LSD (501 to 2000 NTU)

±1 % of reading or ±0.01 NTU Repeatability:

Calibration Points: 4 points (automatic)

Response Time: < 6 seconds for full step change 0.02 NTU; 20.0 NTU; 100 NTU; 800 NTU Calibration Standards:

Light Source: Infrared-emitting diode (850 nm)

> 1.000.000 tests Light Source Life:

Power supply: 4 x 1.4 V batteries, > 200 h IP code:

IP 67

Туре	PK	Cat. No.
Trübungsmessgerät TN-100	1	6205327*LLG

## Spectrophotometer LLG-uniSPEC 2





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

LLG-uniSPEC 2 for standard routine measurements. A pre-adjusted lamp design allows a fast and easy lamp replacement. Both lamps can be individually turned on/off to extend the durability.

- Single beam system, grid with 1200 lines/mm
- Silicon photodiode detector
- Parallel port for printer output
- USB port
- 4 position cell holder (10 mm) included
- Automatic wavelength adjustment

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

#### **Specifications**

Optical System: Single beam,

Grating 1200 lines/mm, Silicium photodiode detector

Wavelength range: 190 to 1100 nm

Bandwidth: 2 nm ±0.5 nm Wavelength accuracy: Wavelength repeatability: 0.3 nm Wavelength setting: automatic Photometric accuracy: ±0.5 % T Photometric repeatability: 0.3 % T

-0.3-3 A, 0-200 % T, 0-9999 C Photometric range: Stability: ±0.002 A/h at 500 nm Stray light: ≤0.1 %T at 220 nm, 360 nm

USB port Data output: Printer port: parallel port Display: 128 x 64 Dots LCD

Standard cell holder: 4-position 10 mm cell changer

D2 lamp and W lamp Lamps: 460 x 360 x 225 mm Dimension (W x D x H):

Weight: 18 kg

220 V/50 Hz or Power supply: 110 V/60 Hz

Туре	Plug type	PK	Cat. No.
LLG-uniSPEC 2	EU	1	6263610*LLG
LLG-uniSPEC 2	UK	1	6263611*LLG

#### Macro and semi-micro cuvettes





Sorted by mould cavity number. PMMA or PS. Path length: 10 mm.

#### Quality characteristics:

- Minimal extinction value variation
- Optically perfect transmission range
- Recessed window to protect against scratches
- Arrowhead marking shows the direction of transmission

#### Polymethylmethacrylate (PMMA) cuvettes

- Typical operating range: from 300 nm to 900 nm
   Standard deviation at 320nm ±0.004 extinction units

#### Polystyrene (PS) cuvettes

- Typical operative range: from 340 nm to 900 nm
   Standard deviation at 360nm ≤ ±0.005 extinction units

Dimensions: 12.5 mm x 12.5 mm x 45 mm Window: Macro cell 10 mm x 35 mm Semi-micro cell 4.5 mm x 23 mm

Description	Volume	Material	PK	Cat. No.
Marina	ml	DMMA	100	0406111*11.6
Macro	2.5 to 4.5	PMMA	100	9406111*LLG
Semi-micro	1.5 to 3.0	PMMA	100	9406115*LLG
Macro	2.5 to 4.5	PS	100	9406110*LLG
Semi-micro	1.5 to 3.0	PS	100	9406114*LLG

## **Plastic disposable UV-Cuvettes** for the UV/VIS range





Made of plastic for the UV/VIS range. For measurements from 230 to 900 nm. Path length 10 mm.

- Compatible with most polar solvents, as well as acids and alkalis (eg acetone, butanone, DMF, concentrated HCL, etc.)
- Ideal for the determination of proteins, DNA, RNA
- Number-sorted to reduce extinction deviations
- Verified windows for protection against scratches

Description	Capacity	PK	Cat. No.
	μl		
micro (centre height 8.5 mm)	70 - 850	100	9406120*LLG
micro (centre height 8.5 mm)	70 - 850	500	9406121*LLG
micro (centre height 8.5 mm)	70 - 850	100	6803642*LLG
micro (centre height 15 mm)	70 - 550	100	9406122*LLG
micro (centre height 15 mm)	70 - 550	500	9406123*LLG
micro (centre height 15 mm)	70 - 550	100	6227779*LLG
semi-micro	1.5 - 3.0 ml	100	9406118*LLG
macro	2.5 - 4.5 ml	100	9406119*LLG

### **Analogue hand-held refractometers ORA** series



Versatile, maintenance-free handheld refractometers.

- Several selectable scales
- Eyepiece can be adjusted to different visual capacities
- With automatic temperature compensation

#### Scope of supply:

Refractometer, storage box, calibration solution, pipette, screwdriver, cleaning cloth

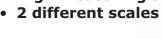
Туре	For	Measuring range	Accuracy	PK Cat. No.
ORA 20BA	Brix	0 20 %	0.1 %	1 4657695*LLG
ORA 32BA	Brix	0 32 %	0.2 %	1 4657702*LLG

## **Digital hand-held refractometers** DR201-95





**Automatic measurement** High measuring accuracy





Digital hand-held refractometer with two different scales, Brix and RI. Handling is fast and very easy, distilled water is used for calibration. With automatic temperature compensation.

#### **Specifications**

10 ... 40 °C Temperature range: ±0.5 °C Accuracy: 10 ... 40 °C Temperature compensation: 130 x 80 x 40 mm Dimensions: Weight: 200 g Power supply: 1.5 V battery IP code: IP 64

Measuring	Accuracy	Resolution	PK	Cat. No.
range				
nD 1.3330 1.5318	nD ±0.0003	nD 0.0001	1	6230350*LLG
0 95 %Brix	±0.2 %Brix	0.1 %Brix		

#### **Abbe Refractometer ORT 1RS**





Universally applicable, analogue table-top Abbe refractometer.

- Measurement of Brix and refractive index
- For the measurement of liquids, solids and pasty samples
- With digital thermometer

#### Scope of supply:

Refractometer, calibration solution, calibration block, pipette, screwdriver, cleaning cloth, digital thermometer

#### **Specifications**

Measuring temperature: 20 °C Dimensions (W x D x H): 180 x 90 x 240 mm Weight: 1950 q

	easuring nge		Accuracy	PK	(	Cat. No.
Λ	95 % / 1 3000	1 7000 nD	0.1 % / 0.0002 nD	1	46	57752*IIG

# Sucrose (Brix) Standards





Certified stabilised Sucrose (Brix) Standards.

- ISO 17025 accredited
- Uncertainty of measurement of 0.11 % for all Brix values at 20 °C
- Equivalent Nominal Refractive Index values from ICUMSA published tables reported on Certificate of Analysis
- 12-month shelf life
- Dropper bottles

Brix	Refractive Index at 20 °C	PK	Cat. No.
%			
5	1.340264 nD	1	BS05S*REA
10	1.347824 nD	1	BS10S*REA
15	1.355679 nD	1	BS15S*REA
20	1.363842 nD	1	BS20S*REA
30	1.381149 nD	1	BS30S*REA
40	1.399860 nD	1	BS40S*REA
60	1.441928 nD	1	BS60S*REA

### **Cooling Boxes Icetime® Plus**





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

Capacity	External dimensions (W x D x H)	Weight	PK	Cat. No.
1	mm	g		
26	407 x 313 x 424	2400	1	6284954*LLG
30	410 x 310 x 460	2600	1	6284527*LLG

## **Cool packs Freez'Pack®**



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



Туре	Dimensions (W x D x H)	Weight	PK	Cat. No.
	mm	g		
Freez'Pack® 2 x M5	150 x 80 x 25	200	10	6290795*LLG
Freez'Pack® M20	200 x 172 x 30	741	5	6290796*LLG
Freez'Pack® M30	255 x 210 x 30	1100	5	6290852*LLG
Freez'Pack® M10	182 x 95 x 33	370	24	6313387*LLG

## Cryoware marker set Nalgene™, **Type 6313**



For durable labelling of cardboard, plastic and cloth material for use at ultra-low temperatures. Non-smudge and non-running. Removable with alcohol. Extra fine point. Two packs available: 1 pack contains red, green, black and blue marker while the other pack contains black markers only.

Description	PK	Cat. No.
Assorted	4	9400978*LLG
Black	4	9400979*LLG

## Cryogenic boxes, 81-well, PP, autoclavable



The boxes are made of polypropylene and can be used in temperatures as low as -90 °C. The boxes are autoclavable at +121 °C for 20 minutes. The boxes have a fixed grid divider with 9 x 9 cells and are suited for 1.0 ml and 2 ml cryogenic vials. Cellcodes are printed on the lid for easy identification.

Туре	Dimensions (W x D x H) mm	P	ľΚ	Cat. No.
Blue	130 x 130 x 50		5	6290856*LLG
Green	130 x 130 x 50		5	6290857*LLG
Natural	130 x 130 x 50		5	6290855*LLG
Red	130 x 130 x 50		5	6290859*LLG
Yellow	130 x 130 x 50		5	6290858*LLG

## LLG-Cryogenic storage boxes, plastic coated, white





Dimensions Cat. No. height mm 133 x 133 50 6290869\*LLG 133 x 133 75 10 6290878\*LLG 50 10 6290870\*LLG 136 x 136

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



Dimensions	Height	Array	For tubes diam.	PK	Cat. No.
mm	mm		mm		
133 x 133	30	9 x 9	Approx. 13.0	10	6290871*LLG
133 x 133	30	10 x 10	Approx. 12.0	10	6290876*LLG
136 x 136	30	10 x 10	Approx. 12.5	10	6290872*LLG
136 x 136	30	9 x 9	Approx. 13.9	10	6290875*LLG

hermo

## Temperature/Humidity data logger **LOG 210**

- PDF-data logger with display
- Usable without software (default settings) (5-minute-interval, without alarm settings)
- Automatic PDF creation
- Movement sensor for shock recording
- e.g.: door or windows closing
- Free adjustable recording interval:
- 10 seconds to 24 hours
- Max-Min-Display memory (resettable)
- Battery lifetime approx. 4 years (recording interval >15 minutes)
- Status- and Alarm-LEDs
- Includes wall mount
- Software is available as download

#### **Specifications Temperature**

Measuring range: -40 to +70 °C

Accuracy: 0.1 °C

Precision:  $\pm 0.5$  °C (0 to +60 °C), otherwise ±1.0 °C

Humidity

Measuring range: 0 to 100 % R.H.

Resolution: 0.1% R.H. Accuracy: ±3 % R.H. (40 to 60 %),

±3.5 % R.H. (20 to 40 % and 60 to 80 %),

otherwise ±5 % R.H.

approx. 70 g Weight:

1 x 3.6 Volt Lithium ½ AA Battery:



# Data Logger LOG32T



Monitoring of storage and transport conditions according to HACCP(EN 12830).

- Memory for 60 000 measured values
- Usable without software
- (pre-programmed 15-minute measuring interval)
- Free adjustable storage interval from 30 seconds to 24 hours
- Automatic output as PDF file
- Battery life > 3 years (with measuring interval >15 minutes)
- Wall bracket included
- Status and alarm LEDs with signal tone (buzzer)
- EN12830 compliant
- IP 65 water-protected

#### **Specifications**

Measuring range: -40 ... +70 °C

0.1 °C Resolution:

±0.5 °C (-10 ... +40 °C), otherwise ±1.0 °C Accuracy:

60 000 measurements Memory:

Weight:

Battery: 1 x 3.6 Volt Lithium 1/2 AA

Cat. No. Type LOG32T 1 9726431\*LLG

### **Core Thermometer Testo 106**



DOSTMANN electronic GmbH

 Extremely fast temperature measurement

Slim, robust measuring tip

With auto-hold function for final reading. Includes sensor protection cap and battery.

The Testo 106-T1 kit also contains a TopSafe protective case and a holster clip for belt or wall.

**Specifications** 

Temperature range: -50 to 275 °C

Resolution: 0.1 °C

Accuracy ±1 digit: ±1 % of measurement

value (100 to 275 °C) ±0.5 (-30 to 99.9 °C) ±1 (-50 to -30.1 °C)

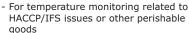
testo

Lithium (CR2032) Power supply:



## Standard PDF Data Logger EBI 300

PDF data logger with internal temperature sensor.



- Transportation of fresh, cool and deep cool
- Monitoring of fridges and deep freezers
- Evaluation without software, PDF are automatically generated
- Minimise training, user errors and IT costs using EBI 300's simple, easy to use design and standard software
- EN 12830, ATP, VO(EG) 37/2005 Compliant
- Factory calibration certificate included
- Programmable via the free online configurator at www.ebi300.com
- No separate interface for programming and reading



Ambient Temperature: -30 to +70 °C Measuring range Temp.: -30 to +70 °C

±0.5 °C (-20 to +40 °C), Accuracy Temperature: ±0.8 °C for remaining range

Resolution Temperature: 0.1 °C

Battery life time: up to two years Measuring period: 1 minute to 24 hours

Maximum Start Delay:

Measuring modes: Start/Stop, endless loop, start with button

35 a

Weiaht: IP code: IP 65

Туре	PK	Cat. No.
EBI 300	1	7655865*LLG

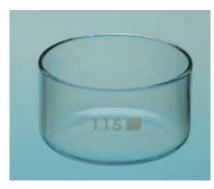


-ebro-

# LLG-Crystallising dishes, borosilicate glass







Crystallising dishes with or without spout. DIN 12337/12338. Autoclavable.



Capacity	Diam.	Height	DIN	PK Cat. No.
ml	mm	mm		
100	70	40	12337	1 6233757*LLG
150	80	45	12337	1 6227688*LLG
300	95	55	12337	1 6205104*LLG
500	115	65	12337	1 6205105*LLG
900	140	75	12337	1 6236597*LLG
2000	190	90	12337	1 6236598*LLG
3500	230	100	12337	1 6236599*LLG
60*	60	35	12338	1 6227922*LLG
150*	80	45	12338	1 6225256*LLG
300*	95	55	12338	1 6803567*LLG
500*	115	65	12338	1 6223298*LLG
900*	140	75	12338	1 6206856*LLG
2000*	190	90	12338	1 6803371*LLG
3500*	230	100	12338	1 6231072*LLG
* With spout				

# Flask rings, pressed cork



Height 30 mm.

For flasks	Ext. diam.	Int. diam.	PK Cat. No.
ml	mm	mm	
10 100	80	30	10 4667531*LLG
250 500	110	60	10 4667532*LLG
1000 2000	140	90	10 4667533*LLG

# Round bottom flasks, borosilicate glass 3.3



ISO 1773. With beaded rim. Thick walled.

Nominal capacity	PK	Cat. No.
ml		
50	10	4678058*LLG
100	10	4678059*LLG
250	10	4678060*LLG
500	10	4678061*LLG
1000	10	4678062*LLG
2000	6	4678063*LLG

# Flat bottom flasks, borosilicate glass 3.3





With flat bottom. ISO 1773. With beaded rim. Thick walled.

Nominal capacity ml	PK	Cat. No.
50	10	4678064*LLG
100	10	4678065*LLG
250	10	4678066*LLG
500	10	4678067*LLG
1000	10	4678068*LLG
2000	6	4678069*LLG

### Micro Centrifuge Microspin 12





Compact high-speed benchtop micro centrifuge.

- Fixed angle aluminium rotor for  $12 \times 1.5/2$  ml tubes, with 12 adapters for 0.2 ml and 0.5 ml tubes and safety lid
- Time operation (1 to 30 minutes), with automatic shut-off
- Suitable for cold rooms, operating temperature 4 to 25 °C
- Metal protective inserts in lid and housing, automatic unbalance switch-off and automatic switch-off when lid is opened
- Actual and set values of time, set and actual speed and relative centrifugal force (g-force)

#### **Specifications**

Max. RCF: 12.400 x g Max. speed: 14.500 rpm 12 x 0.2/0.5/1.5/2 ml tubes Max. capacity:

Timer: 1 ... 30 min

Power consumption: 60 W

Dimensions (W x D x H):

200 x 240 x 125 mm 3.5 kg Weight:

Power supply: 230 V, 50/60 Hz

Туре	PK	Cat. No.
Microspin 12	1 9	721003*LLG

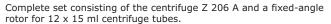
## Compact centrifuge Z 206 A



## **Complete with rotor**







- Microprocessor control with LCD display
- Pre-selection of the rotor type
- Active imbalance detection and switch-off
- Built according to international safety guidelines, e.g. IEC 61010
- Noise level below 60 dBA at max. speed
- Easy rotor change

#### **Specifications**

Max. RCF: 4427 x g 6000 rpm Max. speed: Max. capacity: 6 x 50 ml

59 min 50 sec/10 sec increments Timer:

99 h 59 min/1 min increments

Power consumption: 100 W

Dimensions (W  $\times$  D  $\times$  H): 280 x 370 x 260 mm 12 kg 230 V, 50/60 Hz Weight: Power supply:

Description	PK	Cat. No.
Compact centrifuge Z 206 A without rotor	1	9945737*LLG
	1	
Compact centrifuge Z 206 A	1	9945738*LLG
incl. fixed-angle-rotor 12 x 15 ml		
Fixed-angle rotor 12 x 15 ml	1	9945728*LLG
Fixed-angle rotor 6 x 50 ml	1	9945729*LLG
Fixed-angle rotor 18 x 1.5 / 2.0 ml	1	9945739*LLG

# **LLG-Microcentrifuge tubes, PP**



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



#### **Specifications** Autoclavability

Temperature: 121 °C

Pressure: 1.05 bar or 15 psi Time: 20 min or less

Centrifugation

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

Form	Volume	Max.	PK	Cat. No.
	ml	rcf		
conical	0.5	20000	1000	9409023*LLG
conical	1.5	25000	1000	9409024*LLG
round	2.0	25000	1000	9409025*LLG

#### **LLG-Lab Notebook**



Paginated pages with space for title, project number, date and author's signature. Waterproof and chemical resistant cover. At the end of the notebook there is a periodic table and conversion tables. Conform to GLP, GMP and GCP guidelines.

US Letter format, 216 x 279 mm.

Туре	Description	Colour	PK	Cat. No.
Grid	100 pages	Black	1	9050750*LLG
Grid	200 pages	Blue	1	9050751*LLG

# Coloured wash-bottles, narrow-neck, LDPE





Transparent. Capacity: 500 ml, thread: GL 25, height: 180 mm, diam.: 74 mm. Available in four different colours to facilitate ready identification. Screw cap and PP spray tube. Precise spray jet and optimised medium backflow through the continuous and finely drawn tip of the spray tube.

Colour	PK	Cat. No.
red	5	4664278*LLG
green	5	4664281*LLG
yellow	5	4664282*LLG
blue	5	4664283*LLG

## LLG-GHS Warning Labels, Self-Adhesive, Roll in Dispenser Box



Dispenser box of 250 adhesive labels. The labels are made of a 100  $\mu m$  PE film. Very resistant to most solvents and excellent for indoor and outdoor use.

Signal word trilingual: German, English, French.

Туре	Description	Label	Dimensions	PK	Cat. No.
			mm		
GHS 01	warning	exploding bomb	26 x 37	250	9105700*LLG
GHS 01	danger	exploding bomb	26 x 37	250	9105701*LLG
GHS 02	warning	flame	26 x 37	250	9105702*LLG
GHS 02	danger	flame	26 x 37	250	9105703*LLG
GHS 03	warning	flame over circle	26 x 37	250	9105704*LLG
GHS 03	danger	flame over circle	26 x 37	250	9105705*LLG
GHS 05	warning	corrosive	26 x 37	250	9105707*LLG
GHS 05	danger	corrosive	26 x 37	250	9105708*LLG
GHS 06	danger	skull and crossbones	26 x 37	250	9105709*LLG
GHS 07	warning	exclamation mark	26 x 37	250	9105710*LLG
GHS 08	warning	health hazard	26 x 37	250	9105711*LLG
GHS 08	danger	health hazard	26 x 37	250	9105712*LLG
GHS 09	warning	environment	26 x 37	250	9105713*LLG

#### **Lab-Marker Securline®**



For permanent marking on plastic, metal, and porcelain labware. Will write even when labware surface is damp.

- Permanent, quick-drying ink
- Fine tip, Line thickness: 1 mm

Colour	PK	Cat. No.
Black	10	4665487*LLG

## Diaphragm pumps, Aluminium

- Improved performance, increased pumping speed (up to 16  $\rm m^3/h$ ) and better ultimate vacuum (up to 0.5  $\rm mbar$ ).
- Extend applications with non-aggressive gases whether used in the laboratory or for industrial processes
- Long diaphragm and valve lifetimes: made of highly flexible FPM, with fabric-reinforced double diaphragms for improved long term stability
- Easy to clean due to smooth surfaces. A robust solution for numerous applications in industrial environments



Specifications

Vacuum inlet: Tubing nozzle DN 8-10 mm

Pressure outlet: Silencer / G 1/4"

Туре	Dimensions	Flow	Ultimate	Number	Connector	PK	Cat. No.
	(W x D x H)	rate	vacuum	of steps			
		(50/60Hz)					
	mm	L / min.	mbar				
MZ 2 NT	239 x 243 x 198	36.67 / 40	7	2	CEE	1	9880887*LLG
Country-specific power cord versions available on request.							

### **Chemistry Pump Units and Vacuum Systems**



Compact design, ready to use, no set-up required. Constructed in chemically resistant materials. Quiet operation.

- 100 % oil-free pumping of gases
- Gas ballast as standard for working with condensable vapours
  - Good vacuum even with gas ballast
- High vapour tolerance for water and solvents
- Long service life, low maintenance

Features:

2AK: Inlet and outlet separator

**AK + EK:** Inlet separator, exhaust vapour condenser



MZ 2C NT + 2AK



MZ 2C NT + AK + EK

Characteristics and applications:
Without vacuum control:
MZ 2C NT +2AK: e.g. filtration, distillation

without condensation at the outlet

MZ 2C NT +AK+EK: Well-proven unit for a wide range of applications for a single-user, e.g. gel

drying, distillation, vacuum concentrator.

For solvents with medium to low volatility.

Туре	Dimensions (W x D x H)	max. discharge flow	Ultimate vacuum without / with gas ballast	Connector	PK	Cat. No.
	mm	m³ / hr.	mbar (abs.)			
MZ 2C NT + 2AK	243 x 319 x 309	2.0 / 2.3	7 / 12	CEE	1	9880832*LLG
MZ 2C NT + AK + EK	242 x 326 x 402	2.0 / 2.3	7 / 12	CEE	1	6234067*LLG
Country apositio nauros sand	Lucraiana susilabla an rasuast					

# Cleaning and storage solutions for pH-electrodes



# Reagecon

Cleaning, rinse, regeneration and storage solution.

Туре	Capacity	PK	Cat. No.
	ml		
Organic cleaning solution	500	1	OECS*REA
Electrode Storage solution	100	1	ESS001*REA
Electrode Storage solution	500	1	ESS5*REA
Electrode Storage solution	1000	1	ESS01*REA
Electrode Rinse solution	500	1	ERSS5*REA

#### **Redox Standard Solution**





All values quoted are potentials of Platinum Electrode v Ag/AgCl reference (3M KCl) at 25 °C. Bottles of 500 ml.

Reduction	PK	Cat. No.
voltage mV		
124	1	RS124*REA
	1	
200	1	RS200*REA
250	1	RS250*REA

#### **Technical buffer solutions**





Identified by colour-coded labels. Tolerance  $\pm 0.03$  pH.

pH- value	Сар	acity					PK	Cat. No.
at 25 °C		ml						
4.01		250					1	9040727*LLG
4.01		1000					1	9040722*LLG
7.00		250					1	9040728*LLG
7.00		1000					1	9040723*LLG
10.01		250					1	7401072*LLG
10.01*		1000					1	9040725*LLG
			 	 	 	 	 	0.100 0010

\* For handheld meters 315i, 330i, 340i, 350i, 3110, 3210, 3310, MultiLine® 3410, 3420, 3430, 3510, 3620, 3630 and Inolab® versions from 2004 onwards

## ORP electrodes SenTix® ORP, analogue



## Proven quality





With glass shaft, Ag/AgCl reference system, connections for AS/DIN, AS/DIN-3, AS/BNC, S7 plug head.

#### **Specifications**

Temperature range: 0 ... 100 °C
Length/Diam.: 120 mm/12 mm
Electrolyte: KCl 3 mol/l
Sensor: Platinum
Sensor shape: Disc (4 mm)
Diaphragm: Ceramic

Туре	PK	Cat. No.
SenTix® ORP	1	7050767*LLG

## IDS ORP electrodes SenTix® ORP-T 900



#### **Proven quality**





Universel ORP electrodes with platinum disc for laboratory applications. With integrated temperature sensor and IDS plug.

#### **Specifications**

Measuring range:

Working temperature range:

Length/diam.:

Electrolyte:

Sensor:

Diaphragm:

-1250.0 ... 1250.0 mV

0 ... 100 °C

120 mm/12 mm

KCI 3 mol/I

Platinum

Ceramic

туре	PK	Cat. No.
SenTix® ORP-T 900	1	6267995*LLG

## pH Tester LLG-pH Pen



Ideal for testing small amounts of liquid and in narrow vessels. The supplied storage container prevents the electrode from drying out.

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

#### **Specifications**

pH Measuring range: 0 ... 14  $\pm 0.1$ pH Accuracy: pH resolution:  $\pm 0.1$ Dimensions with electrode (W x D x H):

36 x 20 x 210 mm 12 x 110 mm Dimensions electrode (diam. x L): Weiaht:

72 g 2 x 3 V CR2032 Power supply:

button cell IP code: IP 65 2 years Warranty:

Туре	PK	Cat. No.
LLG-pH Pen	1	6263690*LLG

# **LLG-Indicator paper sticks**



Length:	80	mm
---------	----	----

Range	Package contents	PK	Cat. No.
pH			
0 14	10 x 100 sticks per pack	1000	4667571*LLG

## LLG-Universal indicator paper, rolls





Range pH	Description	PK	Cat. No.
1 14	Dispensing reel with 1 roll	10	4667570*LLG
1 11	Dispensing reel with 1 roll	10	4667572*LLG

## pH meter FiveEasy™ pH F20/ FiveEasv 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
- Electrode arm extension pole included

#### Scope of supply: F20 Standard Kit:

Instrument with CD Operating Instructions, QuickGuide, Declaration of Conformity, Test Certificate, Power Supply, 3-in-1 Electrode LE438, 1 x 4.01 pH, 1 x 7.00 pH, 1 x 9.21 pH Buffer (Bag).

#### FP20 Standard Kit:

Instrument with CD Operating Instructions, QuickGuide, Declaration of Conformity, Test Certificate and Power Supply, 3-in-1 Electrode LE438, 1 x 4.01 pH, 1 x 7.00 pH, 1 x 9.21 pH Buffer (Bag)

#### **Specifications** Measuring range

(Accuracy) pH F20/FP20:

mV: Temperature F20/FP20: Input:

Temperature compensation: Power supply: Calibration F20:

Calibration FP20:

FP20 only

Memory:

#### F20/FP20

0.00 ... 14.00 pH/-2.00 ... 16.00 pH (±0.01 pH) -2000 ... 2000 mV (±1 mV)

0 ... 100 °C (0.5 °C)/-5 ... 105 °C (0.3 °C) BNC, Cinch (NTC 30  $k\Omega$ )

ATC and MTC

100 ... 240 V/50 ... 60 Hz/12 V DC 3 points, linear, 4 predefined buffer groups

5 points, linear/segmented, 4 predefined buffer groups

200 measurements

RS232, USB, Reference input Interface:

Туре	PK	Cat. No.
F20-Standard Kit	1	6280101*LLG
FP20-Standard Kit	1	6280103*LLG

## Sampling scoops and spoons, PS, sterile



White or red high-impact polystyrene plastic.

- Individually sealed and sterilised in a polyethylene bag
- Long handle
- Scoop is suitable for use as weighing boat
- Food-safe
- Lot stamped for accurate lot tracing
- Shipped with a Certificate of Processing for Sterilization
- Made from FDA grade materials

Type	Capacity	Colour	PK	Cat. No.
	ml			
Scoop	60	white	100	4675626*LLG
Scoop	125	white	100	4675627*LLG
Scoop	250	white	100	4675628*LLG
Scoop	60	red	100	4675629*LLG
Scoop	125	red	100	4675625*LLG
Scoop	250	red	100	4675630*LLG
Spoon	1.25	white	200	4675631*LLG
Spoon	2.46	white	200	4675632*LLG
Spoon	4.93	white	200	4675633*LLG
Spoon	14.79	white	200	4675634*LLG

# Disposable spatulas SteriPlast®, PS



White. Due to their long, ergonomic and solid handles and pointed blades they can be easily pierced into paper and plastic bags. The spatulas are ideal for sampling powder, granules and pastes. The spatulas are also available with a transparent sheath to close them immediately after the sampling procedure, to secure a sterile and contamination-free sample.

- Individually packed
- SteriPlast® additionally gamma-sterilized
- Production, assembling and packaging acc. to Cleanroom class 7 (10000)

  - Compliant with EU food and FDA guidelines

Version	Length	Imm. depth	Sterile	PK	Cat. No.
	mm	mm			
without sheath	263	150	+	10	6265047*LLG
with sheath	268	150	+	10	6265048*LLG

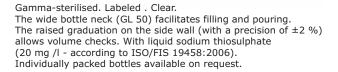
## Ladle scoops, flat handle, 18/10 steel



Capacity	Diam.	Length	PK	Cat. No.
ml	mm	mm		
90	70	185	1	9150665*LLG
200	90	315	1	9150685*LLG
220	100	315	1	9150700*LLG
620	140	345	1	9150703*LLG

## Sample bottles, PP, for water sampling, sterile





Description	Capacity	PK	Cat. No.
	ml		
without sodium thiosulfate	250	108	9001075*LLG
without sodium thiosulfate	500	84	9001076*LLG
without sodium thiosulfate	1000	30	9001077*LLG
with sodium thiosulfate	250	108	9001081*LLG
with sodium thiosulfate	500	84	9001082*LLG
with sodium thiosulfate	1000	30	9001083*LLG

## Reagent spoons, 18/10 steel





#### Double-ended

Dimensions Spoon (L x W)	Length	PK	Cat. No.
mm	mm		
30 x 22 - 23 x 17	120	1	9150012*LLG
30 x 22 - 23 x 17	150	1	9150015*LLG
40 x 29 - 30 x 22	180	1	9150018*LLG
40 x 29 - 30 x 22	210	1	9150021*LLG
48 x 29 - 40 x 29	250	1	9150025*LLG
48 x 35 - 40 x 29	300	1	9150030*LLG

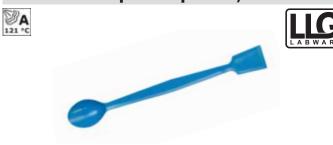
## LLG-Spoon spatulas, 18/10 steel



- One side with curved spoon
- One side with straight, triangular spatula
- For right handed user

Overall length	Dimensions Spoon (L x W)	Dimensions Spatulas (L x W)	PK	Cat. No.
mm	mm	mm		
150	35 x 15	25 x 13	1	9150800*LLG
180	35 x 15	25 x 13	1	9150801*LLG
210	35 x 15	25 x 13	1	9150802*LLG
250	35 x 15	25 x 13	1	9150073*LLG
300	35 x 15	25 x 13	1	9150074*LLG

## **LLG-Macro Spoon Spatula, PP**



Consists of a spoon on one side which allows easy transfer of sample, while the other end is a flat construction with a knife edge which can be used to draw salt or breaking crystals.

Length	Colour	PK	Cat. No.
mm			
150	blue	25	4664539*LLG
180	blue	25	4664540*LLG
210	blue	25	4664541*LLG

## Spatula set, Remanit® 4301, 7 pieces



- $1\ x$  pair of forceps, blunt, straight, 145 mm
- 1 x micro spoon-spatula 150/5 mm
- 1 x micro spoon-spatula 150/7 mm
- 1 x double spatula 150/9 mm
- 1 x powder spatula 150/9 mm
- 1 x micro powder spatula 150/4 mm
- 1 x micro double spatula 150/4 mm

In bag with push button.

Туре	PK	Cat. No.
Spatula set	1	7630153*LLG

# Filter bags Whirl-Pak®, PE, sterile





These bags contain a third layer of finely perforated polyethylene, which filters out the solids in the sample when used in a homogeniser blender. This allows for easy pipetting of the sample. The hole diameter in the filter layer measures 0.33 mm and there are 285 holes per square cm. With write-on lable. Temperature range: -210 to 82 °C.

Nominal capacity	Dimensions (D x W)	Thickness	PK	Cat. No.
ml	mm	mm		
710	150 x 230	0,102	250	7970783*LLG
1627	190 x 300	0,102	250	6263368*LLG

#### **LLG-Lab Stool**











The extra-large seat provides optimum comfort. The solid black plastic star base and the upholstery edge protector that runs all the way round guarantee a long working life. The practical gas spring system with easy ring control allows a comfortable seat height adjustment.

- Resistant to all of the usual disinfectants and chemicals  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
- Seat upholstery made of artificial leather (soft and comfortable, washable and antibacterial) or soft-touch PU foam (extremely robust, washable and antibacterial) in black
- Seat height adjustment by gas spring





Entry model for healthy sitting! The permanent contact backrest provides best support when working sitting down in the laboratory. The generously proportioned seat and backrest with integrated lumbar support provide additional support and therefore offer best laboratory ergonomics.

6.287 753

- Minimal joints: Hygienic design for easy cleaning and disinfection
- Resistant to all of the usual disinfectants and chemicals
- Seat and backrest upholstery made of artificial leather
- Quick adjustment: Every function can be operated comfortably and easy in sitting position
- Seat height adjustment by gas spring
- Backrest adjustable in height and inclination

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

Material	Description	Seat height adjustment mm	PK	Cat. No.
PU foam	Castors, foot ring	570 850	1	6314807*LLG
PU foam	Glides, foot ring	570 850	1	6287759*LLG
Artificial leather	Castors	460 630	1	6287758*LLG
Artificial leather	Glides, foot ring	570 850	1	6287760*LLG

Description	Seat height adjustment	PK	Cat. No.
	mm		
Castors	440-620	1	6287753*LLG
Glides, Foot Ring	580-850	1	6287754*LLG
Stop and Go Castors, Foot Ring	620-890	1	6287755*LLG
Armrests	-	1	6287756*LLG

## Laboratory coat, 100 % cotton, white





#### Ladies laboratory coat Type 81509:

With long sleeves and fitted waist. Reversable collar, concealed buttons with press buttons, 1 outside breast pocket left, 2 side pockets with diagonal access, straight sleeve seam with press buttons for width adjustment, Öko-Tex Standard 100.

#### Mens laboratory coats Type 81996:

Reversible collar, concealed buttons, 1 outside breast pocket left, 1 inside breast pocket right, 2 side pockets with diagonal access with light grey piping, 2 short side slits, straight, untapered back, straight sleeve seam, Öko-Tex Standard 100.

**Specifications** Typ 81509/Typ 81996

Weight: approx. 210 g/m²/approx. 240 g/m² Length: approx. 105 cm/approx. 96 cm

Туре	Size		PK	Cat. No.
Typ 81509	36		1	9414351*LLG
Typ 81509	38		1	9414352*LLG
Typ 81509	40		1	9414353*LLG
Typ 81509	42		1	6323052*LLG
Typ 81509	44		1	9414355*LLG
Typ 81509	46		1	9414356*LLG
Typ 81996	44/46		1	9414371*LLG
Typ 81996	48/50		1	9414373*LLG
Typ 81996	52/54		1	9414375*LLG
Typ 81996	56/58		1	9414377*LLG

Typ 81509

## Eye Wash Bottle, 0.9 % NaCl, Sterile



## Eye wash bottle DUO for simultaneous washing of both eyes



- Ergonomically shaped eyecup
- Easy and simple to use
- According to DIN EN 15154-4
- Shelf life: 3 years



B-SAFET

Description	PK	Cat. No.
Eye wash bottle 0,9 % NaCl, 200 ml	1	9733794*LLG
Eye wash bottle 0,9 % NaCl, 500 ml	1	9733793*LLG
Eye wash bottle DUO 0,9 % NaCl, 1000 ml	1	6240397*LLG

# **Eyewash Bottle pH-neutral**





## **Eve wash bottle DUO** for simultaneous washing of both eyes







A small, handy bottle containing 4.9 % sterile phosphate buffer solution, that neutralises the eye's fluid after accidents involving acids and alkalies.

- Shelf life: 3 years
- According to DIN EN 15154-4

Description	PK	Cat. No.
Eyewash bottle, pH neutral, 200 ml, single	1	9733788*LLG
Eyewash bottle pH neutral DUO, 500 ml	1	9733817*LLG

## **Respiratory protection mask**





FFP2 mask

White. Respiratory protection mask made of skin friendly, non-woven material with integrated nose clip and practical earloops.

- Made in EU
- 4 layers effective filtration system
- Protection level FFP2
- EN 149:2001+A1:2009

Туре	Protection- level	PK	Cat. No.
Respiratory protection mask	FFP 2	2	4680572*LLG

# Safety Eyeshields uvex pheos/pheos s (small)



6.257 034





- Rimless spectacles with a wide field of vision and easy to clean
- Permanent anti-fog on the inside Extremely scratch-resistant on the outside
- Completely metal-free

#### uvex pheos s:

Smaller version of uvex pheos for narrower heads. Same properties as the standard models.

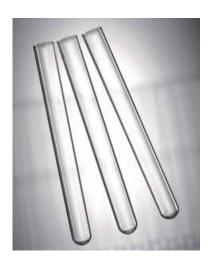
Type	Colour	Lens	PK	Cat. No.
71 -				
uvex pheos	black/green	PC clear, UV 400, 2-1.2	1	6251700*LLG
uvex pheos	black/yellow	PC amber, UV 400, 2C-1.2	1	6255465*LLG
uvex pheos	black/grey	PC grey, UV 400, 5-2.5	1	6252972*LLG
uvex pheos	light grey/grey	PC clear, UV 400, 2C-1.2	1	6257035*LLG
uvex pheos	black/grey	PC clear, UV 400, 2C-1.2	1	7661152*LLG
uvex pheos s	white/green	PC clear, UV 400, 2C-1.2	1	6257034*LLG
uvex pheos s	anthracite/grey	PC clear, UV 400, 2C-1.2	1	6281178*LLG

# **LLG-Test tubes, Fiolax® glass**

# LLG

# Test tubes, Borosilicate glass 3.3





With beaded rim and round bottom. High temperature and chemical resistance.

Diam.	Length	PK	Cat. No.
mm	mm		
10	100	100	6234026*LLG
12	100	100	7190011*LLG
14	130	100	7606374*LLG
18	180	100	7190023*LLG
20	180	100	7190028*LLG

mm mm 16 100 No 100 4658116*LL
16 100 No 100 4658116*LL
16 130 No 100 4658118*LL
16 160 No 100 6266691*LL
18 180 No 100 4658121*LL
20 150 No 100 4658119*LL
25 150 No 50 4658120*LL
25 200 No 50 6281479*LL
30 200 No 50 4656051*LL
16 160 Yes 100 4658131*LL
30 200 Yes 50 4658135*LL

# Test tubes, round bottom, Soda-lime glass



# Culture tubes, Borosilicate glass 3.3, screw cap

schuett-biotec.de



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

Heavy wall. Rimless, with round bottom.

Diam.	Length	PK	Cat. No.
	. 3		
mm	mm		
12	75	100	9400009*LLG
16	100	100	9400022*LLG
4.0	460	100	0.40000.40*!!! 0
16	160	100	9400040*LLG
18	180	100	0400050*110
10	100	100	9400050*LLG

Diam.	Nominal capacity	Length	PK	Cat. No.
mm	ml	mm		
16	15	98	100	9010612*LLG
16	20	150	100	9190600*LLG
16	15	98	100	9010613*LLG
16	20	150	100	9190605*LLG
Spare sci	rew caps on red	uest.		

BANDELIN

## **Ultrasonic Baths, SONOREX SUPER**

These devices work at 35 kHz. SweepTec® for permanent sound field oscillation ensures even and gentle cleaning. Available with heating with adjustable temperature range from 30 to 80 °C. Power information: High ultrasonic peak power and nominal ultrasonic power 230 V, 50/60 Hz. All models are spill-proof with stainless steel tanks (RK 102 H hard-chromium plated) and outer cases, drip proof (IP 32).

Type H with heating adjustable from 30 to 80 °C





of the bath of the interior of the interior of the interior	
of the interior of the interior of the interior	
litres mm mm mm	
RK 52 1.8 150 140 100 1 9877052	*LLG
RK 52 H 1.8 150 140 100 1 9877051	*LLG
RK 100 3.0 240 140 100 1 9877100	*LLG
RK 100 H 3.0 240 140 100 1 9877101	*LLG
RK 156 BH 9.0 500 140 150 1 9877155	*LLG
RK 510 9.7 300 240 150 1 9877510	*LLG
RK 510 H 9.7 300 240 150 1 9877511	*LLG
RK 1028 H 28.0 500 300 200 1 9877529	*LLG

### Lids and baskets for Sonorex ultrasonic baths, Made of stainless steel

Description	Туре	For bath type	Dimensions (W x D x H)	PK	Cat. No.
		baut type	mm		
Lid	D 52	RK/DT 52 / 52 H		1	9877601*LLG
Lid	D 100	RK/DT 100 H / 102 H /102 H-RC / 103 H, DL 102 H		1	9877603*LLG
Lid	D 156	RK/DT 156 BH, DL 156 BH	-	1	9877602*LLG
Lid	D 510	RK/DT 510 / 510 H / 510 H-RC / 512 H, DL 510 H	-	1	9877610*LLG
Lid	D 1028	RK 1028/H / DT 1028 H, DL 1028 H	-	1	9877607*LLG
Basket	K 1 C	RK/DT 52 / 52 H	120 x 110 x 40	1	9877631*LLG
Basket	K 3 C	RK/DT 100 / 100 H / 102 H / 102 H-RC, DL 102 H	200 x 110 x 40	1	9877633*LLG
Basket	K 6 BL	RK/DT 156 BH, DL 156 BH	460 x 100 x 50	1	9877637*LLG
Basket	K 10	RK/DT 510 / 510 H / 510 H-RC, DL 510 H	250 x 185 x 50	1	9877697*LLG
Basket	K 28	RK 1028/H / DT 1028 / H, DL 1028 H	455 x 245 x 50	1	9877698*LLG
Further accessorie	s can be found in our	online shop.			

# Draining rack, PS





## **Innovative SureGrip hook system**



- Versatility due to 2 pegs sizes and drying baskets
- Patent pending SureGrip hook securely grips vessels into place
- Suitable for standing on workbenches or wall mounting
- Max. load 34.9 kg

**Scope of supply:** Draining rack, 36 small pegs (green), 36 large pegs (blue), 2 drying baskets, drainage tubing, mounting hardware

Width	Depth	Height	PK
mm	mm	mm	
441	139	660	1
441	139	000	

## Brushes, natural bristle



_			
Туре	Diam.	Length	PK Cat. No.
	mm	mm	
Pipette brush	5	480	1 9019010*LLG
Pipe cleaner	4	150	100 9019005*LLG
Reagent bottle brush with wool tip	10	190	1 9019020*LLG
Reagent bottle brush with head bundle	10	250	1 9019030*LLG
Reagent bottle brush with wool tip	15	280	1 9019035*LLG
Reagent bottle brush with wool tip	30	270	1 9019040*LLG
Erlenmeyer flask and bottle brush with head bundle	50	330	1 9019050*LLG
Erlenmeyer flask and bottle brush with head bundle	63	470	1 9019060*LLG
Beaker brush with wooden handle	85	390	1 9019070*LLG
Rinsing brush, Nylon	60	220	1 9019110*LLG

# Benchtop holder and biohazard bags



For collecting pipette tips and microcentrifuge tubes.

- Steel wire frame for polyethylene bags (diam. 12 cm, height 25 cm)
- Coated in easy to clean, orange color epoxy

Richarard bags HDRF 100 0404070*LIC	Description	PK	Cat. No.
bioridzard bags, ribre	Biohazard bags, HDPE	100	9404070*LLG
Stand 1 7060716*LLG	Stand	1	7060716*LLG

# **LLG-Trolleys, Stainless Steel**



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

Description	Dimensions (W x D x H) mm	PK	Cat. No.
2 shelves, vertical spacing 585 mm	900 x 600 x 950	1	9148101*LLG
3 Shelves, vertical spacing 275 mm	900 x 600 x 950	1	9148104*LLG

# **LLG-Laboratory jack, stainless steel**



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

Dimensions (W x D):

lin.	Max.	Max.	Max.	PK
	height	stat.		110
	Height	Stat.	dyn.	
n	mm	kg	kg	
0	270	30	7	1

200 x 200 mm

# Spray bottles LaboPlast®, PE/PP





Chemical-resistant to a large extend. Trigger-action spray pump with continuously adjustable spray nozzle.

- Parts in contact with media made of PP, PE and stainless steel
- Nozzle diameter 0.6 mm, continuously adjustable
- Amount sprayed per stroke: 1.2 ml ±0.1 ml

Capacity	Ext. diam.	Neck diam. int.	Height	Weight	PK	Cat. No.
ml	mm	mm	mm	g		
250	60	18.0	220	54	1	9223152*LLG
500	75	18.0	240	79	1	9223155*LLG
1000	98	17.5	295	111	1	9223160*LLG

# **Bottle-top dispensers Dispensette® S**





The Dispensette® S bottle-top dispenser makes liquid dosing easy and secure.

- Discharge tube, with recirculation valve
- Valve system tight sealing without additional sealing rings
- Minimal force needed to operate especially with high-volume devices
- Autoclavable (121 °C)

#### **Included items:**

Bottletop dispenser Dispensette® S, DE-M marked and supplied with performance certificate, telescope filling tube, recirculation valve (optional), mounting tool and adapters made of PP.





# 1 Dispensette® S Organic Analog

Yellow color code. Ideal for dispensing organic solvents, e.g., chlorinated and fluorinated hydrocarbons such as trichlorotrifluoroethane and methylene chloride, or concentrated acids such as HCl and HNO<sub>3</sub> (not HF) as well as trifluoroacetic acid (TFA), tetrahydrofuran (THF) and peroxides.

Volume ml	Grad. ml	Accuracy max. vol. (± R%)	Precision max. vol. (≤ CV%)	PK	Cat. No.
0.5 - 5	0.1	0.5	0.1	1	9284427*LLG
1 - 10	0.2	0.5	0.1	1	9284429*LLG
2.5 - 25	0.5	0.5	0.1	1	9284433*LLG
5 - 50	1.0	0.5	0.1	1	9284437*LLG
10 - 100	1.0	0.5	0.1	1	9284439*LLG

# ② Dispensette® S Organic Digital

Yellow color code (applications see Dispensette® S Organic Analog). Especially easy to read digital display.

Volume	Grad.	Accuracy max. vol.	Precision max. vol.	PK	Cat. No.
ml	ml	(± R%)	(≤ CV%)		
0.5 - 5	0.02	0.5	0.1	1	6269501*LLG
1 - 10	0.05	0.5	0.1	1	6269503*LLG
2.5 - 25	0.1	0.5	0.1	1	6269505*LLG
5 - 50	0.2	0.5	0.1	1	6269507*LLG

## Bottletop dispenser LLG-uniTOPDISPENS with glass piston and clear glass cylinder

The LLG-uniTOPDISPENS is a reasonably priced bottle-top dispenser with glass piston. Available in 2 sizes (2-10 and 10-50 ml). Precise, reliable and robust. The high-quality material and the precision of the grinding ensures the perfect seal of the complete dispensing system.

- Precise and reliable volume setting
- Visible dosing procedure
- Valve block made of PP gives optimised protection of the glass-made dosing cylinder
- Precise grinding of the glass piston into the glass cylinder forms a perfect seal
- Ergonomic finger guard
- Delivered with 2 PP-adapters GL 40 and 45
- With glass piston and clear glass cylinder

You can find the appropriate compatibility list on www.llg-labware.com in the Downloads section.

#### Scope of supply: dispenser,

1 bottle adapter each 40 and 45 mm





LLG

Volume	Graduations	Accuracy max. vol.	Precision max. vol.	PK	Cat. No.
ml	ml	(± R%)	(≤ CV%)		
2 - 10	0.2	0.6	0.2	1	9283806*LLG
10 - 50	1.0	0.6	0.2	1	9283808*IIG

# Laboratory bottles, DURAN®, with retrace code and with screw cap





With blue PP screw cap and pouring ring.

Capacity	Diam.	Height with cap	Neck thread	PK	Cat. No.
ml	mm	mm	GL		
50	46	91	32	10	218011753*SCHOTT
100	56	105	45	10	218012458*SCHOTT
250	70	143	45	10	218013651*SCHOTT
500	86	181	45	10	218014459*SCHOTT
1000	101	230	45	10	218015455*SCHOTT
2000	136	265	45	10	218016357*SCHOTT

# Pipettors, positive displacement, variable, repeating, Stepper™ 416



- Reliable serial dosing
- Various adjustable volumes
- Unique 4-finger activation mode



A SOCOREX

Comfortable pipette, intended for reliable repeat dispensing from 10 to 5000  $\mu$ l. Unique trigger action mechanism eliminates thumb fatigue. Selected materials ensure reliability in use, day after day. Compact shape greatly limits internal instrument contamination. Wide selection between 53 different volumes; up to 73 doses per filling. Two-year warranty.

- 4-finger activation
- Setting knobs bear clear indication of volumes and number of aliquots
- Three positive displacement syringes, colour coded
- Self-locking mechanism
- Clear setting indication

Description	PK	Cat. No.
Stepper™ 416 supplied with colour-coded adjustment knobs, adapter, samples of Ecostep™ syringes	1	4678370*LLG

## Syringe tips, Ecostep™ for Stepper™ 416



The disposable syringes made of PE/PP can be quickly and easily inserted into the Stepper  $^{\text{\tiny{TM}}}$  416. Three sizes of syringes cover the entire volume range from 10 to 5000  $\mu l$ . The identical colour coding of syringes and adjustment knobs prevents prone misadjustments. Sterile syringes, DNase-, RNase- and pyrogen-free.

Sterile	Capacity µl	Capacity	PK	Cat. No.
-	10 - 100	0.75	100	9411509*LLG
-	50 - 500	3.75	100	9411511*LLG
-	500 - 5000	37.5	100	9411513*LLG
+	10 - 100	0.75	50	9411578*LLG
+	50 - 500	3.75	50	9411579*LLG
+	500 - 5000	37.5	50	9411580*LLG

# **LLG-Disposable Reagent reservoirs economy, PS**





Made from polystyrene. Angled sides and a V-shaped bottom allow maximum recovery of reagents. All reservoirs have internal graduated volume lines and pour-spouts on the corners. 25 ml or 50 ml versions. Available as sterile and non-sterile versions.

- DNase-, RNase and pyrogen-free certified.

Description	Capacity	PK	Cat. No.
	ml		
non-sterile, bulk	25	100	6282144*LLG
sterile, single packed	25	100	6282145*LLG
non-sterile, bulk	50	100	6282146*LLG
sterile, single packed	50	100	6282147*LLG

#### Tube racks, conical, PP







Can be used for both 15 ml and 50 ml tubes. Autoclavable.

For tubes ml	Array	PK	Cat. No.
15 / 50	1	4	6276004*LLG

### **LLG-Centrifuge tubes, PP**







Polypropylene tubes with very good thermal, mechanical and chemical stability. With screw closures. Sterile tubes with screwed-on closure. Packed in boxes or bags. With graduations and labelling area. Conical shape.

Centrifugation capacitiy (Max. RCF): Height: 6000 x g 120 mm

Description	Capacity	Diam.	PK	Cat. No.
	ml	mm		
aseptic, bulk pack	15	17	50	6263886*LLG
big pack	15	17	500	9316063*LLG
big pack	50	30	500	9316065*LLG
aseptic, bulk pack	50	30	50	6263887*LLG

#### **Gel electrophoresis tank MultiSUB Mini 10**



For small and medium sample volumes. The small buffer volume of 225 ml increases the effectiveness of the analysis.

#### Supplied with:

Chamber with platinum electrodes, UV carrier 7 x 10 cm, gel casting locks.

#### **Specifications**

Gel dimensions (W x L): 7 x 10 cm Unit dimensions (W x L x H): 21 x 9 x 9 cm 7 x 10 cm tray Max. sample capacity:

Description	PK	Cat. No.
MultiSUB Mini 10	1	9584650*LLG

# Agarose for gel electrophoresis





Cleaver

These agaroses combine tensile strength with low electroosmotic properties to achieve high resolving power for a wide size range of nucleic acid fragments.

#### **Gel Documentation System ENDURO™ GDS II**





- For DNA and protein gels
- **High resolution**



The Gel Documentation System comes in either a 302 nm or a 365 nm version. Designed for the documentation of visible protein stains like Coomassie blue or silver stain, for DNA dyed with Ethidium bromide, Safe Dyes, GelGreen® and SYBR™ safe.

- Region of interest function for optimal exposure in < 30 sec.
- 30.000 operating hours of the transilluminator, no more replacement UV lamps necessary
- 16 bit Tiff files ideal for publication

Runs on a Windows based PC (not included). PC Requirements: Windows 10, Intel® processor, 1.4 GHz processor speed, 2 GB RAM, 16 GB free hard disk space, 2 USB 2.0 or higher ports.

#### **Specifications**

CAS: 9012-36-6

White to off-white powder Appearance:

EEO: ≤ 0.13 %

Gelling Point: 36 °C ±1.5 °C (1.5 % gel) 88 °C ±1.5 °C (1.5 % gel) Melting Point: Solubility: Clear, colourless solution at 1 g in 100 ml water

Gel Strength:  $\geq$  1200 g/cm<sup>2</sup> (1 % gel) Sulphate: < 0.20 %

DNase, RNase, Protease, Endonuclease: None Detected

#### **Specifications**

Resolution: 3.2 megapixels

UV (302 nm or 365 nm), epi-white, epi-blue (GDS Touch II) Transilluminator wavelength:

Field of view: 150 x 200 mm

USB 2.0 ports:

Dimensions (W x D): 310 x 380 mm

Туре	Capacity	PK	Cat. No.
	g		
CSL-AG100	100	1	9584695*LLG
CSL-AG500	500	1	9584696*LLG

Туре	Description	PK	Cat. No.
GDS2-1302	with UV transilluminator, 302 nm	1	4676128*LLG
GDS2-1365	with UV transilluminator, 365 nm	1	4676129*LLG

## **Safety Laboratory Gas Burners Fuego SCS series**



The low profile body facilitates ergonomic operation and the streamlined design reduces air flow disturbances in a cleanroom workbench. Made of stainless steel, with fireproof controls.

- SCS Safety Control System with gas safety cut off: Ignition and flame control, temperature monitor, automatic unit switch off, residual heat display, burner head assembly monitor
- BHC Burner Head Control
- Removable burner head
- Tilt mechanism right/left
- Turbo flame
- Holding device for 3 inoculation loop holders
- Nozzles for natural gas, propane/butane gas Approved by DIN-DVGW, approval no. NG2211AS0167
- Warranty: 2 years

Fuego SCS basic: With stainless steel foot pedal. The foot pedal regulates the burning time either by continuous foot pressure or by start-stop function. Instrument with ON/OFF button function.

Fuego SCS: With Double-Click IR-sensor, button function and foot pedal operation (foot pedal optional). Double-Click IR-sensor: This adjustable safety function ensures that the burner can only be ignited by activating the IR-Sensor twice. Adjustable IR-sensor reaction distance: 5 mm to 50 mm.

Illuminated graphic display: The self-explanatory and language-less symbol display facilitates a rapid selection of all functions. 6 standard-programs with count down display: 1 sec to 2 hrs selectable.

The first safety laboratory gas burner with comfort package: Cooling time reminder for inoculation loops, temperature regulation for heating media, gas consumption display for gas cartridges.

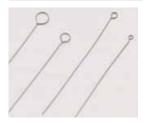
Additional accessories are available on request.

#### **Specifications**

Dimensions (W  $\times$  D  $\times$  H): 103 x 130 x 49 mm 100-240 V 50/60 Hz, Power supply: max. 0.3 A; 9 V DC, 1.3 A Weight: 700 a

Type PI	(	Cat. No.
Fuego SCS basic	L 6:	232207*LLG
Fuego SCS	L 6:	231770*LLG

## **Inoculation loops "metal" and** loop stands



# schuett-biotec.de

**Inoculation loops** made from stainless steel, special stainless steel wire or platinum-iridium wire (90/10). Can be heated to red heat. Length: 60 mm. Wire diameter: 0.5 mm.



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



Туре	Description	Loop diam.	PK	Cat. No.
		mm		
P-I 1	Platinum-iridium	1	1	9520180*LLG
P-I 2	Platinum-iridium	2	1	9520181*LLG
P-I 3	Platinum-iridium	3	1	9520182*LLG
P-I 5	Platinum-iridium	5	1	9520184*LLG
E 1	Stainless steel, special wire	1	10	9520170*LLG
E 2	Stainless steel, special wire	2	10	9520171*LLG
E 3	Stainless steel, special wire	3	10	9520172*LLG
E 5	Stainless steel, special wire	5	10	9520174*LLG
W-1.5	Stainless steel	1.5	10	9520185*LLG
W-2.5	Stainless steel	2.5	10	9520186*LLG
W-4.0	Stainless steel	4.0	10	6233696*LLG
Inoculation loop holder	160 mm long		1	9520178*LLG
Inoculation loop stand R (round)	(Diam. x H) 80 x 50 mm		1	9520190*LLG
Inoculation loop stand L (long)	(L x W x H) 180 x 50 x 50 mm		1	9520191*LLG

# LLG-Petri dishes, soda-lime glass

Suitable for applications in the cultivation of bacteria, yeasts and fungi, as well as cell cultures. Hvdrolytic resistance: class HGB 3 according to ISO 719, type III according to USP.

Height

mm

15

15

20

20

25

30

30

diam.

mm

60

90

100 100 100

120

150

180

200 200



y	
PK	Cat. No.
ГK	Cat. No.
10	6291543*LLG
10	6291544*LLG
10	6291545*LLG
10	6291548*LLG
10	6291546*LLG
10	6291547*LLG
10	6291549*LLG
10	6291550*LLG

6291551\*LLG

6291552\*LLG

6291553\*LLG 6291554\*LLG

# Mini-Incubator CULTURA® M inclusive Multirack



The CULTURA® M Mini-Incubator was specifically designed for the incubation of contact slides and dip slides, as well as common Petri dishes for detecting bacteria, fungi and yeast. With its extremely small footprint, it can easily be transported wherever you need to use it. The Cultura® M incubator has an internal capacity of approximately 4 L. It is used in the areas of medical diagnostics and water analytics.

**Scope of delivery:** one multirack for up to 18 dip slides and one thermometer

#### **Specifications**

Temperature range:  $25 \,^{\circ}\text{C}$  to  $45 \,^{\circ}\text{C}$  Temperature uniformity:  $\pm 1.0 \,^{\circ}\text{C}$  Capacity:  $4 \,^{\circ}\text{L}$ 

External dimensions (W x D x H):  $310 \times 168 \times 155$  mm Internal dimensions (W x D x H):  $220 \times 150 \times 120$  mm

Weight: 1.1 kg
Power supply: 230 V, 50 Hz
Warranty: 2 Years

Туре	PK	Cat. No.
Mini-Incubator CULTURA® M incl. Multirack for 18 tests.	1	6280441*LLG
Mini-Incubator CULTURA® M only inlay and thermometer.	1	6227022*LLG
Multirack to Cultura M (ABS) for 18 tubes 25-30 mm.	1	6280442*LLG

## **LLG-Microbiological Media**





For numerous micro and molecular biological applications. The safety data sheets of these products are available under www.llg-labware.com/en/zertifikate.

Description	Capacity	PK	Cat. No.
	g		
Luria Bertani (Miller), Powder	500	1	6271000*LLG
Luria Bertani (Lennox), Powder	500	1	6271010*LLG
Terrific Broth, Powder	500	1	6271007*LLG
2x YT Broth, Powder	500	1	6271001*LLG
Bact. Agar, Powder	500	1	6271003*LLG
Luria Bertani Agar (Miller), Powder	500	1	6271009*LLG
Luria Bertani Agar (Lennox), Powder	500	1	6271008*LLG
YPD Broth, Powder	500	1	6271002*LLG
Yeast Extract, Powder	500	1	6271004*LLG
Tryptone, Powder	500	1	6271005*LLG
Casein Peptone, Powder	500	1	6271011*LLG
Tryptic Soya Agar (Caso-Agar), Powder	500	1	6271006*LLG
Trypticasein Soy Broth (TSB-media), Powder	500	1	6271018*LLG

# Cooling incubator LLG-uniINCU 28 Cool









- High temperature constancy
- Space-saving



The LLG-uniINCU 28 Cool is a small cooling incubator with 28 litres and a temperature range of 3 °C - 45 °C. Natural convection prevents the samples from drying and enables cultivation and storage of long-term samples. The device is suitable for food controls, research, various cultivation processes and protein crystallization.

- Control panel for temperature setting
- Good temperature distribution due to 5 cooling and heating surfaces
- Peltier cooling and heating system
- Lockable
- Max. 6 shelves possible

**Scope of supply:** Cooling incubator LLG-uni*INCU* 28 Cool with power plug, 2 shelves, key, instruction manual

#### Specifications

Temperature range:

Accuracy/Temperature uniformity:

Capacity:

External dimensions (W x D x H):

Internal dimensions (W x D x H):

Weight:

Power supply:

3 °C ... 45 °C

±0.5 °C

±28 I

420 x 413 x 485 mm

329 x 219 x 369 mm

13.5 kg

100 ... 240 V, 50/60 Hz

Туре	Plug type	PK	Cat. No.
LLG-uniINCU 28 Cool	EU	1	6263575*LLG
LLG-uniINCU 28 Cool	UK	1	6263418*LLG

#### Thermal Shaker LHTS

- Heating and shaking functions
- 4.3" colour LCD touchscreen display provides an intuitive interface
- Rapid heating, cooling and high speed shaking ability
- Internal memory stores five separate 5-step programs, unlimited with USB
- Temperature ramp rate, 0.5 °C steps
- Single Point Calibration Mode
- Pulse Mode Feature
- Maximum Temperature Limiting Function
- Hot Top Indicator
- Audible Alarm

#### Scope of supply:

Thermal Shaker incl. 1.5 ml block, clear rack and cover



#### **Specifications**

4 °C above ambient up to 100 °C Temperature range:

±1 °C from 20 °C to 45 °C Temperature Accuracy: ±2 °C above 45 °C

Speed/Accuracy: 300 to 3000 rpm/±2 % 1 min to 99 h, 59 min Timer:

Orbit: 3 mm 2 to 3 °C/min Cooling rate: Heating rate: 5 °C/min

Permissible ambient conditions: 5 to 35 °C  $260\times\,248\times\,132\;mm$ Dimensions (L X W X H):

5.4 kg Weight:

230 V, 50/60 Hz Power supply:

Туре	PK	Cat. No.
LHTS Thermal Shaker	1	4659483*LLG

### Metal-cased heating mantles, series KM-MEB





With corrosion-resistant stainless steel heating bowl to protect against leaking liquid resulting of a broken flask.

- Increased working safety in the lab
- Plastic-coated, chemically resistant metal housing
- Predrilled threaded hole on rear allows to fix the stativ clamp
- 2 heating zones
- With built-in controller allows a continuous adjustment of power outlet
- Thermally insulated and earthed
- With built-in heating zone switch and residual current detection (RCD)

Capacity	Flask diam.	Rating	Heating zones	PK	Cat. No.
ml	mm	W			
250	85	150	2	1	6310317*LLG
500	105	200	2	1	6310318*LLG
1000	131	300	2	1	6310319*LLG
2000	166	500	2	1	6310320*LLG

### **Dry Baths AccuBlock™**







- Temperature range up to 150 °C
- Single, dual and four block capacity
- Dual display
- USB connectivity enables traceability of data
- Moulded block chamber

#### Please order blocks separately.

#### **Specifications**

Temperature range: Ambient +5 to +150 °C, adjustable in 0.1 °C steps

Temperature uniformity: ±0.2 °C ±0.1 °C Temperature resolution: ±0.3 °C Temperature accuracy:

Timer: 1 ... 99 h 59 min or continuous Aluminium

Block material:

Dimensions (W x D x H) Single/Dual Block:

210 x 290 x 120 mm 4 Block: 210 x 390 x 120 mm Weight

Single/Dual Block: 3.2 kg 4 Block: 4.4 kg

230 V, 50/60 Hz Power supply:

Туре	PK	Cat. No.
Single Block	1	6272368*LLG
Dual Block	1	6272369*LLG
Four Block	1	6272370*LLG

# Blocks for Dry Baths AccuBlock™

Type For	PK	Cat. No.
D1105A 24 x 1.5 ml tubes	1	6224191*LLG
D1102A 20 x 2.0 ml tubes	1	6233664*LLG

## **DryingOven** 125 basic dry/control dry







Oven control dry

- Interior of 125 L
- Oven basic dry with natural convection up to 250 °C
- Oven control dry with recirculating air up to 300  $^{\circ}\text{C}$
- Electronically adjustable ventilation
- Key lock function
- Timer from 1 minute up to 100 days
- For up to 6 shelves
- Interior made of stainless steel
- Door opening possible up to max. 180°  $\,$

#### Additional features Oven 125 control dry:

- Recirculating air drying cabinet with automatic fan switch-off
- Recirculating air adjustable in 10 steps
- Real-time clock
- Temperature selection limited TWB (DIN 12880)
- 2 large TFT Displays

#### Scope of supply:

Oven control dry - glass

Oven with 2 shelves and calibration certificate at 160 °C.

Specifications	basic dry // control dry
Internal volume:	125 l
Ambient temperature:	5 40 °C
Working temperature:	RT+ 5 250 °C //
	RT+ 5 300 °C
Adjustment and display resolution:	0.1 K
Temperature stability (150 °C):	±0.3 K
Ambient humidity:	80 %
Heating power:	2400 W

700 x 650 x 825 mm Outer Dimensions (W x D x H): Inner Dimensions (W  $\times$  D  $\times$  H): 550 x 525 x 450 mm Weigth: 55 kg // 82 kg 230 V, 50/60 Hz Power supply: Protection class: IP 20

Max. Included Cat. No. Туре grids grids Oven basic dry Oven basic dry - glass 6289337\*LLG 6289338\*LLG 6 2 Oven control dry 4663261\*LLG

## Thermal protection glove TempDex 710, up to 125 °C





- Thin, anatomically-shaped glove ensures dexterity
- Excellent abrasion resistance: longer lasting
- Dot embossing for better insulation and better grip
- 10 x 1 pair per pack, Cat. II

Size	Length	PK	Cat. No.
	mm		
7	240	10	6285464*LLG
9	260	10	6285465*LLG
11	280	10	6285463*LLG

## Beaker tongs, chromated steel





PVC coated Insulated jaws are used to hold all types of beakers up to 1000 ml.

Length	Temp.	Pk	Cat. No.
	range		
mm	max. °C		
300	120	1	6237287*LLG

# Flask tongs, chromated steel





PVC coated insulated jaws, used to hold all types of flasks up to 2000 ml.

Length	Temp.	PK	Cat. No.
	range		
mm	max. °C		
300	120	1	4008397*LLG

1 4663262\*LLG



#### KEFO d.o.o.

Slovenija | Brnčičeva 29, 1231 Ljubljana-Črnuče | www.kefo.si Srbija | Bačka 1U, 11 080 Zemun | www.kefo.rs BiH | Ćorovićeva 1A, 71123 I.Sarajevo | www.kefo.ba Hrvatska | N. Tesle 10, 44000 Sisak | www.kefo.hr



# LABORTOPS

#### **Water baths WTB**







- Ideal for tempering samples, plates and nutrient solutions
- All important parameters always visible

Thanks to the personalisable remote viewing through the CustomView, you always have an eye on the important information.

#### Without covers - please order separately!

#### **Specifications**

Working-temperature range: min. 5 °C above Amb. up to +100 °C

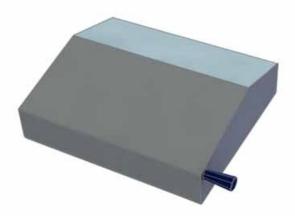
Setting temperature-range: +10 to +100 °C

Setting accuracy temperature: 0.1 °C

Power supply: 230 V

230 V, 50/60 Hz; 115 V, 50/60 Hz no extra charge





Туре	Capacity of the bath	Internal dimensions (W x D x H)	External dimensions (W x D x H)	Rated capacity	Net weight	PK	Cat. No.
	litres	mm	mm	kW	kg		
WTB6	7	277 x 217 x 150	349 x 289 x 245	1.00	6	1	4680108*LLG
WTB11	10	267 x 207 x 200	349 x 289 x 295	1.00	7	1	4680109*LLG
WTB15	17	482 x 277 x 150	554 x 349 x 245	1.42	9	1	4680110*LLG
WTB24	23	472 x 267 x 200	554 x 349 x 295	1.42	10	1	4680111*LLG
WTB35	37	602 x 482 x 150	674 x 554 x 245	2.80	14	1	4680112*LLG
WTB50	51	592 x 472 x 200	674 x 554 x 295	2.80	16	1	4680113*LLG

## Stainless steel gable cover for water baths WTB

For model	PK	Cat. No.
WTB6 / WTB11	1	4680774*LLG
WTB15 / WTB24	1	4680471*LLG
WTB35 / WTB50	1	4680594*LLG