KEFO

LABORTOPS

valid until 30.06.2024

BALLOON AND WIDE NECK BOTTLES

- **New Assortment**
- **High Quality**
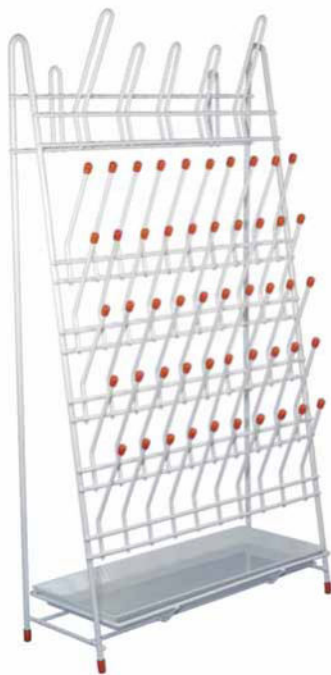- **Large Selection**

New

LLG LABWARE

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GENERAL LABORATORY SUPPLY

LLG-Draining racks, PE-coated wire

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

Type	PK	Cat. No.
LLG-Draining racks	1	6281619*LLG

LLG-Laboratory Power Failure Detector

- Immediate visual and acoustic alarm
- Alarm can sound for short power outages or
  larger periods of at least
  12 hours (can be switched off manually).
- Plug safety cover offers protection against
  accidental disconnection of the plug
- Maximum total power of connected devices.
  3500W power supply 230 V 50 Hz
- Suitable for European plugs
- Max. Rating 16 A
- With built-in battery

Scope of supply:
1 x power failure detector
2 x plug safety caps
2 x screws

Type	PK	Cat. No.
LLG-Laboratory Power Failure Detector	1	6255819*LLG

LLG-All-round Cutter with rubber grip

Easy and comfortable handling is ensured by the ergonomically shaped
grip. The break-off device is integrated into the grip section of the ABS
plastic casing. Comes with a metal blade guide and auto-lock system.
Both cutters will be delivered on blister cards including 2 spare cutting
blades.

Type	PK	Cat. No.
LLG-All-round Cutter 18 mm	1	9160656*LLG

Tally counter, digital

Effective and practical counter with a sturdy, chrome-finished housing.
Ideal for counting blood cells, bacterial colonies, liquid drops or any
other repetitive step with a tally level up to 9999.
TALLY COUNTER - "handy" Features a quick-reset knob, lens window for
easy reading, and a finger ring for a secure grip.

Description	PK	Cat. No.
Tally counter	1	6267411*LLG

Microtube racks, PP, 96-Well

Autoclavable. Polypropylene rack has
96 wells for 0.5 ml microcentrifuge
tubes on one side and 96 wells for
1.5 ml to 2.0 ml microcentrifuge tubes
on the other side. Wells are arranged in
a standard 8 x 12 array. The handy lid
snaps into place using tabs on each end
of the rack. Dimensions (L x W x H):
246 x 121 x 50 mm.

Colour	PK	Cat. No.
Blue, green, pink, yellow and orange	5	9193982*LLG

- New Assortment
- For Transportation and Storage

LLG-Carboy, PP, with handles

LLG-Carboy with screw cap made of PP for storing and dispensing media, solutions and other liquids. The practical shoulder handle facilitates transport and pouring.

- With graduation
- Autoclavable
- Stable bottom with curved corners
- Leak-proof

Capacity	Dimensions (dia. x H)	Neck diam.	Cap size		PK	Cat. No.
l	mm	mm				
10	249 x 376	65	83		1	4692534*LLG
20	285 x 518	65	83		1	4692535*LLG
50	376 x 665	65	83		1	4692536*LLG

LLG-Wide mouth bottle, HDPE, rectangular

New

- Space-saving, rectangular wide mouth bottle with sturdy, uniform wall construction. Ideal for easy filling, storage or transport of liquids, powders and granulates.

- With screw cap
- Exceptional chemical resistance to most acids, bases and alcohols
- Autoclavable
- Leak-proof

Capacity	Dimensions (W x D x H)	Cap size	Neck diam. int.		PK	Cat. No.
ml	mm		mm			
125	39.4 x 60.0 x 97.3	28	21.1		12	4692551*LLG
250	54.0 x 75.5 x 112.0	38	28.8		12	4692552*LLG
500	64.7 x 100.0 x 140.6	48	38.0		12	4692553*LLG
1000	70.2 x 125.2 x 175.0	53	43.7		6	4692554*LLG

LLG-Wide mouth bottle, PP

Ideal for easy filling, storage or transport of liquids, powders and granulates.

- With a screw cap made of PP
- Autoclavable
- Bottom with curved corners
- Leak-proof

Capacity	Diam.	Neck diam. int.	Height		PK	Cat. No.
ml	mm	mm	mm			
30	34.8	21.4	59.8		12	4692538*LLG
60	39.7	21.3	82.5		12	4692539*LLG
125	50.6	28.6	95.5		12	4692540*LLG
250	61.6	33.0	127.4		12	4692541*LLG
500	73.1	43.8	164.0		12	4692542*LLG
1000	92.7	53.3	195.0		6	4692543*LLG

LLG-Wide mouth bottle, HDPE, round

New

Ideal for easy filling, storage or transport of liquids, powders and granulates.

- With a screw cap made of PP
- Excellent chemical resistance
- Autoclavable
- Bottom with curved corners
- Leak-proof

Capacity	Diam.	Neck diam. int.	Height		PK	Cat. No.
ml	mm	mm	mm			
30	34.6	21.0	59.1		12	4692544*LLG
60	39.2	21.1	81.5		12	4692545*LLG
125	50.3	28.3	94.7		12	4692546*LLG
250	60.9	32.8	127.0		12	4692547*LLG
500	72.7	44.0	164.0		12	4692548*LLG
1000	92.0	51.9	195.0		6	4692549*LLG
2000	119.0	90.8	236.0		1	4692550*LLG

Label printer DYMO® LabelWriter™ 550

DYMO

- High Print Resolution
- Including Labels

Compact label printer with direct thermal printing technology for fast and efficient label printing without additional ink cartridges or toner cartridges. The latest label recognition technology provides information on the size, type, and colour of the loaded labels and automatically displays the number of remaining labels.

- Print resolution of up to 300 x 300 dpi
- Customised label design with DYMO® Connect for Desktop software
- Printing precise label quantities without cumbersome label sheets
- Automatic energy-saving mode
- PC connection via USB interface

Scope of supply: Label printer, 1 x label starter roll (28 x 89 mm), power adapter, power cable, USB cable, quick start guide.

Specifications

Max. label width:	59 mm
Print speed:	62 labels/min.
Dimensions (WxDxH):	127 x 187 x 136 mm
Weight:	640 g
Power supply:	100 ... 240 V, 50/60 Hz, 24 V

Type	PK	Cat. No.
DYMO® LabelWriter™ 550	1	4687585*LLG

Deep freeze labels TOUGH-SPOTS®

Heathrow Scientific®
design | function | innovation

Adhesive dots for 0.5/1.5/2.0 ml reaction tubes. Temperature resistance from -196 °C to 80 °C. Tear-resistant, can be written on with almost any marker.

Diam. mm	Colour	For vessels	PK	Cat. No.
9.5	White	0.5 ml Tubes	1000	9040711*LLG
9.5	Blue	0.5 ml Tubes	1000	9040712*LLG
9.5	Green	0.5 ml Tubes	1000	9040713*LLG
9.5	Red	0.5 ml Tubes	1000	9040714*LLG
9.5	Yellow	0.5 ml Tubes	1000	9040715*LLG
13.0	White	1.5/2.0 ml Tubes	1000	9040716*LLG
13.0	Blue	1.5/2.0 ml Tubes	1000	9040717*LLG
13.0	Green	1.5/2.0 ml Tubes	1000	9040718*LLG
13.0	Red	1.5/2.0 ml Tubes	1000	9040719*LLG
13.0	Yellow	1.5/2.0 ml Tubes	1000	9040720*LLG
13.0	Lavendel	1.5/2.0 ml Tubes	1000	6287530*LLG

Sample transport box DuraPorter® XL

New

Heathrow Scientific®
design | function | innovation

High-capacity container for the safe and convenient transport of laboratory samples, instruments and valuable items. Specially designed to meet the stringent demands of clinical and research laboratories.

- Also meets transport requirements for secondary packaging as per UN3373
- Dual latches with security tag feature to protect providing tamper-evidence
- With silicone seal for airtight and watertight closure
- Different inserts for a variety of tube sizes are available separately

Scope of supply: Sample transport box, insert MultiTube Rack.

Specifications

Dimensions (WxDxH):	406 x 413 x 178 mm
With lid:	Yes
Stackable:	No

Colour	PK	Cat. No.
Blue	1	4692499*LLG
Red	1	4692500*LLG
Yellow	1	4692501*LLG

Inserts for sample transport box DuraPorter XL

4692503*LLG

4692504*LLG

Suitable for a variety of reaction tubes and blood collection tubes.

- Separately usable
- The lid can be easily and fully removed
- Sufficient depth for filling with ice

For tubes diam. mm	For tubes ml	Array	PK	Cat. No.
13	3.5 ... 7.5	168	3	4692503*LLG
18	10 ... 15	100	3	4692502*LLG
13 ... 30	3.5 ... 50	-	3	4692504*LLG

Cleanroom Gloves AdvanTech529, nitrile

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

JKT   VIRUS

Enhanced mechanical resistance for short-term operations. The manufacturing process guarantees a very low level of contaminants: particle rates, powder-free, non-volatile residue, extractable content; compliant with ISO 5 class (Class M3.5 for International systems). 100% nitrile formula enables anti-static properties. Offers 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.
	mm			
6	300		100	6270501*LLG
7	300		100	6270502*LLG
8	300		100	6270503*LLG
9	300		100	6270504*LLG
10	300		100	6270505*LLG

Cleanroom Wipes Sontara® MicroPure, polyester/cellulose

Sontara® MicroPure nonwovens (cellulose/polyester) have been specially developed for use in cleanrooms. The nonwoven combines the absorbency of natural fibres with the purity and strength of a synthetic material. No binding agents or chemicals are used in its manufacture. Due to its cellulose content, the nonwoven material has a high absorption capacity for particles and liquids.

Type	Dimensions	Cleanroom Class ISO	PK	Cat. No.
	mm			
100	305 x 305	5 + 6	150	9390185*LLG
100	224 x 224	5 + 6	300	9390186*LLG
AP	305 x 305	6 - 9	150	9390187*LLG
AP	224 x 224	6 - 9	300	9390188*LLG
SV	305 x 305	7 - 9	250	9390189*LLG
SV	224 x 224	7 - 9	500	9390190*LLG

Panoramic Eyeshield 619

121 °C   A

Panoramic Eyeshield is designed for use in rooms with controlled contaminations (sterile and clean rooms) or aseptic conditions. Its soft structure supports multiple repetitive stream cycles and gamma or beta sterilization without perceptible changes.

- Sterilizable through autoclave with steam
- New elastic strap in antistatic silicone
- Innovative quick elastic band adjustment system
- With direct ventilation

Lens		PK	Cat. No.
clear / 2C-1.2 U 1 B CE		1	6286800*LLG

Sticky Swabs, ESD

Sticky Swabs - ESD-safe cleaning stems: Lint-free sticky swabs are specially used and designed for a high-degree dust-free environment (class 10-100). Anti-static treatment can safely dissipate electrostatic charge. Sticky swabs are applicable for manufacturing and assembling static-sensitive products. Property: ESD safe, effective absorption, soft and good tenacity, excellent agility, non-volatile, environment-friendly, no thrill odour.

Material:
Tip: PVAC (Polyvinyl acetate),
            Ethyl acetate - Isopentyl acetate
Handle: PVC

Description	Cleanroom Class ISO	PK	Cat. No.
1 mm Ø	1-2	25	6272061*LLG
2 mm Ø	1-2	25	6272062*LLG
3 mm Ø	1-2	25	6272063*LLG
Kit, box of 75 swabs mixed (25 x 1mm, 25 x 2 mm, 25 x 3 mm)	1-2	1	6272064*LLG

LLG-Laboratory coat, 100% cotton

- Very sturdy material, excellent wearing comfort
- Snap fasteners (press buttons); easy and quick to open
- With fold-down collar
- One outside breast pocket and two side pockets
- Washable up to 60 °C
- Ladies coat with stitched-down back belt

Material:	100% cotton
Colour:	White
Weight:	220 g/m²

Description	Size	PK	Cat. No.
Ladies coat	36/38	1	9414342*LLG
Ladies coat	40/42	1	9414343*LLG
Ladies coat	44/46	1	9414344*LLG
Mens coat	44/46	1	9414345*LLG
Mens coat	48	1	9414346*LLG
Mens coat	50	1	9414347*LLG
Mens coat	52	1	9414348*LLG
Mens coat	54	1	9414349*LLG
Mens coat	56	1	9414350*LLG

LLG-Safety Eyeshields *basic +*

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

Lens	PK	Cat. No.
Clear, uncoated, 2-1.2 U 1 F CE	10	6290868*LLG

Laboratory coat Kimtech™ A7 P+, PP

- Certified PPE Cat III
  acc. to directive 89/686/EEC
- Type 6 limited chemical splash
  protection
- Micro-organism protection tested
- EN1149-1:1995 Antistatic clothing
- High-performance
  chemical-resistant fabric
- Low lint fabric, Helmke Drum
  Category II
- 99% particle and bacterial
  filtration efficiency
- Individually packed, 15 p. in an
  outer package for ISO 7
  Grade C areas
- Silicon-Free

- Abrasion-resistant film-coated
  polypropylene
- Mandarin collar
- Elastic cuff, thumb-loops and
  extra-length arms
- High strength triple stitched seams

Size	PK	Cat. No.
S	15	4653906*LLG
M	15	4653907*LLG
L	15	4653908*LLG
XL	15	4653909*LLG
XXL	15	4653910*LLG

Premium Respirators 8825+ and 8835+, Moulded Masks

8825+

8835+

Respirators Premium 8825+ and 8835+ moulded masks offer the new patented 3-dimensional face seal with integrated nose profile of 3M Premium+ Series, the convenience of a disposable mask, as well as the concept of tailormade face seal of reusable respirator masks. The face seal of the masks 8825+ and 8835+ improves the sealing fit. The profile of the respirator directs the air escaping through the filter medium away from the face. The upward air flow is minimized as much as possible, reducing the fogging of safety glasses.

| Authorization: | EU construction test |
| Testing standards: | EN 149:2001 |

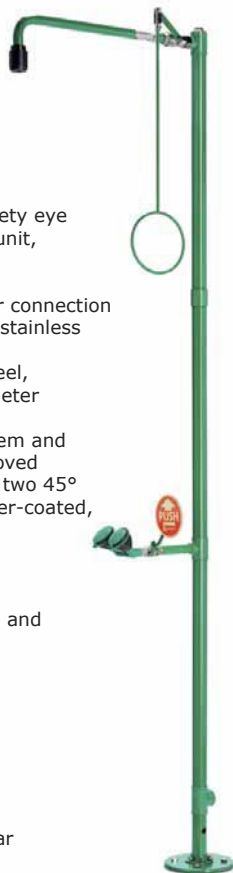| Type	Protection-level	Usage restrictions	PK	Cat. No.
8825+	FFP2 RD	12 x TLV	5	6284248*LLG
8835+	FFP3 RD	50 x TLV	5	6284249*LLG

Safety shower combination ClassicLine, free-standing

Combined Body and Eye Shower

ClassicLine safety shower combination, with safety eye shower optionally with bowl, lid and face wash unit, floor mounted.

- Including upper and lower 1 1/4-inch IG water connection for installation in circulation pipes, 1 1/4-inch stainless steel plug
- Stand with 4-fixing holes made of stainless steel, chemical-resistant green powder-coated, diameter 200 mm.
- A 3/4-inch brass ball valve, with quick-fit system and tie-rod actuation, DIN-DVGW tested and approved
- Integrated ClassicLine safety eye shower with two 45° shower heads, chemical-resistant green powder-coated, 3/4-inch tap connection
- Following BGI/GUV-I 850-0, DIN 1988 and DIN EN 1717
- In accordance with ANSI Z358.1-2014, DIN EN 15154-1:2006, DIN EN 15154-2:2006 and DIN EN 15154-5:2019
- DIN-DVGW tested and approved

Specifications

Total height:	2330 mm
Projection:	630 mm
Installation height for eye shower:	900 mm
Operating pressure:	1.5 to 3 bar
Flow rate body shower:	50 l/min
Water inlet:	1 ¼" female
Flow rate eye shower:	14 litre/minute

Description	PK	Cat. No.
without bowl	1	6239809*LLG
with bowl	1	6239810*LLG
with face wash unit, bowl and lid	1	6317045*LLG

Safety Shower Test Cart, Tank Capacity 30 litres, Mobile

With the safety shower test cart, you can keep the monthly required functional test simple and easy.

- mobile collecting tray equipped with 4 roles made of black plastics
- two integrated grip recesses
- one drain screw
- total height 2100 mm
- tank capacity 30 litre
- total weight 7 kg
- detachable in 3 parts for simple storage

Description	PK	Cat. No.
Safety shower test cart	1	7656739*LLG

LLG-Disposable Gloves, *standard long*, Nitrile, Powder-Free

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

Disposable protective gloves in nitrile with enhanced comfort during use and provide greater chemical protection - the standard glove for the laboratory.

- **For forearm protection, 300 mm length**
- Very comfortable to wear
- For single use in applications with an increased need for safety when handling chemicals
- Free from phthalates/softeners and allergenic latex proteins
- Particularly skin-friendly
- Colour blue - suitable for areas subject to HACCP standards
- **Cat. III. AQL 1.5.**

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

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

Glove shape:	flat with rolled edge (ambidextrous)
Material:	nitrile
Colour:	blue
Outside:	textured
Inside:	powder-free halogenated
Size/total length:	S, M, L, XL/med. 300 mm
Thickness **(measured in double layer)**:	**0.16 mm**

Size	PK	Cat. No.
S	100	6270366*LLG
M	100	6270367*LLG
L	100	6270368*LLG
XL	90	6270369*LLG

Glove Box Pure, PMMA

Aluminium frame with acrylic glass (PMMA) panes, polyethylene base. With a pair of size 9 gloves made of UV-resistant EPDM. Integrated UV lamp with lifetime monitoring in the top for surface and air disinfection in the work area, lamp can be replaced.

Specifications

Capacity Box:	290 l
Internal Dimensions Box (W x D x H):	850 x 540 x 650 mm
Max. Load Box:	40 kg
Inlet openings:	Ø 190 mm
Working Temperature Range:	-20 - 70 °C
Power supply:	240 V, 50/60 Hz

Type	External dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
Pure	1210 x 600 x 700	22	1	6312313*LLG

LLG-Autoclavable bags, PP

Produced from durable PP film with a broad seam at the bottom. For the disposal of contaminated labware. When autoclaving, the neck of the bag must be left open. Film thickness: 50 μm.

Description	Dimensions (D x W) mm	Auto-clavable at	PK	Cat. No.
standard	400 x 780	134 °C	250	9404221*LLG
standard	500 x 780	134 °C	250	9404222*LLG
standard	600 x 800	134 °C	250	9404223*LLG
standard	600 x 780	134 °C	100	9404103*LLG
standard	700 x 1100	134 °C	250	9404224*LLG
standard	700 x 1100	134 °C	75	9404105*LLG
highly transparent	200 x 300	121 °C	100	9404020*LLG
highly transparent	400 x 780	121 °C	500	9404101*LLG
highly transparent	600 x 800	121 °C	500	9404102*LLG
highly transparent	700 x 1100	121 °C	350	9404104*LLG

Holder for Waste Sacks

- White
- Steel wire
- Epoxy resin coating
- With rubber feets

Description	Int. diam. mm	Height mm	PK	Cat. No.
Stand	120	250	1	7060716*LLG

LLG-Autoclavable Bags, PP, with Biohazard printing

Autoclavable bags imprinted with biohazard labelling.
Made of polypropylene. Strong side seams for securely holding items.
Front write-on panel.

Dimensions (D x W) mm	Colour	Auto-clavable at	Thickness μm	PK	Cat. No.
310 x 660	transparent	121 °C	45	50	9404050*LLG
415 x 600	transparent	121 °C	45	50	9404051*LLG
610 x 810	transparent	121 °C	45	50	9404052*LLG
500 x 600	red*	134 °C	50	200	6285813*LLG
630 x 890	red*	134 °C	50	200	6285814*LLG
910 x 1150	red*	134 °C	50	100	6285815*LLG

* with sterilisation indicator

Safety and space-saving canisters, HDPE, electrically conductive

Type	Nom. capacity L	PK	Cat. No.
Space saver canisters	5	1	4687106*LLG
Safety canister*	10	1	4005602*LLG
Safety canister*	20	1	4005671*LLG

* with UN approval

Qualitative filter papers MN 614, round filters

Medium-fast.
- Embossed
- For determination of sugar content, colour, essential oils and emulsions
- Weight: 75 g/m²
- Thickness: 0.25 mm

Diam.	Filtration time	PK	Cat. No.
mm	secs.		
55	20	100	9047400*LLG
70	20	100	9047401*LLG
90	20	100	9047402*LLG
110	20	100	9047403*LLG
125	20	100	9047404*LLG
150	20	100	9047405*LLG
185	20	100	9047406*LLG
240	20	100	9047407*LLG
270	20	100	9047408*LLG
320	20	100	9047409*LLG
385	20	100	9047410*LLG
500	20	100	9047411*LLG

Filter paper, qualitative, type MN 615 1/4, filter circles

Medium fast filtration, smooth.
For fat determinations, free from lipids and resins.
Ether soluble residue <0.1 mg for diam. 270 mm filters.

Diam.	Filtration time	Thickness	PK	Cat. No.
mm	secs.	mm		
110	22	0.16	100	9048503*LLG
125	22	0.16	100	9048504*LLG
150	22	0.16	100	9048505*LLG
185	22	0.16	100	9048506*LLG
240	22	0.16	100	9048507*LLG
270	22	0.16	100	9048508*LLG
320	22	0.16	100	9048509*LLG

LLG-Extraction thimbles, cellulose

Neutral and fat-free. With excellent retention capacity.

Diam.	Length	PK	Cat. No.
mm	mm		
20	80	25	9045701*LLG
22	80	25	9045700*LLG
25	100	25	9045709*LLG
26	60	25	9045707*LLG
28	80	25	9045711*LLG
30	80	25	9045708*LLG
33	80	25	9045702*LLG
33	94	25	9045703*LLG
33	100	25	9045704*LLG
33	118	25	9045706*LLG
43	123	25	9045710*LLG

LLG-Qualitative filter paper, circles

Made from 100% cellulose.
Ash content 0.06%.
Filtration speed according to DIN 53137.
Capacity of separation according to DIN 53135.

Medium fast.
- For fast filtration with fine particles

Diam.	Filtration time	Pore size	PK	Cat. No.
mm	secs.	µm		
42.5	88	5 - 13	100	9045800*LLG
47.0	88	5 - 13	100	9045801*LLG
55.0	88	5 - 13	100	9045802*LLG
70.0	88	5 - 13	100	9045803*LLG
90.0	88	5 - 13	100	9045804*LLG
110.0	88	5 - 13	100	9045805*LLG
125.0	88	5 - 13	100	9045806*LLG
150.0	88	5 - 13	100	9045807*LLG
185.0	88	5 - 13	100	9045808*LLG
240.0	88	5 - 13	100	9045809*LLG

LLG-Qualitative filter paper, sheets

Medium fast, pore size 5 to 13µm.
- For analytical works in laboratories

Dimensions	Filtration time	PK	Cat. No.
mm	secs.		
460 x 570	88	100	9045810*LLG

HPLC starter kits Generation 2.0, GL 45

HPLC Starter Kit 1

Maximum safety for HPLC solvent supply. The integrated air valve (B) blocks hazardous vapours and cleans the inflowing air (M) from dust and dirt particles.

- 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 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 x SafetyCaps III (V 2.0),
8 x blind plug UNF 1/4" 28G, 12 x fitting 1.6 mm,
12 x fitting 2.3 mm, 12 x fitting 3.2 mm, 4 x air valve,
8 x insertion label

Type	PK	Cat. No.
HPLC safety set 1	1	4669378*LLG
HPLC safety set 2	1	4669379*LLG
HPLC safety set 3	1	4678694*LLG

Exhaust Filter, GL 14, PP

SMALL   MEDIUM   LARGE

Lid with integrated ventilation openings and service life indicator. The filling of activated carbon is protected by two porous membranes made of PE. This design allows for an unobstructed flow of exhaust air. Solvents are adsorbed by the activated carbon, ensuring that only filtered air streams out. Suitable for all waste caps with GL14 thread.

Type	Life time	PK	Cat. No.
SMALL	3 months	2	6313839*LLG
MEDIUM	6 months	2	6313840*LLG
LARGE	6 months	2	6313841*LLG

2in1 KITs with Short Thread Vials ND9 (wide opening)

2in1 KITs contain 100 vials (1.5 ml) and 100 closures in a 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, replaceability of the packaging, etc.) remain unchanged. Cover type: UltraBond Short Thread Cap, blue, hole, Silicon beige/PTFE white, slit.

Description	PK	Cat. No.
clear, labelling field	100	11241860*LA

LLG-Glass-Syringes, borosilicate glass
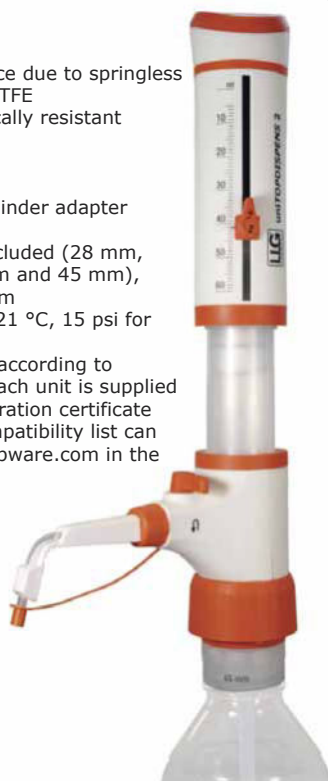

With brown graduations. Sterilisable up to 134 °C.
Material Cone: Metal, Nozzle type: Luer-Lock.

Capacity ml	PK	Cat. No.
1	5	6314007*LLG
2	5	6314008*LLG
5	5	6314009*LLG
10	5	6314010*LLG
20	5	6314011*LLG
50	5	6314012*LLG

You can find our complete range on our website.

Bottletop dispenser LLG-uni*TOPDISPENS* 2

- High chemical resistance due to springless PTFE valve block and PTFE piston including chemically resistant ETP O-ring
- Glass cylinder made of borosilicate glass 3.3
- Specially developed cylinder adapter enables 360° rotation
- Five bottle adapters 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 according to ISO 8655 standards, each unit is supplied with an individual calibration certificate
- The corresponding compatibility list can be found at www.llg-labware.com in the Downloads section.
- 3-year warranty

Volume	Graduations	Accuracy max. vol.	Precision max. vol.		PK	Cat. No.
ml	ml	(± R%)	(≤ CV%)			
0.25 - 2.5	0.05	0.6	0.2		1	6282275*LLG
0.5 - 5	0.1	0.6	0.2		1	6282276*LLG
1 - 10	0.2	0.6	0.2		1	6282277*LLG
2.5 - 30	0.5	0.6	0.2		1	6282278*LLG
5 - 60	1.0	0.6	0.2		1	6282279*LLG
10 - 100	2.0	0.6	0.2		1	6282280*LLG

Bottle top burette Titrette®

- High Accuracy
- Compact Design, Lightweight and Stable
- Easy Maintenance and Cleaning

- High accuracy
- Smooth-running operation for sensitive, drop-wise titration and fast filling of the device
- No switching between fill and titrate

Items supplied: Titrette® bottle-top burette, DE-M marking, performance certificate, telescoping filling tube (170 to 330 mm), recirculation tube, 2 x 1.5 V batteries (AAA/UM4/LR03), 4 x PP bottle adapters (GL45/32, GL 45/38, GL 45/S40 and GL32/NS 29/32), 2 coloured light shield inspection windows, operating manual

Volume	Accuracy max. vol.	Precision max. vol.		PK	Cat. No.
ml	(± R%)	(≤ CV%)			
10	0.10	0.05		1	6259209*LLG
25	0.07	0.025		1	9271332*LLG
50	0.06	0.02		1	9271333*LLG

Laboratory bottle, DURAN® amber glass, with screw cap and pouring ring made of PP

- UV protection up to approx. 500 nm
- ISO 4796-1
- USP standard
- Retrace code
- Autoclavable

Capacity	Dimensions (dia. x H)	Neck thread		PK	Cat. No.
ml	mm	GL			
25*	36 x 74	25		1	218061458*SCHOTT
50	46 x 91	32		1	218061758*SCHOTT
100	56 x 105	45		1	218062454*SCHOTT
250	70 x 143	45		1	218063656*SCHOTT
500	86 x 181	45		1	218064455*SCHOTT
1000	101 x 230	45		1	218065451*SCHOTT
2000	136 x 265	45		1	218066353*SCHOTT

* With specially shaped glass rim for better pouring, thus an additional pouring ring made of plastic is not necessary.

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.

- 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

Capacity	Grad.	Tolerance	Height		PK	Cat. No.
ml	ml	± ml	mm			
15	0.1	0.045	520		1	6280403*LLG
25	0.1	0.075	650		1	6280404*LLG
50	0.1	0.075	920		1	6280405*LLG

You can find our complete range on our website.

Single channel microliter pipettes Acura® *manual* 825, variable

▲ **SOCOREX** SWISS

This pipette line was developed with the highest customer demands in mind.

- User-friendly, slim shape, low weight.
- Justip™ tip adjustment concept, patented.
- Integrated InLab calibration system, patented
- Fully assembled autoclavable at 121 °C
- 3-year warranty

Capacity	Increments	Accuracy max. vol.	Precision max. vol.	PK	Cat. No.
µl	µl	(± R%)	(≤ CV%)		
0.1 - 2	0.002	2.0	1.5	1	9411590*LLG
0.5 - 10	0.01	1.0	0.5	1	9411591*LLG
1 - 10	0.01	1.0	0.7	1	9411592*LLG
2 - 20	0.02	1.0	0.5	1	9411593*LLG
5 - 50	0.1	1.0	0.4	1	9411594*LLG
10 - 100	0.1	0.8	0.2	1	9411595*LLG
20 - 200	0.2	0.6	0.2	1	9411596*LLG
100 - 1000	1	0.5	0.2	1	9411597*LLG

LLG-Labware pipette tips, economy 2.0, PP

The new generation of LLG Labware Pipette tips economy. Racked-tip boxes are delivered in a dispenser, which can be opened from two sides facilitating the use of the product in two workspaces. 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
- Coloured coded rack inserts for easy identification
- Autoclavable
- DNase and RNase-free

Capacity	Colour	Package contents	PK	Cat. No.
µl				
0.1 ... 10	transparent	10 x 96	960	4668776*LLG
0.1 ... 10	transparent	10 x 96	960	6491406*LLG
1 ... 200	transparent	10 x 96	960	4668778*LLG
1 ... 200	yellow	10 x 96	960	4668779*LLG
100 ... 1000	transparent	8 x 96	768	4668782*LLG
100 ... 1000	blue	8 x 96	768	4668783*LLG

Pipette stands Twister™ universal 336 for single channel microliter pipettes

▲ **SOCOREX** SWISS

Unique design 6-position pipette workstation with great characteristics. Model fits six pipettes of most brands providing for an ideal storage solution in any laboratory. Rotation enables quick instrument selection. Easy disassembling for simple maintenance.

Colour	PK	Cat. No.
Sapphire blue	1	6253916*LLG

LLG-Disposable Reagent reservoirs economy, PS

Made from polystyrol. Designed for use with multi-channel pipettes and can accommodate up to 12-channel standard pipettes. Available as sterile and non-sterile versions.

- DNase-, RNase- and pyrogen-free certified.

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

Macro pipette controllers

ISOLAB Laborgeräte GmbH

The handwheel allows precise suction of the liquid into the pipette with one hand.

For	PK	Cat. No.
Pipette volume up to 2 ml	1	4008322*LLG
Pipette volume up to 10 ml	1	4008323*LLG
Pipette volume up to 25 ml	1	4008324*LLG

Pipette tray, PVC

Kartell

PVC. Tidy tray. With 4 long compartments for approx. 30 graduated pipettes (1 ml to 20 ml).

Dimensions (W x D x H) mm	PK	Cat. No.
426 x 300 x 30	1	9200394*LLG

Volumetric pipettes, USP, class AS, AR-glass®, blue graduation

BLAUBRAND®, DE-M marking. DIN EN ISO 648. Calibrated to deliver (TD, EX). Marks and inscriptions in high-contrast blue enamel. Incl. one USP batch certificate. The batch certificate or individual certificate is also available to download from the manufacturer's website.

BRAND

Volume ml	Tolerance ± ml	Overall length ± 10 mm	PK	Cat. No.
0.5*	0.005	300	1	6262520*LLG
1	0.006	300	1	7659228*LLG
2	0.006	330	1	6262521*LLG
3	0.01	330	1	6262522*LLG
4	0.01	400	1	6262523*LLG
5	0.01	400	1	7659239*LLG
10	0.02	440	1	7659240*LLG
20	0.03	510	1	6262529*LLG
25	0.03	520	1	6262530*LLG
50	0.05	540	1	6262532*LLG

* Error limit USP ±0.006 ml
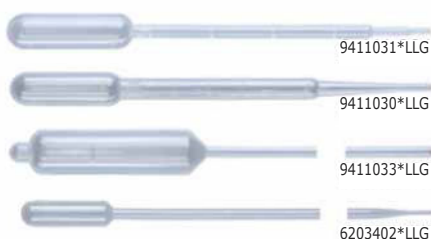
Pasteur pipettes, PE

Kartell

Disposable pipettes with fine tips for precise dispensing. Length: 150 mm

- With suction ball
- Graduated
- Non-sterile in multi-packs

Nominal capacity ml	PK	Cat. No.
1	500	6206154*LLG
3	500	6206772*LLG

Pipettes, Pasteur, PE

9411031*LLG
9411030*LLG
9411033*LLG
6203402*LLG

ratiolab disposables for sciences

For transfer of liquids. Resistant against almost all acids. Soft and elastic bulb.

Type	Capacity ml	Length mm	Sterile	Graduations	PK	Cat. No.
Standard	1.0	150	-	+	500	9411031*LLG
Standard, single wrapped*	1.0	150	+	+	500	9411038*LLG
Standard	1.5	230	-	+	400	7200111*LLG
Standard	2.0	153	-	+	500	7631961*LLG
Standard	2.5	150	-	+	500	6229723*LLG
Macro	3.0	155	-	+	500	9411030*LLG
Macro, single wrapped	3.0	150	+	+	500	9411035*LLG
Macro	3.0	155	+	+	500	4653509*LLG
Standard	4.0	150	-	-	500	6234514*LLG
Macro	6.0	149	-	-	400	9411034*LLG
Standard, with ring mark	10.0	170	-	-	200	9411033*LLG
Standard	10.0	300	-	-	100	6203402*LLG

* Total volume

UV sterilisation cabinets

- Ideal for PCR Preparations
- Efficient Decontamination with UV Light
- Doors with Safety Switches

Cost-effective alternative to cleanrooms for PCR in nucleic acid-free environments. The four powerful UV lamps denature nucleic acids safely in 5 to 30 min. user from UV light thanks to safety switches in the doors. Timer function for UV lamp. The chamber made of 10 mm acrylic also serves as an efficient shield against beta radiation emissions and can therefore be used safely with isotopes such as ^{32}P.

Specifications	Maxi/Midi/Mini
UV Lights:	4 x 15 W
White Lights:	15
Dimensions (H x W x D):	770 x 580 x 420 mm/
	620 x 580 x 420 mm /
	450 x 580 x 350 mm
Weight:	19 kg/14.6 kg/12 kg

Description	PK	Cat. No.
UV sterilisation cabinets Maxi with timer, four UV lights and white light	1	9584774*LLG
General purpose tray white, 680 x 540 mm	1	6258034*LLG
Radiation hazard tray yellow, 680 x 540 mm	1	9584788*LLG

DNA AWAY™ for surface decontaminant

Eliminates unwanted DNA and DNase from glassware and plasticware without affecting subsequent DNA samples.
Degrades DNA more quickly and effectively than autoclaving.

This product is a disinfectant containing biocides. Please inquire about its availability and legal information.

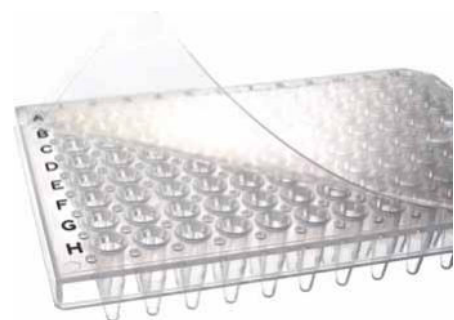| Type	Capacity		PK	Cat. No.
	ml			
MBP DNA Away®	250		1	6228401*LLG

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.
	µl		
96 Well Plate, skirted	200	50	6313409*LLG
96 Well Plate, non-skirted	200	100	6313408*LLG
96 Well Plate, half skirted	200	50	6313394*LLG

LLG-PCR adhesive film and foil

For use in cycles with screw-down or clip-down lids.

PCR Film: Clear film enables visual inspection of samples and fluorescence measurements.

PCR Foil: Aluminium, easy to pierce, no adhesive residue on the pipette tips.

QPCR Foil: Adhesive seal optically clear, peelable, for QPCR and fluorescence applications.

Description	Temp. range °C	PK	Cat. No.
PCR film	-40 ... 102	100	6313398*LLG
PCR foil	-80 ... 104	100	6313400*LLG
QPCR foil	-70 ... 100	100	6313399*LLG

Greenough-Stereomicroscope Educational-Line OSE

KERN

Ideal for Schools and Training Purposes

Ideal for workshops, schools and training.
- Tube 45° inclined
- WF 10×/ Ø 20 mm
- Diopter adjustment: Both-sided
- Illumination 1 W LED incident and transmitted
- Integrated handle and arm curved stand

Total dimension (W x D x H):	230 x 130 x 300 mm
Weight:	2.0 kg
Power supply:	230 V/50 Hz, battery

Type	Description	Mag-nification	PK	Cat. No.
OSE 421	Binocular	2x / 4x	1	4666529*LLG

Phase contrast microscopes Professional line OBN

KERN

This series features professional Köhler illumination with an adjustable field diaphragm and Infinity optics. A C-mount adapter is required to connect a camera (optional).

OBN 158:
- Phase contrast microscope, incl. centring eyepiece
- Objective: 4x, 10xPH, 20xPH, 40xPH, 100xPH
- 5-fold condenser wheel with 10×/20×/40×/100× Infinity PH plan objectives (complete set)
- Including blue and green colour filter

OBN 159:
- Trinocular
- Tube 30° inclined, 360° rotatable
- Eyepieces: HWF 10x/20 mm
- Dioptre compensation on both sides
- 5x nosepiece
- Objective quality: Infinity Plan
- Coaxial coarse and fine drive

Scope of supply: Phase contrast microscope, centring eyepiece, protective dust cover, eyecups, user manual

Type	Lighting	PK	Cat. No.
OBN 158	20 W halogen	1	4666528*LLG
OBN 159	3 W LED	1	6491267*LLG

Staining jar, PMP (TPX®), Hellendahl pattern

Kartell

Accepts 16 slides 76 x 26 mm (8 pairs back to back). Transparent, with grooves. Complete with lid.

Dimensions (W x D x H) mm	PK	Cat. No.
58 x 53.5 x 86	1	9161350*LLG

LLG-Slide dispenser

LLG LABWARE

The slide dispenser can dispense 72 slides individually. By turning the knob, one slide is dispensed. Only dry slides should be inserted into the storage magazine. With a 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.
Dispenser	1	9161000*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.

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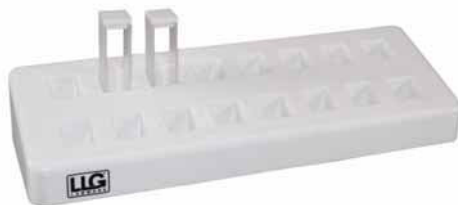- Deuterium and tungsten lamp
- Automatic wavelength adjustment

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

Specifications

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

Type	Plug type	PK	Cat. No.
LLG-uniSPEC 2	EU	1	6263610*LLG

LLG-Cuvette rack, PP

Ideal for storing up to 16 cuvettes with a 12.5 mm width.
The two-tier arrangement of the cuvette rows ensures clarity.

- Numbered positions
- Autoclavable at 121 °C

Length	Width	Height		PK	Cat. No.
mm	mm	mm			
210	70	35		1	4682061*LLG

Densitometer DEN-600

Portable densitometer for OD600 method, McFarland (McF) turbidity method measurement and Bradford protein assay method for protein concentration.

- LCD
- Battery mode possible
- Software for measurement, results, upload and analysis (USB connectivity)
- Compatible with cuvettes, round bottom tubes and falcon tubes (10 mm)

Specifications

Light source:	LED
Measuring range absorbance:	0 ... 3.000
Measuring range McFarland:	0.00 ... 16.00
Accuracy absorbance:	±0.006 at 1 Abs
Accuracy McFarland:	±0.1 at 0 ... 8 McF
Power supply:	100 ... 240 V 50/60 Hz or lithium-ion polymer battery

Type	Wave-length	Dimensions (W x D x H)	Weight		PK	Cat. No.
	nm	mm	kg			
DEN-600	600 ± 10	120 x 145 x 65	0.5		1	4684303*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 320 nm ±0.004 extinction units

Polystyrene (PS) cuvettes
- Typical operative range: from 340 nm to 900 nm
- Standard deviation at 360 nm ≤ ±0.005 extinction units

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

Description	Volume	Operating range	Material		PK	Cat. No.
	ml	nm				
Macro	2.5 to 4.5	300 to 900	PMMA		100	9406111*LLG
Semi-micro	1.5 to 3.0	300 to 900	PMMA		100	9406115*LLG
Macro	2.5 to 4.5	340 to 900	PS		100	9406110*LLG
Semi-micro	1.5 to 3.0	340 to 900	PS		100	9406114*LLG

Reflectance spectrophotometer TR 515

- Switchable Aperture
- Incl. Calibration Plates

Ergonomic and flexible reflectance spectrophotometer for measuring samples in the fields of food, medicine, coatings and plastics.
With a camera-based, integrated localisation device and black and white calibration plates.

- CMOS sensor (256 picture elements, double array)
- Intuitive 3.5 inch TFT colour LCD (capacitive), symbol-based
- Free PC-based OnShade software, which allows graphs and statistical process control
- Operation languages: EN, FR, DE, ES
- Switchable aperture (Ø 8 mm / Ø 4 mm) for adapting the measurement size to the surface
- Can determine accurate colour difference values, formulas and indices in common colour spaces

Scope of supply: Reflectance spectrophotometer, OnShade PC software, black and white calibration board (white tile and black light trap), dust cover, USB cable, external DC power supply, USB stick with user manual in English and Chinese, carrying case

Specifications

Optical geometry:	45°/0°
Colour difference formular:	ΔE^*ab, ΔE^*uv, ΔE^*94, ΔE^*cmc (2:1), ΔE^*cmc (1:1), ΔE^*00v, ΔE (Hunter)
Spectral range:	400 ... 700 nm
Spectral interval:	10 nm
Memory:	1000 standards, 30000 samples
Interface:	USB, Bluetooth® 4.0
Light source:	combined LED light, UV light
Dimensions (W x D x H):	184 x 105 x 77 mm
Weight:	600 g
Power supply:	Li-ion battery

Type	Aperture mm	PK	Cat. No.
TR 515	10/8 + 5/4	1	6325549*LLG

Cells W600

Cells made of optical glass or Borosilicate glass 3.3, 21 x 40 mm, for instrument 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)

Further versions are available on request.

Type	Path length mm	Material	PK	Cat. No.
W600/OG/10	10	optical glass	1	6207120*LLG
W600/OG/1"	25.4	optical glass	1	9947342*LLG
W600/OG/33	33	optical glass	1	6093322*LLG
W600/OG/50	50	optical glass	1	6207119*LLG
W600/OG/100	100	optical glass	1	6235055*LLG
W600/OG/5¼"	133.35	optical glass	1	9947343*LLG
W600/B/10	10	Borosilicate glass 3.3	1	6241927*LLG
W600/B/33	33	Borosilicate glass 3.3	1	6086921*LLG
W600/B/100	100	Borosilicate glass 3.3	1	6253940*LLG
W600/B/5¼"	133.35	Borosilicate glass 3.3	1	9947345*LLG

LLG-Cuvettes, glass

LLG-Cuvettes have two clear windows and two side walls, and they are available as optical glass or in quartz variants. The walls and the base are polished inside and frosted outside. The thickness of the windows and the base is 1.25 mm. The overall height of standard-type cells is 45 or 48 mm. Each cuvette is supplied with a PTFE lid.

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

Type	Volume ml	Path length mm	PK	Cat. No.
quartz glass	3.5	10	2	4681513*LLG
quartz glass	17.5	50	2	4681514*LLG
optical glass	3.5	10	4	4681515*LLG
optical glass	17.5	50	4	4681516*LLG

LLG-pH electrode with gel electrolyte

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.

Temperature range:	0 ... 80 °C
pH range:	0 ... 14 pH
Length/Ø:	120/12 mm
Temperature sensor:	NTC 30kΩ
Cable length:	1 m
Electrolyte:	Gel
Diaphragm:	Fibre

Type	PK	Cat. No.
LLG-pH electrode with gel electrolyte	1	4681924*LLG

Technical pH buffer solutions

Colour coded. Tested and ISO 17025 Certified at 25 °C. Uncertainty of measurement ±0.02 pH. Temperature dependence data is printed on the label as are lot numbers and expiry dates. These pH buffer solutions are suitable for use where very accurate measurements are required and are supplied with a detailed Certificate of Analysis which outlines traceability to N.I.S.T (the N.I.S.T SRM(s) Lot No. is stated on the certificate). This item has a 12 to 36-month shelf life from the date of manufacture depending on pH value.

pH-value at 25 °C	Colour	Capacity ml	PK	Cat. No.
2.00	Red	250	1	TB2002*REA
4.01	Red	250	1	TB4012*REA
7.00	Yellow	250	1	TB7002*REA
9.21	Blue	250	1	TB9212*REA
10.00	Blue	250	1	TB1002*REA
4.01	Red	500	1	TB401*REA
7.00	Yellow	500	1	TB700*REA
4.01	Red	1000	1	TB4011*REA
7.00	Yellow	1000	1	TB7001*REA
10.00	Blue	1000	1	TB1001*REA

LLG-Universal Indicator strips "Premium" in a vial with a snap lid

A flip-top vial is easy to open and close with one hand. The new LLG pH strips offer the utmost convenience and ease of use in laboratory-grade testing. With a single colour match, and a 12 mm reagent pad, these universal pH strips (0.0-14.0) belong in every lab.

- pH measuring range: 0 - 14
- 12 mm matching area for quick matches,
- Flip-top vial stays closed when dropped but is easy to open with one hand.
- Vial keeps strips safe from the elements
- 1 pack (vial) of 100 strips

Range	PK	Cat. No.
pH		
0 ... 14	100	9129808*LLG

pH-Fix indicator strips, special

For determination of pH-value.
Permanent colour.
Non-bleeding.

Range	PK	Cat. No.
pH		
1.7 ... 3.8	100	9130386*LLG
2.0 ... 9.0	100	9130380*LLG
3.6 ... 6.1	100	9130387*LLG
4.0 ... 7.0	100	6280450*LLG
4.5 ... 10.0	100	9130383*LLG
6.0 ... 10.0	100	9130392*LLG
7.5 ... 9.5	100	9130390*LLG

Laboratory instrument inoLab® pH 7110

Basic pH/mV laboratory instrument for all tasks where reliable, accurate readings are required quickly and easily. With a large LCD segment display and an easy-to-read keyboard.

Scope of supply: Instrument, mains power adapter, stand.

- AutoRead Function
- High Measuring Range

Specifications

Ranges:	All values ±1 digit
pH:	-2.0 ... 20.0 ±0.1 pH
	-2.00 ... 20.00 ±0.01 pH
	-2.000 ... 19.999 ±0.005 pH
mV:	±(1200.0 ±0.3) mV
	±(2000 ±1) mV
Calibration:	1-, 2- or 3 point WTW technical buffer or DIN/NIST
Temperature:	-5.0 ... 105.0 °C ±0.1 °C
Power supply:	Universal power supply 100 to 240 V, 50/60 Hz, 4 x 1.5 V AA or 4 x 1.2 V NiMH rechargeable batteries

Type	Description	PK	Cat. No.
pH 7110	Stand-alone instrument with DIN connection	1	9920090*LLG
pH 7110 SET 2	Instrument incl. SenTix® 41, buffer 4.7 / 10.01 and 3 mol/l KCl	1	9920091*LLG
pH 7110 SET 4	Instrument incl. SenTix® 81, buffer 4.7 / 10.01 and 3 mol/l KCl	1	9920092*LLG

pH meter FiveGo™ F2

- Portable pH Meter
- For Field and Laboratory use

Portable pH meter for field work and laboratories.

- Measurement made easy: A large, well-structured display, intuitive button arrangement, and simple menu ensure measurements can be performed in just a few clicks
- IP67 Water and dustproof.

Scope of delivery:
F2-Meter: Meter only
F2-Standard kit: Meter with LE438 sensor

F2-Standard kit

Specifications
pH

Measuring range:	0.00 ... 14.00
Resolution:	0.01
mV	
Measuring range:	-1999...1999 mV
Resolution:	1 mV
Temperature Compensation:	ATC and MTC
Calibration:	3 points, 4 predefined buffer groups
Memory size:	200 measurements, current calibration
Temperature	
Measuring range:	0 ... 100 °C
Resolution:	0.1 °C

Type	PK	Cat. No.
F2-Meter	1	6280111*LLG
F2-Standard kit	1	6280112*LLG

Conductivity Pocket Tester Elite CTS Pin/Cup

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

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

Scope of supply:
Elite CTS Pin/Cup:
Tester incl. batteries, lanyard

Elite CTS Pin/Cup Kit:
Tester incl. batteries, lanyard, soft carry case, CTS conductivity Standard Sachets (5 x 1413 µS/cm KCl and 5 x 2764 µS/cm KCl)

Elite CTS Pin

Elite CTS Cup

Specifications

Conductivity range:	0.0 µS ... 20.00 mS
TDS range:	0.0 ... 10000 ppm
Salinity range:	0 ... 10000 ppm
Resolution:	100 ppm
Temperature range:	0 ... 60.0 °C
Resolution:	0.1 °C
Operating temperature:	5 ... 45 °C
Relative humidity:	5 ... 85%, non-condensing
Temperature compensation:	ATC
Power supply:	4 x AAA 1.5 V batteries
IP code:	IP 67

Type	PK	Cat. No.
Elite CTS Pin	1	6290132*LLG
Elite CTS Pin Kit	1	6290138*LLG
Elite CTS Cup	1	6290133*LLG
Elite CTS Cup Kit	1	6290139*LLG

You can find our complete range on our website.

ChemoSampler, PP

Grey. For sampling aggressive liquids, e.g. acids, alkalis, detergents. The samples are drawn directly into the screw-on original sampling bottle. The tamperproof bottle closure of these bottles with the original safety ring ensures unadulterated sample transport.

- Resistant to acids and alkalis
- Incl. sample bottle 1000 ml
- An extension rod 100 cm is available as an accessory

Length	PK	Cat. No.
mm		
1000	1	9303940*LLG

Disposable scoops SteriPlast®, PS

White. The scoops are also available with a transparent cover to close them immediately after the sampling procedure to secure a sterile and contamination-free sample.

- Individually packed
- Gamma-sterilized
- Production, assembling and packaging
  acc. to Cleanroom class 7 (10000)
- According to EU food and FDA guidelines

Capacity	Length	PK	Cat. No.
ml	mm		
25	141	10	6265037*LLG
50	160	10	6265039*LLG
100	205	10	6265041*LLG
150	216	10	6265043*LLG
250	232	10	6269512*LLG
500	280	10	6269514*LLG
500	283	10	6269515*LLG
1000	332	10	6284542*LLG
2000	381	10	4680855*LLG

Vampire Sampler

The self-priming peristaltic pump is also suitable for dirty or particle-containing substances with a maximum viscosity. 500 mPas. Ideal for sampling from barrels, tanks, wells, water separators, wastewater and sewage treatment plants. The samples are fed directly into the sample container via the closed hose system.

- Battery-powered hose pump
- Suction depth up to 5 metres

Scope of supply: Drive unit, pump head, pump hose (30 cm, Marprene), suction hose (5 m, PE), hose connector (PP), sample bottle (250 ml, LDPE), bottle basket, two rechargeable batteries, battery charger

Type	PK	Cat. No.
Vampire sampler, complete	1	9303851*LLG

Disposable spoons SteriPlast®, PS

White. The spoons are ideal for sampling powders, granules and pastes.

- Individually packed
- Gamma-sterilised
- Production, assembly and packaging
  acc. to Cleanroom class 7 (10000)
- According to EU food and FDA guidelines

Capacity	Length	PK	Cat. No.
ml	mm		
2.5	127	100	6265045*LLG
10	170	100	6265046*LLG

Erlenmeyer flasks, wide mouth, GL 45, PP, with blue screw neck

Transparent. Suitable for storage and cultivation of cell cultures.
To preserve markings, do not clean at temperatures exceeding 60 ºC.

- Suitable for microwaves
- Food-safe products according to EC Directive No. 10/2011

Nominal capacity ml	Grad. ml		PK	Cat. No.
75	10		1	566941*VITL
125	20		1	567941*VITL
250	50		1	568941*VITL
500	100		1	569941*VITL
1000	200		1	570941*VITL

Mortars only, porcelain

To DIN 12906. With spout, pestle not supplied.
Glazed externally. Inside rough.

Capacity ml	Int. diam. mm	Height mm	PK	Cat. No.
70	65	40	1	9164206*LLG
170	90	55	1	9164209*LLG
400	130	65	1	9164212*LLG
700	150	70	1	9164215*LLG
1000	180	80	1	9164218*LLG

Laboratory Blender Waring® 8011

Versatile laboratory mixer ideally suited for general laboratory work supplied either with a 1 L stainless steel container or a 1.2 L glass container.

- Two velocity settings (18000 or 22000 rpm)
- Epoxy-coated motor housing
- Two-piece lid vinyl/styrene

Scope of supply: Mixer, container (stainless steel or glass) with handle and lid

Type	With	PK	Cat. No.
8011EG	Glass container, 1.2 l	1	6284693*LLG
8011ES	Stainless steel container, 1 l	1	6284694*LLG

Pestles only, porcelain

To DIN 12906. With a glazed handle.
Unglazed grinding surface.

Head diam. mm	Length mm	Nominal diam. mm	PK	Cat. No.
24	115	50 / 63	1	9164306*LLG
30	135	90	1	9164309*LLG
36	150	125	1	9164312*LLG
42	175	150	1	9164315*LLG
55	210	180	1	9164318*LLG

Nominal size = mortar internal diameter

Heating oven, ED 23, with gravity convection

BINDER
Best conditions for your success

Diversity for all types of thermal, whether efficient drying, long-term controlled elevated temperatures or sterilization tasks for homogeneous temperature distribution.

Equipment:
- Temperature range from 5 °C above ambient temperature to 300 °C
- Independent adjustable temperature safety device class 2 (DIN 12880), with visual temperature alarm

Nom. capacity L	Max. grids	Included grids	External dimensions (W x D x H) mm	PK	Cat. No.
20	4	2	435 x 520 x 495	1	9883529*LLG

Safety Gloves Clavies®, Heat Protection up to 232 °C

SP Bel-Art

Soft, pliant, all-cotton terry cloth gloves are superb for handling hot objects out of the autoclave or oven, or for other heat protection in the lab, school or industry. Note: Gloves are not waterproof and should not be used to handle dry ice.
1 pair per pack.

Length gauntlet mm	Overall length mm		PK	Cat. No.
130	330		1	9005271*LLG
280	470		1	9005272*LLG

Peltier-recirculating chiller TE 400

Julabo

- Precise Temperature Control
- Touch Display
- Low Maintenance Requirements

New

Robust Peltier chiller with precise temperature control for simple temperature control tasks in laboratories and research facilities. It works without refrigerant and is therefore very environmentally friendly and low-maintenance. The TE 400 offers a cooling capacity of up to 400 watts and a pump capacity of up to 7 l/min. The operating mode "Silent Mode" reduces the noise level by lowering the cooling power requirements.

- High-temperature stability
- Touch display for easy operation
- Economical and environmentally friendly operation thanks to high energy efficiency and low energy consumption
- RS232 interface
- Low-maintenance
- Pump connection thread M16x1 external thread

Specifiations

Temperature:	-5 ... 40 °C
Temperature stability:	±0.02 °C
Max. Delivery rate:	7 l/min
Max. Delivery pressure:	1.2 bar
Cooling capacity at 20 °C:	0.4 kW
Heating capacity:	0.45 kW
Dimensions (WxDxH):	274 x 413 x 400 mm
Weight:	24 kg
Plug type:	EU/CH/UK/US
Power supply:	100 ... 230 V, 50/60 Hz

Type	PK	Cat. No.
TE 400	1	6492490*LLG

Cryo Protection Gloves CRYOKIT 400

EN 511   EN 388   EN 420

221   2231

tec-lab GmbH

Suitable for all work with liquid nitrogen and other cryogenic gases up to approx. minus 196 °C. Protects against cold and contact burns in case of leakage of liquid gas.
Interior insulation: polyester multi-layer fabric (410 g/m²) and polyolefin parallel membrane.
According to normative EN 511, EN 420, EN 388, Cat III. Warning: Not intended for immersion in liquid nitrogen or other liquid cryogens.
1 pair per pack.

Size	Length	PK	Cat. No.
	mm		
7	400	1	6270632*LLG
8	400	1	6270633*LLG
9	400	1	6270634*LLG
10	400	1	6270635*LLG
11	400	1	6270636*LLG

Cryogenic vial racks, PC

121 °C

Heathrow Scientific
design | function | innovation

- Drainage holes in each well
- Alphanumeric identification
- Temperature resistant
  up to -196 °C
- Autoclavable

Volume	Array	For tubes diam.	PK	Cat. No.
litres		mm		
2 ... 5	50	12.9	4	6238908*LLG

Cooled incubators FOC series

- With Internal Sockets
- High Temperature Stability

VELP SCIENTIFICA

Versatile cooled incubators with auto-tuning temperature control system for optimal temperature stability.

- 2-internal sockets for further devices
- Software TEMPSoft™ for setting times, temperatures, ramps and alarm thresholds
- Wireless (WIFI) and wired connectivity
- Life span counter for key components is built in
- Forced ventilation for uniform temperature distribution

Scope of supply: Cooled incubator, shelves

Specifications

Temperature range:	3 ... 50 °C
Temperature accuracy:	±0.5 °C
Display:	3-digit LCD
Interface:	Wi-Fi, 2 x RS485
Power supply:	230 V, 50/60 Hz

Type	Nom. capacity	Included grids	External dimensions (W x D x H)	PK	Cat. No.
	L		mm		
FOC 120E	109	2	540 x 550 x 912	1	6316555*LLG
FOC 200E	169	3	540 x 550 x 1263	1	6316556*LLG

LLG-Cryotubes, PP, sterile

121 °C

LLG LABWARE

With a star shape in the screw cap, for an automated capper/uncapper. Temperature resistance down to -196 °C. **Not appropriate for operations in liquid nitrogen.** Printed graduations for accurate measurements. Large white area for writing specimen identification.

Packed in 2 bags of 50 tubes.

Capacity	Description	Thread	PK	Cat. No.
ml				
1.2	Self-standing	External	100	9401160*LLG
1.2	Self-standing	Internal	100	9401161*LLG
2.0	Self-standing	External	100	9401162*LLG
2.0	Self-standing	Internal	100	9401163*LLG
2.0	Without ring	External	100	9401164*LLG
2.0	Without ring	Internal	100	9401165*LLG
5.0	Self-standing	External	100	9401166*LLG
5.0	Without ring	Internal	100	9401167*LLG
5.0	Self-standing	Internal	100	9401168*LLG

Grippers for cryogenic and vaccine vials, PP

121 °C

Heathrow Scientific
design | function | innovation

For precise gripping and safe removal of cryogenic microtubes and vials, as well as crimped vaccine/serum vials from cold storage boxes. The set includes one gripper for cryogenic vials (Ø 13.5 mm) and one gripper for vaccine vials (Ø 21 mm).

- Ergonomic squeeze area
- Autoclavable at 121 °C

New

Type	PK	Cat. No.
Grippers	2	6492241*LLG

Ultrasonic cleaning units Elmasonic Select

- 4 Individual
  Cleaning Programs
- Autostart Function

Versatile ultrasonic baths with an ultrasonic frequency of 37 kHz, 5 ultrasonic modes (dynamic, pulse, sweep, degas, eco), heating and the possibility to save up to 4 individual cleaning programmes.

- Mode dynamic combines pulse and sweep modes for higher cleaning performance
- Mode pulse for powerful sample preparation
- Mode sweep for uniform cleaning throughout the bath
- Mode degas is optimised for degassing liquids
- Mode eco for quiet, energy-efficient operation and longer lifetime
- Digital control panel with wipeable membrane keypad and easy-to-read display for all operating states
- Setup menu for individual adjustment of the device functions
- Autostart function for temperature-controlled start of cleaning
- Dry run protection
- Adjustable limit temperature from 40 to 60 °C
- With stopcock (except Select 30 and 40)

Scope of supply: Ultrasonic bath, lid

Specifications

Temperature:	25 ... 80 °C
Sound pressure level (LpAU):	<80 dB
Ultrasonic sound level (LpZ):	<110 dB
Power supply:	220 ... 240 V~, 50/60 Hz
IP code:	IP 20

Type	Capacity of the bath	External dimensions (W x D x H)	PK	Cat. No.
	litres	mm		
Select 30	2.7	305 x 170 x 230	1	6321722*LLG
Select 40	3.9	305 x 170 x 280	1	4684652*LLG
Select 60	5.9	370 x 210 x 275	1	4684653*LLG
Select 80	9.3	570 x 195 x 280	1	4684654*LLG
Select 100	9.5	380 x 300 x 280	1	4684655*LLG
Select 120	12.9	380 x 300 x 330	1	4684656*LLG
Select 300	27.5	575 x 360 x 330	1	4684659*LLG

LLG-Erlenmeyer flasks, borosilicate glass 3.3, with a screw cap

Erlenmeyer flasks made of borosilicate glass 3.3, screw cap with PTFE liner.

- White graduation and labelling field
- GL thread

Capacity	Thread		PK	Cat. No.
ml	GL			
100	32		2	4686198*LLG
250	32		2	4686199*LLG
500	32		2	4686200*LLG
1000	32		1	4686201*LLG

LLG Weighting Rings, Cast Iron, Vinyl Coated

To stabilise glassware in water or oil baths. The vinyl coating prevents vessels and apparatus from being scratched or marked.

For flasks	Int. diam.		PK	Cat. No.
ml	mm			
100 ... 500	48		1	4682062*LLG
250 ... 1000	56		1	4682063*LLG
500 ... 2000	61		1	4682064*LLG
1000 ... 4000	74		1	4682065*LLG

Insert baskets for ultrasonic cleaning units Elmasonic Select

Aperture size:
11x15/10x10 mm

For bath type	Dimensions (W x D x H)	Max. load	PK	Cat. No.
	mm	kg		
Select 30	195 x 105 x 50	1	1	4688713*LLG
Select 40	195 x 105 x 95	3	1	4688714*LLG
Select 60	255 x 105 x 95	5	1	4688715*LLG
Select 80	455 x 105 x 55	5	1	4688716*LLG
Select 100	250 x 195 x 90	6	1	4688717*LLG
Select 120	250 x 195 x 135	7	1	4688718*LLG

Bunsen burner with needle valve

USBECK Laborgeräte

DIN 30665. Air regulation, pilot flame.

Rubber sucker base (Art. Nr. 9.018 360), please order separately.

Type	Height	Weight		PK	Cat. No.
	mm	g			
Natural with needle valve	155	220		1	9018365*LLG
Propane with needle valve	155	220		1	9018366*LLG

Teclu burners with needle valve

USBECK Laborgeräte

Acc. to DIN 30665, with air regulation, with low flame.

Type	Height	Weight		PK	Cat. No.
	mm	g			
Natural	155	260		1	9018375*LLG
Propane	155	260		1	9018376*LLG

Tripod Stand

USBECK Laborgeräte
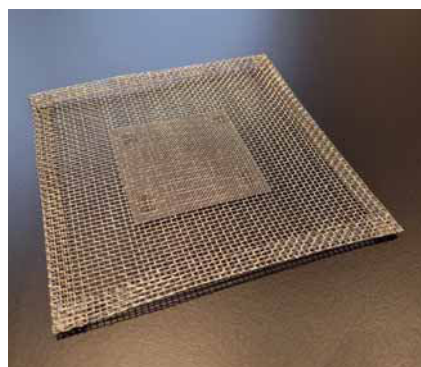
Zinc-plated steel. With a circular top and flared legs.
Zinc plating of tripod stands serves as temporary corrosion protection. May peel off after direct contact with an open burner flame.

Diam.	Height		PK	Cat. No.
mm	mm			
100	180		1	9034110*LLG
120	210		1	9034112*LLG
120	250		1	6200910*LLG
120	260		1	6234831*LLG
140	220		1	9034114*LLG
160	230		1	6059957*LLG

Wire gauze, steel, galvanised

USBECK Laborgeräte

- Folded edges
- Fine-meshed, heat-resistant stainless steel centre

Dimensions (D x W)		PK	Cat. No.
mm			
155 x 155		1	4688237*LLG
195 x 195		1	4688238*LLG

Electric arc lighter

Lighter for lighting Bunsen and gas burners with an electrically generated arc. Since the lighter does not produce an open flame, it offers more safety than conventional lighters. The protective cover also prevents accidental ignition.

DOSTMANN electronic GmbH

- Safe and easy-to-use
- Works with an electric arc
- LED light indicates when the battery is running low
- Charging via micro-USB cable (included)
- With safety cover and automatic switch-off after 10 seconds

Description	Dimensions (W x D x H)	PK	Cat. No.
	mm		
Electric arc lighter	192 x 26 x 19	1	6492358*LLG
Electric arc lighter with flexible neck	219 x 26 x 18	1	6492359*LLG

You can find our complete range on our website.

LLG-Short period timer with alarm

Easy-to-use combination timer and stopwatch, with large display and alarm function from/up to 99 min. and 59 sec. With a magnet for easy fixing. Battery LR 44 inclusive.

Dimensions (Ø x H):	54 x 16.5 mm
Weight:	approx.40 g

Type	PK	Cat. No.
LLG-Short period timer with alarm	1	9260150*LLG

Temperature/Humidity data logger EBI 20-TH1

- Visual Alarm
- Max/min values on display
- Stores 40000 readings, can be read off at any time
- Replaceable battery

Specifications

Measuring range temperature:	-30 to +70 °C
Measuring range humidity:	0% to 100% R.H.
Resolution temperature:	0.1 °C
Resolution humidity:	0.1% R.H.
Memory:	40000 samples
Sensor:	NTC for temperature/ capacitive for humidity
Measuring period:	1 minute to 24 hours
Power supply:	3V lithium (CR 2450)
IP code:	IP 52
Housing:	ABS
Dimensions (L x W x H):	69 x 48 x 22 mm

Type	PK	Cat. No.
EBI 20-TH1-Set	1	9908074*LLG

Digital Thermo-/Hygrometer EXACTO

For monitoring temperature and humidity. With a display of min and max values.

- Permanent display of daily maximum and minimum values with automatic reset after 24 hours.
- Backlighting
- With magnet, stand and mounting hole

Specifications

Temperature range:	-20 ... 70 °C
Temperature accuracy:	±1 °C
Temperature resolution:	1 °C
Humidity range:	1 ... 99%
Humidity accuracy:	±3% at 35 ... 75%, otherwise ±5%
Humidity resolution:	1%
Power supply:	2 x 1.5 V AAA (not included in scope of supply)
Dimensions (W x D x H):	74 x 26 x 90 mm
Weight:	106 g

Type	PK	Cat. No.
EXACTO	1	4670846*LLG

Stopwatch, digital

1/100 sec., split time, clock, date with weekday, hourly chime, alarm with snooze function, lanyard.

Measuring range:
Time up to 23 h, 59 min, 59 sec.

Dimensions (W x H x D):
65 x 79 x 21 mm, weight: 50 g.

Incl. 1x 1.5 V LR44 battery, EK-EL.

Type	PK	Cat. No.
Stopwatch	1	9851018*LLG

Temperature data logger Traceable® Excursion-Trac™, with 1 insertion probe

Temperature data logger for monitoring the temperature in refrigerators and freezers. Transmission of the data recorded in CSV format via a USB port.
- Display of max./min. Temperature and current temperature
- Smart-Alarm™ with visual and acoustic alarm in the event of limit violations
- Large measurement data memory
- Switchable °C/°F
- Storage of up to 10 different alarm messages
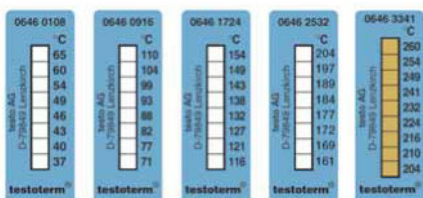- NIST-traceable certificate included

Scope of supply: Temperature data logger with 1 insertion probe, 3 m cable, stand, hook-and-loop strips, magnetic strips, wall mount, batteries, NIST-traceable calibration certificate

Specifactions

Temperature range:	-90 ... 105 °C
Accuracy:	±0.2 °C
Resolution:	0.01 °C
Memory:	525600 measured values
Dimensions probe (WxDxH):	70 x 19 x 108 mm
Dimensions probe (L x Ø):	159 x 3.2 mm
Power supply:	2 x AAA

Type	PK	Cat. No.
Traceable® Excursion-Trac™ with 1 insertion probe	1	4687369*LLG

8-step irreversible temperature strips testoterm®

Strips for 8 temperatures with 5 types covering the measuring range from 37 to 260 °C. Each strip displays 8 different temperatures. Each strip measures 50 x 18 mm.

Measuring range °C	PK	Cat. No.
37 ... 65	10	9246002*LLG
71 ... 110	10	9246003*LLG
116 ... 154	10	9246004*LLG
161 ... 204	10	9246005*LLG
204 ... 260	10	9246006*LLG

Laboratory Thermometer TFX 410

Robust and impact-resistant temperature measurement device for Pt 1000 penetration probe (connection Lemo size 0). Conform to HACCP and DIN EN 13485. With battery and factory calibration certificate.

- Probes made of stainless steel, for temperatures up to +400 °C
- Accuracy: exceeds DIN IEC 584, class 1

Specifications:

Measurement range TFX 410:	-50 ... +300 °C
Accuracy:	±0.3 °C
Resolution:	0.1 °C
Sensor:	Pt 1000 (connection Lemo size 0)
Housing material:	ABS
Certificate:	3-point factory calibration
Operating temperature:	-25 °C to +50 °C
Storage temperature:	-30 °C to +70 °C
Dimensions (L x W x H):	54 x 22 x 109 mm (without probe)
Weight:	Approximately 90 g
Power supply:	3.0 V Lithium, replaceable
Battery lifetime:	Approximately 5 years
IP code:	IP 67

Type	Description	PK	Cat. No.
TFX 410	Laboratory thermometer with assigned probe	1	6206350*LLG
TFX 410-1	Laboratory thermometer (without probe)	1	6207171*LLG
TFX 410-1 + TPX 200	Laboratory thermometer with probe without cable	1	6205687*LLG
TFX 410-1 + TPX 400	Laboratory thermometer with probe with tip and 60 cm cable	1	6205686*LLG
TFX 410-1 + TPX 400-150	Laboratory thermometer with probe with tip and 150 cm cable	1	6243018*LLG

LLG- General-purpose thermometers, red filling

Enclosed-scale type, with eyelet. With uncoated, prismatic measuring capillary. Red spirit filling (except 9.235 265: blue).

Measuring range °C	Length mm	Diam. mm	PK	Cat. No.
-10/0 ... 50	200	7 ... 8	1	9235245*LLG
-10/0 ... 100	260	7 ... 8	1	9235250*LLG
-10/0 ... 150	260	7 ... 8	1	9235255*LLG
-10/0 ... 200*	300	7 ... 8	1	9235260*LLG
-10/0 ... 250*	300	7 ... 8	1	9235265*LLG

* Note: With these types the colour can fade after extended periods of use at higher temperatures.

Magnetic stirrer with heating LLG-uniSTIRRER 3 pro, complete set

- New Design
- Proven Quality

LLG LABWARE

Universal magnetic stirrer with outstanding price-performance ratio and new, improved design.

- Stainless steel plate with ceramic coating
- Digital speed and temperature control
- LED display
- "HOT" display for hot surfaces, even when the device is switched off
- Fixed safety circuit of the hotplate temperature at 320 °C
- Connection for PT1000 temperature probe, integrated control function. The control accuracy with the temperature sensor is ±0.5 °C.

Scope of supply: Magnetic stirrer, PT1000 temperature probe, rod, holder

WARRANTY 3 YEARS

Specifications
Max. Stirring volume:	3 l
Speed:	200 ... 1500 rpm
Heating temperature:	RT ... 280 °C
Ø working area:	135 mm
Permissible ambient temperature:	5 ... 40 °C
Dimensions (WxDxH):	220 x 160 x 95 mm
Weight:	1400 g
Power supply:	200 ... 240 V/100 ... 120 V, 50/60 Hz
Protection class (IP):	IP 21

Type	Plug type	PK	Cat. No.
LLG-uniSTIRRER 3 pro	EU	1	6263400*LLG
LLG-uniSTIRRER 3 pro	UK	1	6263401*LLG

Magnetic stirring bar protest set 1

behr Labor-Technik

Magnetic stirring bars protest ®,
Set 1 in a transparent box with a hinged lid.
Consisting of: 2x 20 x 6 mm, 2x 25 x 6mm, 2x 30 x 6 mm, 2x 40 x 8 mm, 1x 50 x 8 mm, 1x 60 x 9 mm

Description	PK	Cat. No.
MS-Set 1	1	6267317*LLG

Magnetic stirrer TWISTER

- Innovative Concept
- Modular System

IKA®

Set 1

Set 2

Without heating. The TWISTER is a universal and particularly compact mixer with a magnetic drive. The mixing positions can be controlled separately or simultaneously (leader-follower principle).

- Intuitive and chemically resistant 360° LED glass display for conveying all information without an alphanumeric display
- Integrated beaker detection
- Suitable for operation in incubators up to 40 °C

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 rounds.

Specifications
Max. stirred volume per postion:	5 l
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 x D x H):	135 x 135 x 24 mm
Weight:	0.6 kg
Power supply:	100 ... 240 V, 50/60 Hz
IP code:	IP 66

Type	Stirring capacity l	PK	Cat. No.
TWISTER Set 1	5	1	4685997*LLG
TWISTER Set 2	10	1	4685998*LLG

Magnetic stirrer MST Digital

VELP SCIENTIFICA

Small, lightweight magnetic stirrer for volumes up to 5 l.

- Timer
- Auto reverse function

Specifications
Volume (H_2O):	5 l
Speed (max.):	1500 rpm
Display:	Digital
Timer:	1 ... 900 min
Dimensions (W x D x H):	120 x 145 x 50 mm
Power supply:	100 ... 240 V, 50/60 Hz
Warranty:	3 years

Type	PK	Cat. No.
MST Digital	1	4666683*LLG

Rocking shakers Duomax 1030

- Different Tilt Angles
- Overheating Protection

heidolph
research made easy

The Rocking shakers Duomax are suitable for the modular Incubator 1000 and are recommended for applications which require variable temperatures. With 2-dimensional tilting movement, suitable for Petri dishes, culture bottles, Erlenmeyer flasks and all standard vessels.

- 2 models available: Tilt angle to 5° for soft and gentle movements or tilt angle to 10° for a much stronger motion
- An overtemperature sensor preventatively shuts off the unit in a dangerous heat-up situation, particularly valuable for you in case of continuous operation
- Set and continuously adjust the variable speed on the analogue control knob, suitable for all standard vessels

Specifications
Type of movement:	rocking
Tumbling angle:	5° or 10°
Speed range:	2 ... 50 rpm
Max. Load:	5 kg
Timer:	1 ... 120 min
Power consumption:	115 W
Permissible ambient temperature:	5 ... 31 °C
Permissible relative moisture:	80%
Platform dimensions (W x D):	290 x 258 mm
Overall dimensions (W x D x H):	320 x 375 x 185 mm
Weight:	8 kg
Power supply:	230 V, 50/60 Hz
Protection class acc. to DIN EN 60529:	IP 40

Type	Inclination angle °	PK	Cat. No.
Duomax 1030	5	1	9839855*LLG
Duomax 1030	10	1	9839856*LLG

Shaker VORTEX 2

IKA®

Vortex shaker especially for short-time operation (Touch function) or continuous operation.

Specifications
Type of movement:	orbital
Orbital diameter:	4 mm
Max. shaken quantity:	400 g
Motor rating input/output:	39/9 W
Speed range:	500 to 2500 rpm
Dimensions (W x H x D):	120 x 138 x 140 mm
Weight:	3.9 kg
Enclosure according to DIN EN 60529:	IP 21

Type	Plug type	PK	Cat. No.
VORTEX 2	EU	1	7971443*LLG
VORTEX 2	UK	1	6317556*LLG
VORTEX 2	CH	1	6492282*LLG

LLG-Centrifuge Tubes economy, PP

A 121 °C

LLG LABWARE

- With additional graduation in the cone base
- Max. rotate speed up to 12000 x g and 6000 x g for self-standing   tubes
- Autoclavable at 121 °C
- Freezable to -80 °C
- Pyrogen free
- DNase/RNase-free
- Aseptically, bulk pack

Capacity ml	Form	Height mm	Diam. mm	PK	Cat. No.
15	conical	119.6	17	500	6270403*LLG
50	conical	113.9	30	500	6270404*LLG
50	with rim	116.5	30	500	6270405*LLG

Precision balances Entris® II, LLG Premium Line

- LLG Premium Line
- Quality "Made in Germany"
- Very Fast Stabilization and Settling Times
- High Chemical Resistance

Made in Germany

The evolution of the Entris® balance series. The large portfolio offers the right model for every weighing task. With many convenient functions for efficiency and accuracy in the laboratory. Quality "Made in Germany".

- Modern sensors ensure very fast stabilisation time
- Automatic, internal calibration and adjustment function (isoCAL) for all "i" models
- A weighing platform made of stainless steel
- Excellent readability and operability with a hybrid touch display

Scope of supply: Precision balance, power supply unit, display protection cover

Specifications

Weighing platform:	182 x 182 mm
Dimensions (W x D x H):	219 x 317 x 94 mm
Power supply:	100 ... 240 V, 50 ... 60 Hz

Type	Capacity	PK	Cat. No.
	g		
BCE622i-1S	620	1	4669160*LLG
BCE822i-1S	820	1	4669184*LLG
BCE2202i-1S	2200	1	4669120*LLG
BCE3202i-1S	3200	1	4669132*LLG
BCE4202i-1S	4200	1	4669140*LLG
BCE6202i-1S	6200	1	4669156*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*LLG
Sample dishes	100	7	80	6265408*LLG
Sample dishes with rim	100	7	80	6281537*LLG

Analytical balance Type ACJ

KERN

- Single Cell Weighing System
- Short Settling Time
- Stable Temperature Behaviour

The bestseller in analytical balances, now with a high-quality single-cell weighing system.

- With EC type approval, integrated RS-232 and USB data interface
- Automatic internal adjustment in the case of a change in temperature >2 °C or time-controlled every 4 hours
- Dosage aid: High-stability mode and other filter settings can be selected
- Simple recipe weighing and documenting with a combined tare/print function
- Large LCD, digit height 14 mm

A DAkkS calibration with a DAkkS calibration certificate is optionally available and must be specified when ordering the balances.

Specifications

Overall dimensions (W x D x H):	210 x 340 x 325 mm
Dimensions weighing space (W x D x H):	174 x 162 x 227 mm
Permissible ambient temperature:	10 °C/30 °C
Net weight:	approx. 6 kg

Type	Capacity	PK	Cat. No.
	g		
ACJ 80-4M	82	1	4680329*LLG
ACJ 100-4M	120	1	6316869*LLG
ACJ 200-4M	220	1	4680330*LLG
ACJ 300-4M	320	1	6314246*LLG

Halogen Moisture Analyser DBS 60-3

KERN

Modern moisture analyser with 10 memories and graphic display.

- Halogen quartz glass heater 400 W
- Backlit LCD, digit height 15 mm: Previous drying time, current temperature, unit for displaying the results, current moisture content in %, drying mode/Status display drying
- Observation window over the sample, useful during the initial adjustment

Specifications

Readability:	0.01% or 0.001 g
Weighing range, max:	60 g
Reproducibility, weight of sample 2 g:	0.15%
Reproducibility, weight of sample 10 g:	0.02%
Temperature range:	50 ... 200 °C
Dimensions (W x D x H):	204 x 336 x 167 mm

Type	PK	Cat. No.
DBS 60-3	1	9901441*LLG

Mikrocentrifuge Frontier™ FC5513-K

With Unbalance Sensor

Compact high-speed microcentrifuge with modern touch-wheel interface. Ideal suited for general laboratory applications.

- Backlit, two-lined LCD
- Powerful brushless induction motor
- 10 acceleration and deceleration rates
- Memory for up to 99 parameters
- Imbalance sensor
- Small footprint

Scope of supply: Centrifuge, angle rotor for 24 x 1.5/2.0 ml tubes

Specifications

Max. RCF:	17317 x g
Max. Speed:	20 ... 13500 rpm
Max. Load:	24 x 1.5/2.0 ml
Timer:	10 s ... 99 h 59 min 59 s, continuous
Power consumption:	170 W
Dimensions (W x D x H):	277 x 356 x 236 mm
Weight:	13.1 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
FC5513-K	1	6323158*LLG

LLG-Microcentrifuge tubes, PP

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

Specifications
Autoclavability

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

Centrifugation

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

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

Mini centrifuges LLG-uni*CFUGE* 2 and LLG-uni*CFUGE* 2/5

- Proven Quality
- Topseller

LLG-uni*CFUGE* 2

LLG-uni*CFUGE* 2/5

Compact and reasonably priced mini centrifuges with two rotor types. Speed can be adjusted to 4000 rpm or 6000 rpm. Powerful motor for fast starting. Quick stop when the lid is opened.

LLG-uni*CFUGE* 2 with **Universal rotor** for 6 x 1.5/2.0 ml and 6 x 0.5 ml tubes and 2 times 8 x 0.2 ml PCR stripes.

LLG-uni*CFUGE* 2/5 with **rotor for 4 x 5 ml tubes**.

Scope of supply: Centrifuge, mains cable

Specifications

Max. RCF:	1200 x g and 2000 x g
Max. speed:	4000 rpm and 6000 rpm
Motor:	brushless DC motor
Max. load:	6 x 0.5/1.5/2 ml and 2 x 8-tube PCR strips (0.2 ml) or 4 x 5 ml tubes
Dimensions (diam. x H):	140 x 120 mm
Weight:	0.7 kg
Power supply:	100 ... 240 V, 50/60 Hz
Warranty:	3 years

Description	Plug type	PK	Cat. No.
LLG-uni*CFUGE* 2 with universal rotor	EU	1	6263510*LLG
LLG-uni*CFUGE* 2 with universal rotor	UK	1	6263511*LLG
LLG-uni*CFUGE* 2/5 with rotor for 5 ml tubes	EU	1	6263515*LLG
LLG-uni*CFUGE* 2/5 with rotor for 5 ml tubes	UK	1	6263516*LLG

LLG-Centrifuge tubes, 5 ml, PP, with Safe-Lock lid

- Conical shape
- Frosted labelling area on the lid
- Lid membrane can be easily pierced
- Easy opening and closing with one hand
- Graduation lines for visual volume control
- RNase- and DNase-free
- max. RZB: 25000 x g
- Temperature range: -86 ... 121 °C

Capacity	PK	Cat. No.
ml		
5	200	6322888*LLG

KEFO d.o.o.

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PARTNER OF THE
LLG
Laboratory Supply Solutions

LABOR**TOPS**

Mini-Diaphragm vacuum pumps LABOPORT® N96, chemically-resistant

- Topseller
- Compact
- High Flow Rate

The pump combines a high flow rate with a very compact design. Suitable for filtration, SPE, and liquid aspiration using a vacuum. Due to the manual rotational speed control, the pump is quiet, very energy efficient, and can be optimally adjusted following the application.

- Easy-to-clean surface
- Minimised footprint
- Adjustable in flowrate due to manual rotational speed control
- PTFE-coated diaphragm for use with aggressive/corrosive gases and vapours

Specifications

Ultimate vacuum (abs.):	<130 mbar
Operating pressure:	2.5 bar
Connectors for tube:	ID 6 mm
Permissible ambient temperature:	5 ... 40 °C
Pump head:	PPS
Diaphragm:	PTFE coated
Valves:	FKM

Type	Flow rate	Ultimate vacuum	Dimensions (W x D x H)	Weight		PK	Cat. No.
	L / min.	mbar (abs).	mm	kg			
N96	7	130	75 x 156 x 119	1.3		1	4672374*LLG