

## LABORTOPS

valid until 31.12.2025

# MULTIPARAMETER METER MULTILAB® PRO IDS

- Up to 4 parameters simultaneously
- Fully GxP compliant
- LIMS Ready



**New**



**Page 3**

|                         |         |                             |         |
|-------------------------|---------|-----------------------------|---------|
| Temperature Measurement | 2       | General Laboratory Supply   | 18, 22  |
| pH Measurement          | 3       | Waste Disposal              | 19      |
| Filtration              | 4       | PPE                         | 20      |
| Glassware               | 5       | Cleaning                    | 21      |
| Sampling                | 6 - 7   | Microbiology                | 23      |
| Analytical Measurement  | 8 - 9   | Centrifugation              | 24      |
| BOD / COD               | 10      | Ultrapure Water             | 25      |
| PFAS Analysis           | 11      | Stirring / Shaking / Mixing | 26 - 27 |
| Heating / Cooling       | 12 - 13 | Optics                      | 28 - 29 |
| Genomics / Proteomics   | 14 - 15 | Vacuum Technology           | 30      |
| Liquid Handling         | 16 - 17 | Weighing                    | 31 - 32 |

## Temperature logger, testo 175-H1



2-channel temperature and humidity data logger with external humidity sensor (NTC/capacitive humidity sensor)

- Professional long-term monitoring of temperature and humidity in work and storage rooms

### Specifications

|                                    |                                                         |
|------------------------------------|---------------------------------------------------------|
| Channels:                          | 2 x internal (stump)                                    |
| Measurement units:                 | °C, °F, %r.F., %RH, °C <sub>td</sub> , g/m <sup>3</sup> |
| Measuring ranges:                  |                                                         |
| Temperature (NTC):                 | -20 ... +55 °C                                          |
| Humidity (capacitive):             | 0 ... 100% r.h.                                         |
| Dew point:                         | -40 ... +50 °C <sub>td</sub>                            |
| Operation and storage temperature: | -20 ... +55 °C                                          |
| Battery type:                      | 3 x AlMn Type AAA or Energizer                          |
| IP code:                           | IP 54                                                   |
| Meas. cycle:                       | 10sec - 24h                                             |
| Memory:                            | 1 mio. measurement values                               |

| Type         | PK | Cat. No.    |
|--------------|----|-------------|
| testo 175-H1 | 1  | 6242911*LLG |

## Wireless min./max. alarm thermometer type 13090



Wireless min./max. thermometer for monitoring refrigerators and freezers for quality assurance.

- Triple display for current, min./max. temperature, as well as indoor/outdoor and wireless temperature
- Adjustable Hi/Low alarm

**Scope of supply:** Bottle temperature sensor with 1 m cable, wireless temperature sensor (transmitter)

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| Temperature range (internal):           | 0 ... 50 °C                               |
| Temperature range (external, wireless): | -40 ... 50 °C                             |
| Temperature range (external, cable):    | -50 ... 70 °C                             |
| Resolution:                             | 0.1 °C                                    |
| Wireless distance:                      | 50 m (open field),<br>10 m (refrigerator) |

| Type  | PK | Cat. No.    |
|-------|----|-------------|
| 13090 | 1  | 6325021*LLG |

## Digital hand held thermometer TTX 200



For measuring the core temperature with a fixed probe with a cable and a handle.

- Very large display with large figures
- Factory calibration certificate

### Specifications

|                         |                                             |
|-------------------------|---------------------------------------------|
| Temperature range:      | -30 ... +199.9 °C                           |
| Accuracy:               | ±0.5 °C (-30 ... +100 °C),<br>otherwise ±1% |
| Sensor length/diam.:    | 120 mm/3 mm                                 |
| Cable length:           | 600 mm                                      |
| Working temperature:    | -20 ... +60 °C                              |
| Dimensions (L x W x H): | 127 x 60 x 16 mm (without sensor)           |
| Weight:                 | approx. 220 g                               |
| Power supply:           | CR 2032                                     |
| Protection class:       | IP 55                                       |

| Type    | PK | Cat. No.    |
|---------|----|-------------|
| TTX 200 | 1  | 6291272*LLG |

## Combi infrared and insertion thermometer TLC 750i-V2



### Very simple operation

Handy infrared thermometer for non-contact measurement of surface temperature or core temperature with the foldable insertion probe.

- Practical pocket size for daily use
- Backlit display allows reading in dark environment
- Rotating display makes it easy to read the measured value
- Double laser pointer
- HACCP and DIN EN 13485 compliant, incl. calibration certificate
- Waterproof housing (IP 65)



|                       |                         |
|-----------------------|-------------------------|
| Temperature infrared: | -50 ... 250 °C          |
| Resolution infrared:  | 0.1 °C                  |
| Accuracy sensor:      | ±0.5 °C (-30 ... 99 °C) |
| Accuracy infrared:    | ±1.0 °C (0 ... 65 °C)   |

| Type        | PK | Cat. No.    |
|-------------|----|-------------|
| TLC 750i-V2 | 1  | 6491695*LLG |

## Multiparameter meters MultiLab® Pro IDS



- 2- or 4-channel device
- No electrode change necessary
- 7" touch screen
- Suitable for IDS electrodes



**New**

Digital multiparameter meter with up to 4 galvanically isolated measuring channels for pH, ORP, mV, conductivity, oxygen, ISE and turbidity measurements. This allows up to 4 identical or different parameters to be measured simultaneously. Ideal for demanding tasks, even in critical (GxP) areas. The brilliant 7" touch display with special touchscreen glass is resistant to alcohol and disinfectants and can be operated with gloves. Predefined methods, automated documentation, metadata backup and onboard manual simplify handling and optimise the workflow.

- Wireless-ready for Intelligent Digital Sensors (IDS) modules
- Digital sensor recognition
- Wired or wireless sensor connection possible
- Preset and definable buffer sets
- QSC calibration
- AutoRead function
- LIMS ready: easy integration into existing LIMS systems
- Stored metadata is securely transferred via the LAN network
- Data export also as PDF/A, JSON and csv
- Interfaces: 2 x USB-A and 1 x Ethernet
- GxP-compliant



### Scope of supply:

**MultiLab® Pro 20 IDS S2:** Multiparameter meter with 2 measuring channels, pH electrode SenTix® 980, digital conductivity measuring cell TetraCon® 925, pH buffers STP 4, STP 7 and STP 10 Trace, 3 mol KCl solution, conductivity standard 1413 µS/cm, stand, universal power supply

**MultiLab® Pro 40 IDS S4:** Multiparameter meter with 4 measuring channels, pH electrode SenTix® 980, ORP electrode SenTix® ORP-T 900, digital conductivity measuring cell TetraCon® 925, digital oxygen sensor FDO® 925, pH buffers STP 4, STP 7 and STP 10 Trace, 3 mol KCl solution, conductivity standard 1413 µS/cm, stand, universal power supply

| Type                    | Channels | PK | Cat. No.    |
|-------------------------|----------|----|-------------|
| MultiLab® Pro 20 IDS S2 | 2        | 1  | 4712712*LLG |
| MultiLab® Pro 40 IDS S4 | 4        | 1  | 4712715*LLG |

pH buffer solutions at 20 °C/25 °C,  
certified reference material (CRM)



Certified reference material according to ISO 17034. The pH buffer solutions are colour-coded, and the uncertainty of measurement of  $\pm 0.01$  pH was tested at 20 °C/25 °C. Supplied with a detailed certification report which includes traceability to NIST.

| pH-value       | Colour     | Capacity | PK | Cat. No.         |
|----------------|------------|----------|----|------------------|
|                |            | ml       |    |                  |
| 4.00 at 20 °C  | red        | 500      | 1  | CRM10405C*REA    |
| 7.00 at 20 °C  | yellow     | 500      | 1  | CRM10705C*REA    |
| 10.00 at 20 °C | colourless | 500      | 1  | CRM11005BF*REA   |
| 4.00 at 25 °C  | red        | 500      | 1  | CRM1040525C*REA  |
| 7.00 at 25 °C  | yellow     | 500      | 1  | CRM1070525C*REA  |
| 10.00 at 25 °C | colourless | 500      | 1  | CRM1100525BF*REA |

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



Flip-top vial is easy to open and close with one hand. The new LLG pH strips offer the utmost in 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.

| Range    | Package contents                  | PK  | Cat. No.    |
|----------|-----------------------------------|-----|-------------|
| pH       |                                   |     |             |
| 0 ... 14 | 100 strips per vial with snap lid | 100 | 9129808*LLG |

## LLG filter papers for qualitative analyses



### Medium fast

- Made from 100% cellulose
- Filtration speed according to DIN 53137

| Diam.<br>mm | Filtration<br>time<br>secs. | Pore<br>size<br>µm | PK  | Cat. No.    |
|-------------|-----------------------------|--------------------|-----|-------------|
| 70          | 88                          | 5 - 13             | 100 | 9045803*LLG |
| 90          | 88                          | 5 - 13             | 100 | 9045804*LLG |
| 110         | 88                          | 5 - 13             | 100 | 9045805*LLG |
| 125         | 88                          | 5 - 13             | 100 | 9045806*LLG |
| 150         | 88                          | 5 - 13             | 100 | 9045807*LLG |
| 185         | 88                          | 5 - 13             | 100 | 9045808*LLG |
| 240         | 88                          | 5 - 13             | 100 | 9045809*LLG |

## Syringeless filters SEPARA



- Quick and easy to use
- Low sample loss



SEPARA integrates in one single device auto-sampler vial, filtration membrane, plunger, and cap/septa. The single step filtering process is efficient and saves time. PP vial with Ø 12 x 33 mm, Filtering capacity 0.48 ml, dead volume <30 µl, maximum operating temperature 50 °C

| Membrane         | Pore<br>size<br>µm | Colour      | PK  | Cat. No.         |
|------------------|--------------------|-------------|-----|------------------|
| Nylon            | 0.22               | light blue  | 100 | MV32ANPNY002BC01 |
| PTFE             | 0.22               | pink        | 100 | MV32ANPPT002TC01 |
| Regen. Cellulose | 0.22               | grey        | 100 | MV32ANPRC002GC01 |
| PVDF             | 0.22               | yellow      | 100 | MV32ANPPV002FC01 |
| PES              | 0.22               | light green | 100 | MV32ANPPS002EC01 |
| Nylon            | 0.45               | blue        | 100 | MV32ANPNY004UC01 |
| PTFE             | 0.45               | red         | 100 | MV32ANPPT004CC01 |
| Regen. Cellulose | 0.45               | black       | 100 | MV32ANPRC004LC01 |
| PVDF             | 0.45               | orange      | 100 | MV32ANPPV004IC01 |
| PES              | 0.45               | green       | 100 | MV32ANPPS004WC01 |

## Qualitative Filters for beer analysis



Suitable for analytical methods in breweries to filter and analyse, based upon recommended procedures of the EBC (European Brewery Convention).

- Medium fast
- Grained surface

### Further sizes on request.

| Type          | Diam.<br>mm | Filtration time<br>acc. to Herzberg<br>s | PK  | Cat. No.    |
|---------------|-------------|------------------------------------------|-----|-------------|
| Folded filter | 185         | 110                                      | 100 | 4006207*LLG |
| Folded filter | 240         | 110                                      | 100 | 4006208*LLG |
| Folded filter | 320         | 110                                      | 100 | 4006209*LLG |

## Funnels, DURAN®



DIN ISO 4798. With short stem. Glass Type I/neutral glass as per USP, EP and JP. Autoclavable.

| Diam.<br>mm | For<br>filter paper<br>diam. mm | Height<br>mm | DIN  | PK | Cat. No.         |
|-------------|---------------------------------|--------------|------|----|------------------|
| 35          | 45 - 55                         | 60           | 4798 | 1  | 213512308*SCHOTT |
| 45          | 55 - 70                         | 80           |      | 1  | 213512805*SCHOTT |
| 55          | 70 - 90                         | 95           | 4798 | 1  | 213513304*SCHOTT |
| 70          | 110 - 125                       | 125          |      | 1  | 213513801*SCHOTT |
| 80          | 125 - 150                       | 140          |      | 1  | 213514103*SCHOTT |
| 100         | 150 - 185                       | 180          | 4798 | 1  | 213514609*SCHOTT |
| 120         | 185 - 240                       | 210          |      | 1  | 213515108*SCHOTT |
| 150         | 240 - 270                       | 265          | 4798 | 1  | 213515708*SCHOTT |



## Separating funnels, Squibb-pattern, borosilicate glass 3.3

**ISOLAB**  
Laborgeräte GmbH



Supplied with a PTFE stopcock. With a PE conical stopper.

- ISO 4800
- NS necks according to DIN 12242 standard

| Description | Capacity | Bore | NS    | PK | Cat. No.    |
|-------------|----------|------|-------|----|-------------|
|             | ml       | mm   |       |    |             |
| Graduated   | 50       | 2.5  | 19/26 | 1  | 6236317*LLG |
| Graduated   | 100      | 2.5  | 19/26 | 1  | 6236318*LLG |
| Graduated   | 250      | 4.0  | 29/32 | 1  | 6236319*LLG |
| Graduated   | 500      | 4.0  | 29/32 | 1  | 6236320*LLG |
| Graduated   | 1000     | 6.0  | 29/32 | 1  | 6236321*LLG |
| Graduated   | 2000     | 6.0  | 29/32 | 1  | 6240412*LLG |

## LLG-Standing flasks with standard ground joint, borosilicate glass 3.3



With a flat bottom and standard ground joint. White graduation and inscription. Acc. to DIN EN ISO 4797.

## Stand for separating funnel, PP

**ISOLAB**  
Laborgeräte GmbH



Suitable to hold all types of laboratory funnels and also separatory funnels with diameter from 60 up to 150 mm. Two tapered wedges are provided to ensure firm grip.

| Description              | PK | Cat. No.    |
|--------------------------|----|-------------|
| Separating funnel holder | 1  | 4672109*LLG |

## Disposable culture tubes, soda-lime glass, with screw cap



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

| Capacity | Outer diam. | Height | Wall thickness | DIN-Thread | PK  | Cat. No.         |
|----------|-------------|--------|----------------|------------|-----|------------------|
| ml       | mm          | mm     | mm             | GL         |     |                  |
| 6        | 12          | 100    | 1              | 14         | 100 | 231751159*SCHOTT |
| 12       | 16          | 100    | 1              | 18         | 100 | 231751459*SCHOTT |
| 22       | 16          | 160    | 1              | 18         | 100 | 231752155*SCHOTT |
| 32       | 18          | 180    | 1              | 18         | 100 | 231752352*SCHOTT |

## Petri dishes, DUROPLAN®, borosilicate glass 3.3



With lid. DURAN®. Made of DURAN® borosilicate glass 3.3. The base and lid are completely flat on both the outside and inside, free of bubbles and cords. The glass is type 1/neutral glass, as specified by USP/EP, and JP. Autoclavable. DIN 13132.

| Ext. diam. | Height | PK | Cat. No.         |
|------------|--------|----|------------------|
| mm         | mm     |    |                  |
| 60         | 20     | 1  | 217554101*SCHOTT |
| 80         | 20     | 1  | 217554307*SCHOTT |
| 100        | 15     | 1  | 217554607*SCHOTT |
| 100        | 20     | 1  | 217554804*SCHOTT |
| 120        | 20     | 1  | 217555106*SCHOTT |
| 150        | 30     | 1  | 217555303*SCHOTT |



## Sampler Tubes, V4A stainless steel



Sampler for free flowing, bulk goods up to approx. 1cm diameter.

- also for coarse-grained bulk goods
- corresponds to ISTA standard for seed lengths of 10 mm and 5 mm

| Diam. | Length | PK | Cat. No.    |
|-------|--------|----|-------------|
| mm    | cm     |    |             |
| 40    | 40     | 1  | 6200394*LLG |
| 40    | 80     | 1  | 6204492*LLG |

## Chemistry scoop, PP, with rod handle



For aggressive liquids, complete with strong handle made of polypropylene.

| Capacity | Stem diam. | Stem | PK | Cat. No.    |
|----------|------------|------|----|-------------|
| ml       | mm         | mm   |    |             |
| 250      | 20         | 1000 | 1  | 9303840*LLG |
| 600      | 20         | 1000 | 1  | 9303842*LLG |
| 1000     | 20         | 1000 | 1  | 9303844*LLG |

## Disposable spatulas LaboPlast®/SteriPlast®, PS



The sample spatula is ideal for sampling powders, granulates and pastes.

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



| Type        | Sterile | Length | Imm. depth | PK | Cat. No.    |
|-------------|---------|--------|------------|----|-------------|
|             |         | mm     | mm         |    |             |
| LaboPlast®  | -       | 263    | 150        | 10 | 6265035*LLG |
| SteriPlast® | +       | 263    | 150        | 10 | 6265047*LLG |

## Disposable samplers for solids, HDPE



For contamination-free samples. They are cleanroom-manufactured and individually packed. Gamma-sterilised versions are also available.

For direct removal and filling of free-flowing powders and small-grain granulates.

| Type       | Description | Length | PK | Cat. No.    |
|------------|-------------|--------|----|-------------|
|            |             | mm     |    |             |
| DispoLance | sterile     | 300    | 20 | 6282459*LLG |
| DispoLance | non-sterile | 300    | 20 | 6282458*LLG |
| DispoLance | sterile     | 500    | 20 | 6282461*LLG |
| DispoLance | non-sterile | 500    | 20 | 6282460*LLG |

## Sampling Dippers DispoLadle, HDPE

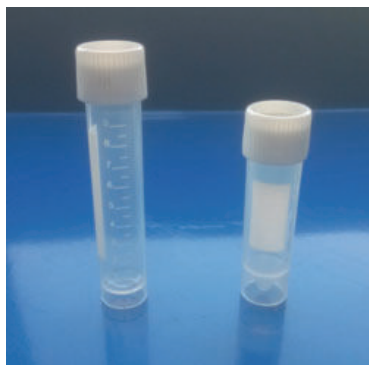


The scaled scoop with embossing can be used for measuring. It shows contents in increments of 10 ml, up to 200 ml.

- Cleanroom manufactured
- Individually packaged
- Optionally sterilised by gamma rays

| Description | Capacity | Length | PK | Cat. No.    |
|-------------|----------|--------|----|-------------|
|             | ml       | mm     |    |             |
| Standard    | 200      | 500    | 20 | 6284537*LLG |
| Sterile     | 200      | 500    | 20 | 6284538*LLG |
| Standard    | 200      | 1000   | 20 | 6284539*LLG |
| Sterile     | 200      | 1000   | 20 | 6284540*LLG |

## LLG-Transport tubes, PP, with screw cap



For convenient storage and dispatch of samples.

- Conical bottom
- Free standing
- Printed graduation
- 1 1/4 turn thread design for super fast screwing

| Capacity<br>ml | Outer<br>diam.<br>mm | Height<br>with cap<br>mm | PK  | Cat. No.    |
|----------------|----------------------|--------------------------|-----|-------------|
| 5              | 16                   | 60                       | 100 | 6265667*LLG |
| 10             | 16                   | 80                       | 100 | 6265668*LLG |

## Sample bags Whirl-Pak®, PE, sterile



Nasco

Whirl-Pak® bags are sterile polyethylene laboratory sample bags used to transport samples for biological testing and other applications. Available with or without write-on label. With integrated wire closing system. Temperature range: -210 to 82 °C.

| Nominal capacity<br>ml | Dimensions<br>(D x W)<br>mm | Description            | PK  | Cat. No.    |
|------------------------|-----------------------------|------------------------|-----|-------------|
| 58                     | 75 x 125                    | with write-on label    | 500 | 7058005*LLG |
| 118                    | 75 x 185                    | with write-on label    | 500 | 7077212*LLG |
| 532                    | 115 x 230                   | with write-on label    | 500 | 7058120*LLG |
| 710                    | 150 x 230                   | with write-on label    | 500 | 6242083*LLG |
| 2721                   | 254 x 380                   | with write-on label    | 250 | 6266304*LLG |
| 3637                   | 254 x 508                   | with write-on label    | 250 | 6266305*LLG |
| 5441                   | 380 x 508                   | with write-on label    | 100 | 6257989*LLG |
| 58                     | 75 x 125                    | with write-on label    | 500 | 6091055*LLG |
| 118                    | 75 x 185                    | without write-on label | 500 | 9404234*LLG |
| 207                    | 95 x 180                    | without write-on label | 500 | 7981345*LLG |
| 532                    | 115 x 230                   | without write-on label | 500 | 9404235*LLG |
| 710                    | 150 x 230                   | without write-on label | 500 | 6228639*LLG |
| 1065                   | 125 x 380                   | without write-on label | 500 | 9404236*LLG |
| 1242                   | 150 x 380                   | without write-on label | 500 | 6266302*LLG |
| 2041                   | 190 x 380                   | without write-on label | 500 | 6305117*LLG |

## LLG-Sample containers, with screw cap, PP



White, with screwed-on lid.  
For storage or transport of samples.

| Nominal capacity<br>ml | Ø with<br>Cover<br>mm | Height<br>mm | PK | Cat. No.    |
|------------------------|-----------------------|--------------|----|-------------|
| 30                     | 58                    | 19           | 10 | 9402310*LLG |
| 75                     | 58                    | 47           | 10 | 9402313*LLG |
| 310                    | 81                    | 81           | 10 | 9402318*LLG |
| 600                    | 119                   | 67           | 10 | 9402321*LLG |
| 1250                   | 119                   | 130          | 5  | 9402324*LLG |

## Water sample bottles, PET



With and without sodium thiosulfate

ISOLAB  
Laborgeräte GmbH



- Sterile
- Leak-proof
- Thick walls
- Crush-resistant corners

| Nominal capacity<br>ml | Description                   | PK  | Cat. No.    |
|------------------------|-------------------------------|-----|-------------|
| 125                    | without sodium thiosulphate   | 180 | 4712663*LLG |
| 250                    | without sodium thiosulphate   | 108 | 4712664*LLG |
| 500                    | without sodium thiosulphate   | 84  | 4712665*LLG |
| 1000                   | without sodium thiosulphate   | 30  | 4712666*LLG |
| 125                    | without sodium thiosulphate * | 130 | 4712667*LLG |
| 250                    | without sodium thiosulphate * | 72  | 4712668*LLG |
| 500                    | without sodium thiosulphate * | 42  | 4712669*LLG |
| 1000                   | without sodium thiosulphate * | 22  | 4712670*LLG |
| 125                    | with sodium thiosulphate      | 180 | 4712671*LLG |
| 250                    | with sodium thiosulphate      | 108 | 4712672*LLG |
| 500                    | with sodium thiosulphate      | 84  | 4712673*LLG |
| 1000                   | with sodium thiosulphate      | 30  | 4712674*LLG |
| 125                    | with sodium thiosulphate *    | 130 | 4712675*LLG |
| 250                    | with sodium thiosulphate *    | 72  | 4712676*LLG |
| 500                    | with sodium thiosulphate *    | 42  | 4712677*LLG |
| 1000                   | with sodium thiosulphate *    | 22  | 4712678*LLG |

\* Individually packed

Melting point apparatus,  
model MP-200D/MP-200D-HR



MP-200D

Supplied with 100 melting point tubes, open one end.

Specification

|                         |                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of samples:      | 2                                                                                                                                                |
| Temperature range:      | Ambient to 300 °C                                                                                                                                |
| Temperature accuracy:   | ±1.0 °C at 20 °C, ±2.5 °C at 300 °C                                                                                                              |
| Display:                | Three digit LED // Four digit LED                                                                                                                |
| Display resolution:     | 1 °C // 0.1 °C                                                                                                                                   |
| Display hold facility:  | No // Yes                                                                                                                                        |
| Ramp rates:             | 20 °C per minute to plateau,<br>2 °C per minute to melt //<br>20 °C per minute to plateau,<br>variable between 1 and 10 °C<br>per minute to melt |
| Dimensions (w x d x h): | 160 x 220 x 170 mm                                                                                                                               |
| Net weight:             | 1.8 kg                                                                                                                                           |
| Electrical supply:      | 230 V, 50 Hz, 75 W                                                                                                                               |

MP-200D // MP-200D-HR

| Type       | PK | Cat. No.    |
|------------|----|-------------|
| MP-200D    | 1  | 9950177*LLG |
| MP-200D-HR | 1  | 9830430*LLG |

Melting point tubes for MP series

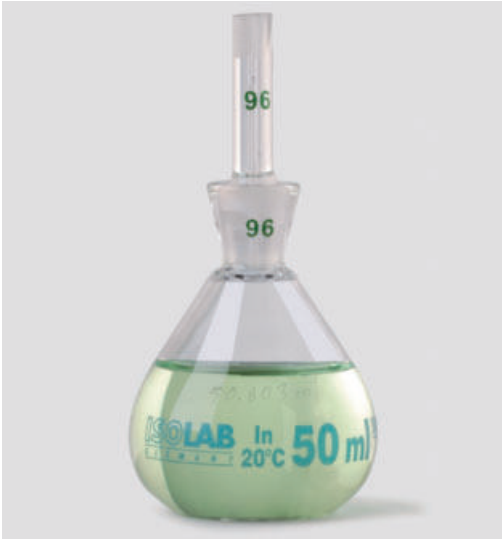


- Antimicrobial coating
- Up to 300 °C



| Type                                                       | PK  | Cat. No.    |
|------------------------------------------------------------|-----|-------------|
| Melting point determination tubes<br>(open on both sides)  | 100 | 6236492*LLG |
| Melting point determination tubes<br>(closed at one end)   | 100 | 6803067*LLG |
| Melting point determination tubes<br>(closed at both ends) | 100 | 9950400*LLG |

Pycnometers, Borosilicate glass 3.3,  
calibrated



ISO 3507. Individually calibrated to contain (In) to 0.001 ml.  
Net volume capacity is engraved on the body. Each bottle is calibrated  
together with its stopper. In order to differentiate easily, both the body  
and the stopper have the same code numbers printed on them.

| Capacity | PK | Cat. No.    |
|----------|----|-------------|
| ml       |    |             |
| 5        | 1  | 4008327*LLG |
| 10       | 1  | 6241602*LLG |
| 25       | 1  | 4008328*LLG |
| 50       | 1  | 6241603*LLG |
| 100      | 1  | 4008329*LLG |



## Flame Photometer FF-200D-I and FF-200D-R



**Cole-Parmer**  
an antylla scientific company

- Low temperature flame photometer
- Supplied with filters



FF-200D-I

Single channel, low temperature flame photometer for use in industry, medicine and education. Can be operated with propane, butane, natural gas or liquid gas (LPG). With built-in electronic flame failure safety system for operational safety.

- Model FF-200D-I incl. Na, K, Ca, Ba and Li filters
- Model FF-200D-R incl. Na, K and Li filters
- 3 year warranty

**Supplied with:** Na, K, Li filters (model PFP7/C), additionally Ba and Ca filter (model PFP7), connecting hoses and clips, compressor plug, drain trap, fuses and operating/service instructions

### Specifications

Range PFP7: 0 ... 199.9 ppm  
Range PFP7/C: 120 ... 160 ppm Na, 0 ... 10 ppm K

### Limits of detection

Na/K: < 0.2 ppm  
Li: < 0.25 ppm  
Ca: < 15 ppm  
Ba: < 30 ppm  
Reproducibility: < 1% (Coefficient of variation for 20 consecutive samples using 10 ppm Na set to a reading of 50)

Linearity: < 2% (when concentration of 3 ppm Na/K and 5 ppm Li are set to a reading of 100)

Specificity: Interference from Na, K and Li equal in concentration to test element will be < 0.5%

Recorder output: Nominal 1.00 V for a reading of 100.0  
Air: 6 l/min at 1 Kg/cm<sup>2</sup> /14psi (oil and moisture free pressurised air)

Dimensions (W x D x H): 420 x 360 x 300 mm

Weight: 8 kg

Power supply: 190 ... 250 V, 50/60 Hz

| Type      | PK | Cat. No.    |
|-----------|----|-------------|
| FF-200D-I | 1  | 9309409*LLG |
| FF-200D-R | 1  | 6272846*LLG |

## Laboratory refractometers Abbatmat Essential



**Anton Paar**

- Peltier temperature control
- Preset refractive index and Brix scale



Abbatmat 3001

The Abbatmat Essential line is budget-friendly with the best build quality and temperature control. All three instruments are suitable for liquids, viscous or solid substances, as well as turbid and dark substances. Fast concentration measurements due to a simplified user interface and predefined methods.

- Precise Peltier temperature control
- Up to 10 methods: refractive index and Brix preset, plus 8 optional methods
- Intuitive 7" Hybrid touchscreen
- Sapphire prism backed by a 25-year warranty

| Type          | Measuring range                     | Accuracy                    | PK | Cat. No.    |
|---------------|-------------------------------------|-----------------------------|----|-------------|
| Abbatmat 3001 | 1,33 ... 1,55 nD<br>0 ... 100 °Brix | ±0,0001 nD<br>±0,05 °Brix   | 1  | 4713222*LLG |
| Abbatmat 3101 | 1,30 ... 1,66 nD<br>0 ... 100 °Brix | ±0,00004 nD<br>±0,03 °Brix  | 1  | 4713223*LLG |
| Abbatmat 3201 | 1,26 ... 1,72 nD<br>0 ... 100 °Brix | ±0,00002 nD<br>±0,015 °Brix | 1  | 4713224*LLG |

## Standards for Flame photometers

**Reagecon**



Suitable for calibration, control, IQ/OQ and method validation. Compatible with all Flame Photometry Instruments. NIST traceable. HDPE bottles of 500 ml.

| Type               | Measuring range  | PK | Cat. No.     |
|--------------------|------------------|----|--------------|
| Sodium / Potassium | 100 / 100 mmol/L | 1  | FCNK3*REA    |
| Sodium / Potassium | 120 / 2 mmol/L   | 1  | FCNK4*REA    |
| Sodium / Potassium | 140 / 5 mmol/L   | 1  | FCNK5*REA    |
| Sodium / Potassium | 160 / 8 mmol/L   | 1  | FCNK1*REA    |
| Sodium / Potassium | 160 / 80 mmol/L  | 1  | FCNK2*REA    |
| Rinse solution     | -                | 1  | FIRINSE5*REA |

BOD sensor system



Dissolved oxygen bottles according to Winkler, soda lime glass



For the determination of dissolved oxygen in water. The measured capacity is specified to  $\pm 0.01$  ml. With a white labelling area. Each bottle and its stopper is marked with a unique, matching identification number.

| Nominal capacity ml | NS    | Snap-on clip | PK | Cat. No.    |
|---------------------|-------|--------------|----|-------------|
| 100 to 150          | 14/23 | 9.304 050    | 1  | 9304038*LLG |
| 250 to 300          | 19/26 | 9.304 051    | 1  | 9304048*LLG |

Clamps for oxygen determination bottles acc. to Winkler



Stainless steel, nickel-plated. For securing the NS stopper.

| For bottles ml | For      | PK | Cat. No.    |
|----------------|----------|----|-------------|
| 100 ... 150    | NS 14/23 | 1  | 4684046*LLG |
| 250 ... 300    | NS 19/26 | 1  | 4684047*LLG |

HCL-Absorber, for COD determination



The glass filter devices are made of borosilicate glass 3.3 and can withstand acids, alkalis and solvents and even temperatures of up to 540 °C.

| Ground size | PK | Cat. No.    |
|-------------|----|-------------|
| NS 29/32    | 1  | 6225057*LLG |

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
- Protected against splashing water (IP 54)

**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

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



For PFAS analysis

## LLG-Short thread vials ND9, PP

The LLG-Short thread vials are suitable for PFAS analyses. Free from polyhaloolefins.



| Capacity | o.d. x Height | PK  | Cat. No.    |
|----------|---------------|-----|-------------|
| ml       | mm            |     |             |
| 0.3      | 11.6 x 32     | 100 | 4008262*LLG |
| 0.7      | 11.6 x 32     | 100 | 4712515*LLG |
| 1.5      | 11.6 x 32     | 100 | 4712514*LLG |

## LLG-Short thread seals ND9, PP, ready assembled

The LLG-Short thread seals are suitable for PFAS analyses.

- Cap made of PP
- Septa made of PP, silicone or polyimide
- Free from polyhaloolefins



| Caps                   | Septa                                  | PK  | Cat. No.    |
|------------------------|----------------------------------------|-----|-------------|
| blue, with hole        | Silicone white/PP transparent          | 100 | 4712516*LLG |
| blue, with hole        | Silicone white/PP transparent, slitted | 100 | 4712517*LLG |
| transparent, with hole | Silicone white/PP transparent          | 100 | 4712518*LLG |
| transparent, with hole | Silicone white/PP transparent, slitted | 100 | 4712519*LLG |
| blue, with hole        | Silicone white/Polyimide orange        | 100 | 4712520*LLG |

## b.safe caps, GL45, PP/PPS, PFAS Analytic



Screw caps, with freely movable insert made of PP. Free from polyhaloolefins. 3 capillary connections (3.2 mm).

- Insert made of PP
- Fittings made of PE
- Ideal for PFAS analysis

**Scope of supply:** Cap, 2xfittings (PE), 3xblind fittings (PE), air valve with service life indicator



Capillary connections: 3  
Neck thread: GL 45

| Type       | PK | Cat. No.    |
|------------|----|-------------|
| b.safe-Cap | 1  | 4694468*LLG |

## Air valves, PP, PFAS Analytic



The integrated non-return valve avoids evaporation of solvents and lets flow ambient air into the bottle in case of vacuum.

- Free from polyhaloolefins



| Thread       | Life time | PK | Cat. No.    |
|--------------|-----------|----|-------------|
| UNF 1/4" 28G | 6 months  | 2  | 4694467*LLG |

## SPE columns, CHROMABOND PFAS



Special phase for SPE analysis. For enrichment of PFAS from water, textiles and sediments (contaminated soils). Polymeric combination phase with weak anion exchanger, highly porous, spherical particles.

| Capacity | Filling quantity | Package   | PK  | Cat. No.    |
|----------|------------------|-----------|-----|-------------|
| ml       | mg               |           |     |             |
| 3        | 120              | 30 Piece  | 30  | 4712701*LLG |
| 3        | 120              | 250 Piece | 250 | 4712702*LLG |
| 6        | 300              | 30 Piece  | 250 | 4712703*LLG |
| 6        | 300              | 250 Piece | 30  | 6320451*LLG |

## EC analytical HPLC columns, NUCLEODUR PFAS/PFAS Delay



Reliable for PFAS



Hydrophobic reversed phase with distinct polar selectivity for special PFAS analysis. Suitable for high sensitivity LC/MS analysis. NUCLEODUR PFAS Delay columns trap and therefore delay system-related PFAS contaminants, ensuring trace-level analysis of PFAS in your samples. Suitable for high sensitivity LC/MS analysis.

| Type       | Particle size | Length | Int. diam. | PK | Cat. No.    |
|------------|---------------|--------|------------|----|-------------|
|            | µm            | mm     | mm         |    |             |
| PFAS       | 3             | 100    | 2          | 1  | 4712704*LLG |
| PFAS Delay | 5             | 50     | 2          | 1  | 4712705*LLG |

## Universal Ovens UN



**memmert**

### Specifications

|                            |                                           |
|----------------------------|-------------------------------------------|
| Type designation:          | N = Natural convection                    |
| Working temperature range: | at least 5 °C above ambient to +300 °C    |
| Setting temperature range: | +20 to +300 °C                            |
| Setting accuracy:          | up to 99.9 °C: 0.1 °C/from 100 °C: 0.5 °C |
| Power supply:              | 230 V, 50/60 Hz                           |

| Type  | Nom. capacity | Max. grids | Included grids | Internal dimensions (W x D x H) mm | External dimensions (W x D x H) mm | Rated capacity kW | Net weight kg | PK | Cat. No.    |
|-------|---------------|------------|----------------|------------------------------------|------------------------------------|-------------------|---------------|----|-------------|
|       | L             |            |                |                                    |                                    |                   |               |    |             |
| UN30  | 32            | 3          | 1              | 400 x 250* x 320                   | 585 x 434** x 704                  | 1.6               | 45            | 1  | 9869681*LLG |
| UN55  | 53            | 4          | 1              | 400 x 330* x 400                   | 585 x 514** x 784                  | 2.0               | 57            | 1  | 9869682*LLG |
| UN75  | 74            | 6          | 2              | 400 x 330* x 560                   | 585 x 514** x 944                  | 2.5               | 66            | 1  | 9869683*LLG |
| UN110 | 108           | 5          | 2              | 560 x 400* x 480                   | 745 x 584** x 864                  | 2.8               | 74            | 1  | 9869684*LLG |

\* Less 39 mm for fan

\*\*Depth without door handle, please add 56 mm

## Cooled incubators FOC series

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

- 2 internal sockets for further devices
- Wireless (WIFI) and wired connectivity
- Front 3 button panel (Set, "+", "-")
- Forced ventilation for uniform temperature distribution

Model FOC 200E: With internal transparent door

**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  |



**VELP**  
SCIENTIFICA

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

## Metal-cased heating mantles series KM-ME, with controller

**ISOHEAT®**

LabHEAT® - Heating mantles for flasks, round bottom. Flexible glass yarn heating element in plastic plastic-coated, chemical-resistant metal housing. Max. heating element temperature 450 °C; 1.5 m power supply (earthed) cable and RCD (residual current detection); nominal voltage 230 V AC.



| Capacity ml | Flask diam. mm | Rating W | Heating zones | PK | Cat. No.    |
|-------------|----------------|----------|---------------|----|-------------|
| 100         | 64             | 100      | 1             | 1  | 9642521*LLG |
| 250         | 85             | 150      | 2             | 1  | 9642522*LLG |
| 500         | 105            | 200      | 2             | 1  | 9642523*LLG |
| 1000        | 131            | 300      | 2             | 1  | 9642524*LLG |
| 2000        | 166            | 500      | 2             | 1  | 9642525*LLG |
| 3000        | 185            | 600      | 2             | 1  | 9642526*LLG |
| 4000        | 207            | 750      | 2             | 1  | 9642527*LLG |
| 5000        | 223            | 860      | 2             | 1  | 9642528*LLG |
| 6000        | 236            | 1000     | 2             | 1  | 9642529*LLG |
| 10000       | 279            | 1400     | 2             | 1  | 9642530*LLG |
| 20000       | 345            | 2000     | 2             | 1  | 9642531*LLG |



## Recirculating cooler VALEGRO

Julabo



- Natural refrigerant
- Illuminated filling level indicator
- OLED touch display

New



The modern, user-friendly recirculating cooler is characterised by its compact design and precise temperature control:

- Natural refrigerant R290
- OLED touch display
- Continuously adjustable pump
- Timer
- Illuminated, easy-to-clean level indicator
- With casters
- Bath volume 1.5 to 3 liters
- Temperature: -20 ... 40 °C
- Temperature stability:  $\pm 0.3$  °C
- Power supply: 200 ... 230 V, 50/60 Hz
- Weight: 26 kg
- Version with Ethernet interface available as an option

| Type        | Flow rate<br>l / min. | PK | Cat. No.    |
|-------------|-----------------------|----|-------------|
| VALEGRO 350 | 16                    | 1  | 6522810*LLG |
| VALEGRO 500 | 19                    | 1  | 6522811*LLG |

## High-performance freezers TSX Series, up to -35 °C

thermo  
scientific

- Low noise level
- Natural refrigerant
- Audible and visual alarm



- With auto defrost
- Whisper-quiet with a noise level of just 52 dB(A)
- Natural refrigerant (R290)
- Acoustic and visual alarm
- Self-closing door with 90° hinge

## Specifications

Temperature range: -35 ... -15 °C  
Power supply: 230 V, 50 Hz

| Type        | Capacity<br>l | External dimensions<br>(W x D x H)<br>mm | PK | Cat. No.    |
|-------------|---------------|------------------------------------------|----|-------------|
| TSX 1230 FV | 326           | 619 x 790 x 1854                         | 1  | 4671810*LLG |
| TSX 2330 FV | 650           | 711 x 962 x 1994                         | 1  | 4672628*LLG |
| TSX 3030 FV | 827           | 864 x 962 x 1994                         | 1  | 6312076*LLG |

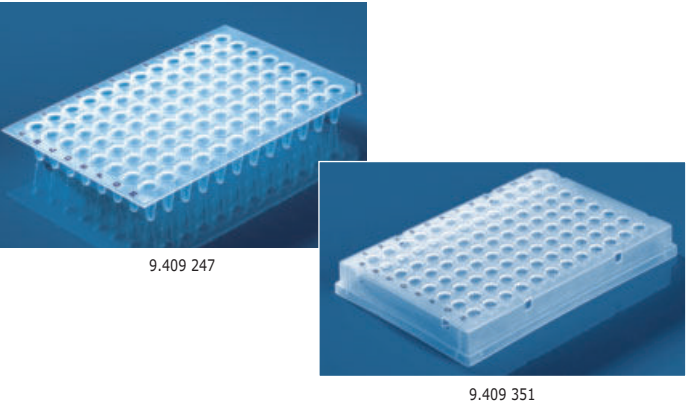
Deep freeze labels  
Cryo-Babies®/Cryo-Tags®

Temperature resistant from -196 °C to 150 °C. All labels withstand freezer temperatures down to -196 °C (liquid and vapour phase nitrogen), boiling water baths, autoclaving and moderate ovens (150 °C). Resist most organic solvents and caustic agents.

| Type         | Dimensions<br>(W x D)<br>mm | For<br>vessels         | PK   | Cat. No.    |
|--------------|-----------------------------|------------------------|------|-------------|
| Cryo-Babies® | 24 x 13                     | 0.5ml tubes            | 1000 | 9100030*LLG |
| Cryo-Babies® | 33 x 13                     | 1.5/2.0ml tubes        | 1000 | 9100031*LLG |
| Cryo-Tags®   | 38 x 13                     | General<br>application | 1000 | 9100032*LLG |



96 well PCR-Plates,  
PP, for PCR or qPCR



The ultra-thin-walled PCR plate design facilitates constant, rapid and precise heat transfer. With blue alphanumeric code and cut corner for easy orientation, or as indicated.

**96-well, non-skirted**  
PP. 0.2 ml wells. 96-well non-skirted PCR plates are suitable for most commercially available thermocyclers.

**96-well, semi-skirted**  
PP. 0.2 ml wells. 96-well semi-skirted PCR plates can easily be labelled or tagged with a barcode.

**96-well, skirted**  
PP. 0.2 ml wells. 96-well skirted PCR plates are especially rigid and are optimally suited for use with automatic pipetting systems and for being transported.

| Description                                 | Volume<br>ml | Cut corner | PK | Cat. No.    |
|---------------------------------------------|--------------|------------|----|-------------|
| Low Profile, non-skirted                    | 0.15         | H12        | 50 | 9409247*LLG |
| Low Profile, semi skirted                   | 0.15         | A12        | 50 | 9409256*LLG |
| Low Profile, fully skirted*                 | 0.15         | H1         | 50 | 9409351*LLG |
| Standard profile, non-skirted               | 0.20         | A12        | 50 | 9409254*LLG |
| Standard profile, semi skirted              | 0.20         | A12        | 50 | 9409264*LLG |
| Standard profile, non-skirted, elevated rim | 0.20         | H12        | 50 | 9409381*LLG |

\*Black alphanumeric code, no additional markings on the cut corner.

Single PCR tubes  
with attached caps, PP



0.2 ml and 0.5 ml PCR tubes with attached caps are compatible with leading thermocyclers with heated lids.

| Capacity | Description | Colour | PK   | Cat. No.    |
|----------|-------------|--------|------|-------------|
| ml       |             |        |      |             |
| 0.2      | domed cap   | clear  | 1000 | 9409370*LLG |
| 0.2      | flat cap    | clear  | 1000 | 9409371*LLG |
| 0.5      | flat cap    | clear  | 1000 | 9409372*LLG |

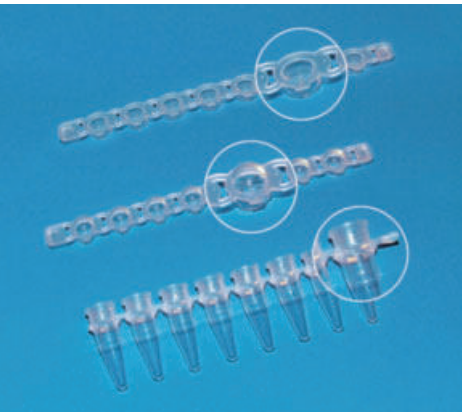
Sealing Films,  
Self-adhesive, Polyester



In case the microplates, PCR-plates, and deep well plates need to be not only covered but also securely sealed, self-adhesive sealing films are the ideal solution.

| Description                     | Application          | PK  | Cat. No.    |
|---------------------------------|----------------------|-----|-------------|
| single film                     | ELISA, PCR           | 100 | 9409386*LLG |
| single film, highly transparent | ELISA, Real Time PCR | 100 | 4000237*LLG |

Strips of 8-/12- PCR tubes  
plus detached cap strips, PP



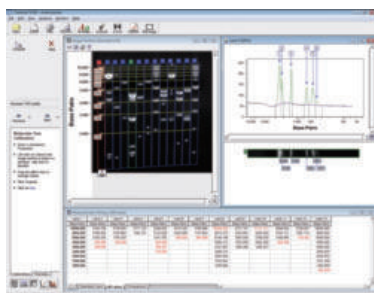
The lids of the 8-strip strips can be opened and closed easily without tools. The vessels have a retaining tab at one end, and the lid strips have a small tab on the side of each lid for careful, contamination-free opening. Made of high-quality polypropylene, RNase-, DNase-, and DNA-free.

| Capacity | Description                                     | Colour | PK  | Cat. No.    |
|----------|-------------------------------------------------|--------|-----|-------------|
| ml       |                                                 |        |     |             |
| 0.2      | Strips of 8 PCR tubes, without caps             | clear  | 125 | 9409374*LLG |
| 0.2      | Strips of 8 PCR tubes, with separate flat caps  | clear  | 250 | 4007894*LLG |
| 0.2      | Strips of 8 PCR tubes, with separate domed caps | clear  | 250 | 4007895*LLG |

## Gel documentation system microDOC with UV-Transilluminator



- Powerful camera
- Compact device



Recently upgraded with a new 24.1 megapixel digital CMOS camera to guarantee superb resolution, the microDOC is the researcher's choice for a simple, ultra-compact gel documentation system that meets constraints in both budget and space within the laboratory. A large 8" TFT screen enables images, including agarose and fluorescent gels, colorimetric gels, autoradiography film and blotting membrane, to be captured clearly and easily. The system is computer-free and supplied with an 8 GB storage card and 58 mm ethidium bromide filter as standard. Files are saved onto the storage card in RAW, TIFF-RGB and JPEG formats.

**microDOC BASIC:** The microDOC BASIC is a simple, low-cost system comprising a lift-off dark room hood and 24.1 megapixel digital camera, through which the gel is viewed directly.

**TotalLab™ 1D software:** Its main functions include: lane creation, background subtraction, band detection, profile deconvolution, and molecular size, pI and quantity calibration. More sophisticated standalone software options are available for 1D applications that require band matching, array, colony counting and image ToolBox functionalities.

### Camera:

- File Format Design rule for Camera File system, DPOF (version 1.1) compliant
- Focus-Area Selection AF mode and manual focus are available
- Hood
- Safety Door Switch Automatically disconnects UV transilluminator, while opening the chamber door during operation

### Specifications Camera

|                                     |                                                         |
|-------------------------------------|---------------------------------------------------------|
| Effective Pixels:                   | 24.1 megapixels                                         |
| Type:                               | TTL-CT-SIR with CMOS sensor                             |
| Lens:                               | Canon EF/EF-S 18-55 mm                                  |
| Maximum Aperture:                   | f/2.8 - f/5.6                                           |
| Image Resolution:                   | 720 × 480 up to 5.184 × 3.456                           |
| Data Type Still images:             | Exif 2.3 (JPEG), RAW (CR2)                              |
| Movies:                             | MOV (Image data: H264; Audio data: Linear PCM (stereo)) |
| Filter:                             | Ethidium Bromide or SYBR Green (58 mm)                  |
| Inner White Light:                  | 2 x 3 W white light LED (excl. MDOC Basic Models)       |
| Monitor:                            | 8" TFT liquid crystal screen                            |
| Display Format:                     | 960 x 234 mm                                            |
| Luminance:                          | 300 cd/m <sup>2</sup>                                   |
| Display Mode:                       | NTSC/PAL mode switchable                                |
| Dimensions with camera (W x D x H): | 290 x 325 x 515 mm                                      |
| Rated Voltages:                     | 110 - 220 V                                             |
| Weight approx.:                     | 7.7 kg                                                  |

| Description                       | PK | Cat. No.    |
|-----------------------------------|----|-------------|
| Compact Gel documentation system* | 1  | 9584759*LLG |

\* Incl. Analysis Software TotalLab1D.

## LLG-Agarose Standard



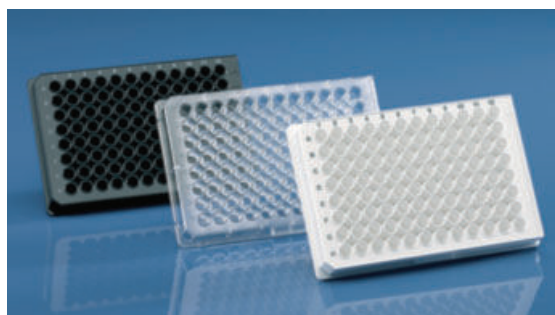
High transparency and low background of the agarose gel ensure clear and sharply defined bands.

- Very good dissolution and rapid gel formation
- High gel strength even at low agarose concentrations
- Suitable for agarose concentrations from 0.75 up to 2%
- Good separation efficiency for nucleic acid fragments between 250 bp and 23 kb
- Free of DNase and RNase

|                |                                  |
|----------------|----------------------------------|
| Appearance:    | White powder                     |
| Clarity (NTU): | ≤4 (1.5% gel)                    |
| Gelling point: | 36 ± 1.5 °C (1.5% gel)           |
| Melting point: | 88 ± 1.5 °C (1.5% gel)           |
| Gel strength:  | ≥1000 g/cm <sup>2</sup> (1% gel) |
| Sulphate:      | ≤0.15%                           |

| Capacity | PK | Cat. No.    |
|----------|----|-------------|
| g        |    |             |
| 100      | 1  | 4681511*LLG |
| 500      | 1  | 4681512*LLG |

## Microtitre plate BRANDplates®, 96-well, pureGrade™, Medium Binding



Non-treated surface. The standard plate for most applications. Particularly applicable for homogenous assays, screening, and in the field of storage.

- Non-sterile
- Grey or embossed alphanumeric coding
- ANSI/SLAS format

The scope of supply includes 1 lid per pack.

| Description          | Bottom shape/<br>Well volume µl | PK  | Cat. No.    |
|----------------------|---------------------------------|-----|-------------|
| 96-well, transparent | U / 330                         | 100 | 4000238*LLG |
| 96-well, transparent | V / 360                         | 100 | 6233851*LLG |
| 96-well, transparent | F / 350                         | 100 | 6231785*LLG |
| 96-well, transparent | C / 350                         | 100 | 4000239*LLG |
| 96-well, white       | U / 330                         | 100 | 4000240*LLG |
| 96-well, white       | F / 350                         | 100 | 6233548*LLG |
| 96-well, black       | U / 330                         | 100 | 4000241*LLG |
| 96-well, black       | F / 350                         | 100 | 6233756*LLG |

## Repetitive pipette HandyStep® touch/HandyStep® touch S



- Intuitive Operation
- Ergonomic
- Automatic Tip Ejection



Repetitive pipette with colour touch display and automatic tip size recognition.

The automatic tip size recognition of the PD-Tips II, with patented coding on the piston, automatically displays the tip size after inserting the tip. By inserting a new PD-tip of the same size, all instrument settings are maintained.

**HandyStep® touch** with the standard modes Multi-Dispensing, Auto-Dispensing, Pipetting and Favorites  
**HandyStep® touch S** with the additional functions Sequential Dispensing, Multi-Aspiration and Titration

- Touchscreen operation with intuitive menu navigation and integrated help function
- Automatic tip ejection by the press of a button
- Variable volume adjustment from 1.0 µl to 50 ml
- USB-C connection for quick charging by cable
- Inductive charging with optional charging stand
- Compatible third party tips can also be used

**Scope of supply:** Repetitive pipette, includes universal AC adapter (for Europe, UK, USA, Japan, Australia and New Zealand), Li-Ion battery, USB-Type C cable, shelf/rack mount, sample PD-Tips II, operating manual, performance certificate

| Type               | Colour | PK | Cat. No.    |
|--------------------|--------|----|-------------|
| HandyStep® touch   | White  | 1  | 9284015*LLG |
| HandyStep® touch S | Black  | 1  | 9284016*LLG |

## Pasteur pipettes, PE



**Kartell**

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

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

## Dispenser tips, PD-Tips II



The tips are also compatible with all other instruments of the HandyStep® family and with repetitive pipettes from other manufacturers.

- Cylinder: PP/piston: HDPE, 0.1 ml piston: LCP
- Volumes from 0.1 ml to 50 ml
- Comply with the requirements of ISO 8655
- Supplied with batch certificate
- Adapter for sizes 25 ml and 50 ml included
- PD-Tips II cannot be autoclaved; the adapters are autoclavable

| Nominal capacity ml | Description | Sterile | PK  | Cat. No.    |
|---------------------|-------------|---------|-----|-------------|
| 0.10                | bulk        | -       | 100 | 9280950*LLG |
| 0.50                | bulk        | -       | 100 | 9280951*LLG |
| 1.00                | bulk        | -       | 100 | 9280952*LLG |
| 1.25                | bulk        | -       | 100 | 9280953*LLG |
| 2.50                | bulk        | -       | 100 | 9280954*LLG |
| 5.00                | bulk        | -       | 100 | 9280955*LLG |
| 10.00               | bulk        | -       | 100 | 9280956*LLG |
| 12.50               | bulk        | -       | 100 | 9280957*LLG |
| 25.00               | bulk        | -       | 50  | 9280958*LLG |
| 50.00               | bulk        | -       | 25  | 9280959*LLG |

## Automatic Burettes, Schilling pattern, borosilicate glass 3.3/ PE



- Precise dosing using the press button
- Exact fine titration with the micro-screw
- With Schellbach stripe
- Resistant to chemicals
- Further parts in contact with the medium: PP, natural rubber
- Graduation according to Category B (Tolerances according to DIN EN ISO 385)
- Blue ring graduations

| Capacity ml | Grad. ml | Tolerance ± ml | Height mm | PK | Cat. No.    |
|-------------|----------|----------------|-----------|----|-------------|
| 5           | 0.05     | 0.030          | 610       | 1  | 7300482*LLG |
| 10          | 0.05     | 0.045          | 560       | 1  | 6070383*LLG |
| 15          | 0.1      | 0.045          | 520       | 1  | 6070634*LLG |
| 25          | 0.1      | 0.075          | 650       | 1  | 7200163*LLG |
| 50          | 0.1      | 0.075          | 920       | 1  | 6059942*LLG |





## Microliter pipettes LLG-proMLP

All LLG-proMLP pipettes are equipped with an adjustable eject button allowing right and left handed users to set the button\*according to their preferences.



- High quality **Made in France**
- High accuracy, reliability and reproducibility
- Extremely light weight while the robustness still remains
- Perfect ergonomics for highest comfort
- Colour-coded push-button for quick operation
- Extremely low pipetting forces
- **Built-in volume locking** for error-free results
- Completely autoclavable at 121 °C
- Including individual calibration certificate (according to EN ISO 8655)

\*not available for 5 ml and 10 ml pipette

## Single channel microliter pipettes



**Scope of supply:** microliter pipette, calibration tool



| Capacity   | Increments | Accuracy max. vol. (± R%) | PK | Cat. No.    |
|------------|------------|---------------------------|----|-------------|
| μl         | μl         |                           |    |             |
| 0.2-2      | 0.002      | 1.65                      | 1  | 6270420*LLG |
| 0.5-10     | 0.02       | 1.10                      | 1  | 6270421*LLG |
| 2-20       | 0.02       | 1.00                      | 1  | 6270422*LLG |
| 10-100     | 0.2        | 0.80                      | 1  | 6270423*LLG |
| 20-200     | 0.2        | 0.80                      | 1  | 6270424*LLG |
| 100-1000   | 2          | 0.80                      | 1  | 6270425*LLG |
| 500-5000   | 2          | 0.66                      | 1  | 6270426*LLG |
| 1000-10000 | 20         | 0.60                      | 1  | 6270427*LLG |

## LLG-Pipette stands for single channel microliter pipettes, PMMA



White, stable plastic (PMMA), industrial grade. Adjustable heights. Suitable for all kinds of pipettes.

| Description    | PK | Cat. No.    |
|----------------|----|-------------|
| for 4 pipettes | 1  | 9280014*LLG |
| for 6 pipettes | 1  | 9280011*LLG |

## Multichannel microliter pipettes



**New**

- Made in the EU
- Adjustable tip ejector button
- Integrated volume lock

The new LLG-proMLP multichannel microliter pipettes combine high accuracy and reliability with ergonomic and extremely low force pipetting, relieving stress from your hand and thumb. Available volume ranges from 0.5 μl to 300 μl.

**Scope of supply:** microliter pipette, calibration tool



| Capacity   | Colour coding | Channels | PK | Cat. No.    |
|------------|---------------|----------|----|-------------|
| μl         |               |          |    |             |
| 0.5 ... 10 | red           | 8        | 1  | 4690343*LLG |
| 2 ... 20   | light yellow  | 8        | 1  | 4690344*LLG |
| 20 ... 200 | yellow        | 8        | 1  | 4690346*LLG |
| 20 ... 300 | green         | 8        | 1  | 6523142*LLG |
| 0.5 ... 10 | red           | 12       | 1  | 4690347*LLG |
| 2 ... 20   | light yellow  | 12       | 1  | 4690348*LLG |
| 20 ... 200 | yellow        | 12       | 1  | 4690350*LLG |
| 20 ... 300 | green         | 12       | 1  | 6523143*LLG |



- Improved optical clarity and pipette fit
- Colored coded rack inserts for easy identification
- Graduated (5 and 10 ml without graduation, 6.326 975 with graduation)
- Autoclavable
- DNase and RNase free

| Capacity       | Colour      | Package contents     | PK  | Cat. No.    |
|----------------|-------------|----------------------|-----|-------------|
| μl             |             |                      |     |             |
| 0.1 ... 10     | transparent | 10 x 96 tips in rack | 960 | 4668776*LLG |
| 0.1 ... 10     | transparent | 10 x 96 tips in rack | 960 | 6491406*LLG |
| 1 ... 200      | transparent | 10 x 96 tips in rack | 960 | 4668778*LLG |
| 1 ... 200      | yellow      | 10 x 96 tips in rack | 960 | 4668779*LLG |
| 100 ... 1000   | transparent | 8 x 96 tips in rack  | 768 | 4668782*LLG |
| 100 ... 1000   | blue        | 8 x 96 tips in rack  | 768 | 4668783*LLG |
| 100 ... 5000   | clear       | 1 bag of 250         | 250 | 9409097*LLG |
| 100 ... 5000   | clear       | 1 bag of 250         | 250 | 6326975*LLG |
| 1000 ... 10000 | clear       | 1 bag of 100         | 100 | 9409098*LLG |

## LLG-Measuring jugs with handle, PP



Made of highly transparent Polypropylen. With easy-to-read blue graduation.

- Autoclavable at 121 °C
- Open handle
- Stackable
- According to ISO 7056

| Nominal capacity<br>ml | Grad.<br>ml | Ext. diam.<br>mm | Height<br>mm | PK | Cat. No.    |
|------------------------|-------------|------------------|--------------|----|-------------|
| 250                    | 5           | 75               | 115          | 2  | 9013680*LLG |
| 500                    | 10          | 100              | 137          | 2  | 9013681*LLG |
| 1000                   | 10          | 125              | 167          | 2  | 9013682*LLG |
| 2000                   | 20          | 148              | 217          | 1  | 9013683*LLG |
| 3000                   | 25          | 170              | 244          | 1  | 9013684*LLG |

## LLG-Griffin beakers, PP



Transparent. Low form with practical spout and easy-to-read blue graduation.

- Autoclavable at 121 °C
- Good chemical resistance
- Stackable
- According to ISO 7056

| Nominal capacity<br>ml | Grad.<br>ml | Diam.<br>mm | Height<br>mm | PK | Cat. No.    |
|------------------------|-------------|-------------|--------------|----|-------------|
| 100                    | 10          | 50          | 70           | 2  | 9013672*LLG |
| 250                    | 25          | 67          | 93           | 2  | 9013673*LLG |
| 500                    | 50          | 88          | 119          | 2  | 9013674*LLG |
| 1000                   | 50          | 109         | 147          | 2  | 9013675*LLG |
| 2000                   | 100         | 133         | 184          | 1  | 9013676*LLG |

## Aspirator bottles, series 350, HDPE



Food-grade product according to Regulation (EC) No 10/2011. Natural with printed blue graduations (in L) and a screwed closure. With or without a threaded connection at the base.

| Capacity<br>Litres | Ext. diam.<br>mm | Height<br>mm | Handle | PK | Cat. No.    |
|--------------------|------------------|--------------|--------|----|-------------|
| 5                  | 167              | 330          | 1      | 1  | 9011009*LLG |
| 10                 | 206              | 427          | 1      | 1  | 9011010*LLG |
| 25                 | 278              | 580          | 2      | 1  | 9011025*LLG |

Height in mm without cap.

## Cylindrical jars with ribbed cap, HDPE



The cylindrical jars are supplied with insert and cap. Thanks to the large neck, they are suitable for powders, solid specimen, creamy or semisolid substances, crystals and hygroscopic substances. Suitable for foodstuff according to EC Regulation 1935/2004 and EC Regulation 10/2011.

| Nominal capacity<br>ml | Ext. diam.<br>mm | Neck i. d.<br>mm | Height<br>mm | PK | Cat. No.    |
|------------------------|------------------|------------------|--------------|----|-------------|
| 70                     | 50               | 36               | 60           | 10 | 4672397*LLG |
| 120                    | 56               | 36               | 71           | 10 | 4672394*LLG |
| 250                    | 69               | 50               | 94           | 10 | 4672395*LLG |
| 500                    | 86               | 70               | 107          | 10 | 4672396*LLG |
| 1000                   | 111              | 85               | 128          | 10 | 4672393*LLG |
| 1500                   | 111              | 87               | 182          | 10 | 9073444*LLG |
| 2000                   | 111              | 87               | 235          | 10 | 9073446*LLG |

## Vial disposer Arnold/Marco, PP



For the safe and quick disposal of HPLC vials. Thanks to the safety funnel with an extra-large neck diameter, your vials fall easily through the opening without jamming or clogging the opening. The hinged lid safely holds back solvent vapors and other contaminants.

- For the disposal of large quantities of sample vials
- Connection for optional activated carbon filter available
- Low overall height, also suitable for safety storage cabinets (Marco)

**Scope of supply:** 10 l canister, safety funnel

| Type   | Dimensions<br>(W x D x H)<br>mm | Funnel<br>diam.<br>mm | PK | Cat. No.    |
|--------|---------------------------------|-----------------------|----|-------------|
| Arnold | 195 x 195 x 380                 | 185                   | 1  | 6328027*LLG |
| Marco  | 195 x 195 x 380                 | 140                   | 1  | 6328028*LLG |

## LLG-Autoclavable bags, PP



Constructed from very strong 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.

| Capacity | Width | Length | Package contents          | PK  | Cat. No.    |
|----------|-------|--------|---------------------------|-----|-------------|
| L        | mm    | mm     |                           |     |             |
| 1.5      | 200   | 300    | Dispenser box of 100 bags | 100 | 9404099*LLG |
| 6.0      | 300   | 500    | Box of 500 bags           | 500 | 9404220*LLG |
| 22.0     | 400   | 780    | Box of 250 bags           | 250 | 9404221*LLG |
| 25.0     | 500   | 780    | Box of 250 bags           | 250 | 9404222*LLG |
| 32.0     | 600   | 800    | Box of 250 bags           | 250 | 9404223*LLG |
| 32.0     | 600   | 780    | Box of 100 bags           | 100 | 9404103*LLG |
| 72.0     | 700   | 1100   | Box of 250 bags           | 250 | 9404224*LLG |
| 72.0     | 700   | 1100   | Box of 75 bags            | 75  | 9404105*LLG |

## Needles and waste containers Medibox®



- Break-resistant, puncture-resistant and stable when used as intended in accordance with the specifications of DIN EN ISO 23907
- Can be temporarily closed with one hand
- Can be permanently sealed
- Marking of maximum fill level on the lid or directly on the box
- Autoclavable at 134° for up to 18 minutes (does not apply to the Medibox® 0.8 litre)
- Certified according to: DIN EN ISO 23907; Directive 2008/68/EC and ADR-UN approval: UN 3291
- Meets the requirements for waste containers according to TRBA 250

| Volume<br>litres | Filling<br>volume<br>L | Dimensions<br>(W x D x H)<br>mm | PK | Cat. No.    |
|------------------|------------------------|---------------------------------|----|-------------|
| 0.8              | 0.67                   | 98 x 98 x 180                   | 9  | 6321710*LLG |
| 2.4              | 2.0                    | 151 x 151 x 200                 | 9  | 6321707*LLG |
| 4.7              | 3.9                    | 190 x 190 x 200                 | 5  | 6321708*LLG |
| 5.7              | 4.8                    | 190 x 190 x 257                 | 5  | 6321709*LLG |

LLG-Absorbent,  
oil and chemical binder, granules

Universal chemical and oil binder for all liquids, also for solvents. Very high absorption capacity (up to 1:75 of aqueous solutions). Almost dust-free granules with colour indicator: colour changes to yellow in contact with acids, to red in contact with alkalis. Disposal according to the pollutant recorded.

| Capacity | Package              | PK | Cat. No.    |
|----------|----------------------|----|-------------|
| kg       |                      |    |             |
| 1.5      | Square handle bottle | 1  | 6283037*LLG |
| 5.0      | Bucket               | 1  | 6270479*LLG |

LLG-Safety Eyeshields *lady*

- CE approved to EN 166 and EN 170
- Panoramic wrapping lens
- 180° visual field
- Nosepad and terminal tips made from soft, moldable material for optimal comfort and individual customisation
- 100% UV protection (up to 400 nm)
- Weight only 25 g

| Colour      | Lens                                    | PK | Cat. No.    |
|-------------|-----------------------------------------|----|-------------|
| white/green | clear, AF+, AS+,<br>2C-1.2 U 1 FT KN CE | 1  | 9006007*LLG |
| white/pink  | clear, AF+, AS+,<br>2C-1.2 U 1 FT KN CE | 1  | 9006008*LLG |
| black/green | clear, AF, AS,<br>2C-1.2 U 1 FT CE      | 1  | 9006009*LLG |

Disposable Gloves  
Kimtech™ Purple Nitrile™

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



JKT



VIRUS




Offering the highest protection of all Kimtech™ gloves, Purple Nitrile™ gloves are latex-, silicone- and powder-free.

- Contains no natural rubber latex
- Textured fingertip, enhances wet and dry grip
- Virus Protection
- AQL 0.65
- **Cat. III Low Chemical resistant**

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 420, Suitable for food handling.

| Size         | Length | PK  | Cat. No.    |
|--------------|--------|-----|-------------|
|              | mm     |     |             |
| XS (5 to 6)  | 240    | 100 | 9005420*LLG |
| S (6 to 7)   | 240    | 100 | 9005421*LLG |
| M (7 to 8)   | 240    | 100 | 9005422*LLG |
| L (8 to 9)   | 250    | 100 | 9005423*LLG |
| XL (9 to 10) | 250    | 90  | 9005424*LLG |

## Hand-Held Drench Hoses



Two sprays in one. The hose can be used as a fixed eyewash when fitted into the mount. The hose can also be removed from the mount so that other body parts and reclining patients can be treated.

- Wall-/ table mount included
- according to DIN 1988 und DIN EN 1717
- according to DIN EN 15154-2:2006 and ANSI Z358.1-2014
- DIN-DVGW tested and certificated
- DIN certification label included

|                |                                        |
|----------------|----------------------------------------|
| Spray height:  | 250mm                                  |
| Hose length:   | 1500mm                                 |
| Connection:    | 1/2" swivel nut                        |
| Water output:  | 7 litres/min per spray head, regulated |
| Inlet fitting: | M 28 x 80 mm                           |

| Description              | Connection  | PK | Cat. No.    |
|--------------------------|-------------|----|-------------|
| 1 spray head, 45° angle  | 1/2" female | 1  | 9733778*LLG |
| 2 spray heads, 45° angle | 1/2" female | 1  | 9733779*LLG |
| 1 spray head, vertical   | 1/2" female | 1  | 9733786*LLG |

Thermal protection gloves  
TempTec 332, neoprene

EN 388 EN ISO 374-1 Type A EN 407 EN 511



2212X



ACLMNS



X2XXXX



- Thermal insulation due to double-knit cotton
- Good grip due to pebbled palms
- Chemical resistance to acids and aliphatic solvents
- 1 pair per pack

|         |                 |
|---------|-----------------|
| Length: | 355 mm          |
| Colour: | black/blue      |
| CE:     | <b>Cat. III</b> |

| Size | PK | Cat. No.    |
|------|----|-------------|
| 8    | 1  | 6269287*LLG |
| 9    | 1  | 6281320*LLG |
| 10   | 1  | 6316498*LLG |



## Precision wipes, KIMTECH SCIENCE, 1-ply



Exceptional  
Workplaces®



Precision tissue wipes for critical cleaning in the electronic, optic and precision mechanics industries, lint-free, highly absorbent and strong, even when wet. 1-ply, white. Anti-static.

| Dimensions | Package contents | PK | Cat. No.    |
|------------|------------------|----|-------------|
| mm         |                  |    |             |
| 304 x 304  | Box of 196 wipes | 1  | 9413020*LLG |
| 115 x 215  | Box of 280 wipes | 1  | 9413021*LLG |

## Wipes, WypAll\*L20/L30



Exceptional  
Workplaces®



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

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

| Type | Width | Package contents    | Colour | PK | Cat. No.    |
|------|-------|---------------------|--------|----|-------------|
|      | mm    |                     |        |    |             |
| L20  | 330   | 1 roll x 500 wipes  | blue   | 1  | 9413044*LLG |
| L20  | 185   | 6 rolls x 300 wipes | white  | 6  | 9413091*LLG |
| L30  | 370   | 1 roll x 670 wipes  | blue   | 1  | 9413046*LLG |

## LLG-Hand towels, 3-ply



Bright white, extra absorbent, completely unfolding, matching most dispenser systems, economical use due to high absorbency and comfortable size. Suitable for LLG-Dispenser for hand towels, Cat. No. 7.618 375.

| Width | Length | Package contents          | PK | Cat. No.    |
|-------|--------|---------------------------|----|-------------|
| mm    | mm     |                           |    |             |
| 220   | 420    | 20 Packs with 100 tissues | 20 | 6266568*LLG |

## Brushes, Set

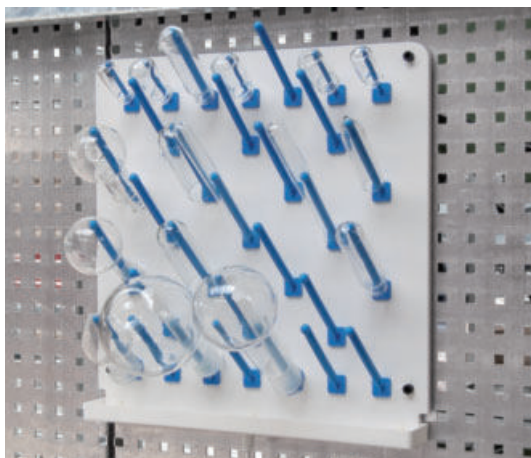


### Set consisting of:

Pipette brush Ø 5 mm, L 500 mm (9.019 010)  
Reagent bottle brush with wool tip Ø 10 mm, L 190 mm (9.019 020)  
Reagent bottle brush with wool tip Ø 30 mm, L 270 mm (9.019 040)  
Reagent bottle brush with head bundle Ø 10 mm, L 250 (9.019 030)  
Bottle brush with head bundle Ø 50 mm, L 330 mm (9.019 050)  
Bottle brush with head bundle Ø 60 mm, L 470 mm (9.019 060)  
Beaker brush Ø 85 mm, L 390 mm (9.019 070)  
Beaker brush Ø 85 mm, L 430 mm (9.019 080)  
Beaker brush Ø 100 mm, L 430 mm (9.019 090)  
Beaker brush Ø 100 mm, L 630 mm (9.019 092)

| Type | PK | Cat. No.    |
|------|----|-------------|
| Set  | 1  | 9019002*LLG |

## Draining rack LaboPlast®, PVC



The stable rods are individually placed into the holes of the draining rack and are clicked into place. Their positions can be changed at any time.

**Scope of supply draining rack with drain channel:** Draining rack incl. wall mounting set (screws, dowels), removable drain channel incl. drainage connection and drain tube

| Width | Height | PK | Cat. No.    |
|-------|--------|----|-------------|
| mm    | mm     |    |             |
| 400   | 400    | 1  | 9003374*LLG |
| 500   | 500    | 1  | 9003375*LLG |
| 600   | 600    | 1  | 9003376*LLG |

## LLG-Trolleys, Stainless Steel



Made of CNS 18/10, material no. 1.4301. All shelves are produced with an all-around raised profile edge. This prevents anything from slipping over the edge. The load capacity per shelf is 80 kg. Wall bumpers made of plastic (polyamide) on all four corners protect against damage.

| Description                       | Width | Depth | Height | PK | Cat. No.    |
|-----------------------------------|-------|-------|--------|----|-------------|
|                                   | mm    | mm    | mm     |    |             |
| 2 shelves, vertical spacing 585mm | 900   | 600   | 950    | 1  | 9148101*LLG |

## Wiper Bowl® Polytex®

The cleaning cloths are packed in the practical Wiper Bowl® dispenser bucket. This means that the moist cleaning substances remain effective for a particularly long time and the wipes do not dry out.

- consisting of 100% extremely robust and low-lint polypropylene
- for removing oils, grease, adhesives, paints etc, adhesives, colours etc. and stubborn soiling

**Attention:**  
**Minimum order quantity = 6 buckets !**



| Description                            | PK | Cat. No.    |
|----------------------------------------|----|-------------|
| 1 bucket with 72 tissues at 25 x 25 cm | 1  | 7673365*LLG |

## Spirit burner, 18/10 steel



With a wick height adjuster and a sealing cap. Capacity approx. 60ml.

| Type          | PK | Cat. No.    |
|---------------|----|-------------|
| Spirit burner | 1  | 9018560*LLG |

## LLG-Laboratory Power Failure Detector

- Immediate visual and acoustic alarm
- Alarm can sound for short power outages, or for larger periods of at least 12 hours (can be switched off manually).
- Plug safety cover offers protection against accidental disconnection of plug
- Maximum total power of connected devices 3500 W 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 |

## Safety Bunsen Burner, schuett phoenix II



Ideal for safety  
cabinets

*schuett***biotec.de**



eco



standard

For sterilising, heating, flame sterilising. For use in every microbiological laboratory or in safety cabinets.

**schuett phoenix II eco:** (with LED control lamp and foot-switch), Start flame by foot-switch or button (On/Off). Best suited for use in microbiological safety cabinets. Best price-to-performance ratio.

**schuett phoenix II standard:** (brilliant colour display, selection of native language, sensor and foot-switch) Start/Stop flame by activating sensor 1x or 2x, use foot switch or press button by hand. Continuous display of timer.

**schuett phoenix II accu:** (brilliant colour display, selection of native language, sensor and built-in extra heavy duty power cells) Start/stop flame by activating sensor 1x or 2x, use foot-switch or press button by hand. Continuous display of timer and battery power. Operates for up to 30 hours, intermittent use. Complete with battery charger for 3-hour recharging. Ideal for mobile usage.

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

| Type                                | PK | Cat. No.    |
|-------------------------------------|----|-------------|
| schuett phoenix II eco*             | 1  | 9018760*LLG |
| schuett phoenix II standard*        | 1  | 9018761*LLG |
| schuett phoenix II accu             | 1  | 9018762*LLG |
| *incl. foot switch, stainless steel |    |             |

## Inoculation loops and loop stands

*schuett***biotec.de**



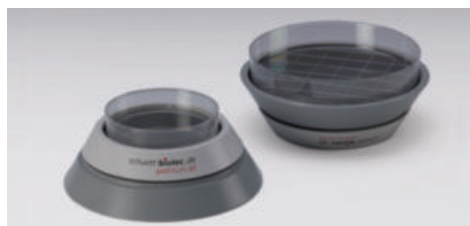
**Inoculation loops** made from stainless steel, special stainless steel wire or platinum-iridium wire (90/10). It can be heated to red heat. Length: 60 mm. Wire diameter: 0.5 mm.

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

| Type                             | Description                  | Loop diam. mm | PK | Cat. No.    |
|----------------------------------|------------------------------|---------------|----|-------------|
| 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 |
| 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 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 |

## Petri dish turntables, schuett petrurn

*schuett***biotec.de**



9.520 201



9.520 200

For uniform inoculation of petri dishes. Easy-to-use. Made in Germany.

### schuett petrurn-M

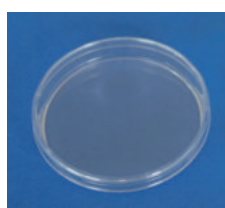
With manually operated. Petri dish (90 mm or 150 mm diameter).

### schuett petrurn-E

Electrically driven (100 - 240 V, 50/60 Hz). Easy operation of the rotary table, contact-free start via IR sensor (adjustable rotation time from 3 to 120 sec.), in continuous operation or optionally in foot switch mode. Infinitely adjustable speed from 10 to 120 rpm. For Petri dishes up to Ø 100 mm (Ø 150 mm optional). Compact housing made of stainless steel.

| Type                                                    | Dimensions mm       | PK | Cat. No.    |
|---------------------------------------------------------|---------------------|----|-------------|
| schuett petrurn-M, manually driven                      | (Dia. x H) 160 x 45 | 1  | 9520201*LLG |
| schuett petrurn-E, electrically driven                  | (Dia. x H) 160 x 70 | 1  | 9520200*LLG |
| Foot pedal for schuett petrurn-E                        |                     | 1  | 9520203*LLG |
| Turntable adapter for Petri dishes up to 150mm diameter |                     | 1  | 9520204*LLG |

## LLG-Petri dishes, PS



Made in the EU



Produced under aseptic conditions in an ISO 6 cleanroom. Contact plate with counting grid.

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

| Ext. diam. mm | Description                | Height approx. mm | PK   | Cat. No.    |
|---------------|----------------------------|-------------------|------|-------------|
| 60            | with triple vents, aseptic | 14                | 1080 | 6323696*LLG |
| 60            | without vents, aseptic     | 14                | 1080 | 6323697*LLG |
| 90            | with triple vents, aseptic | 16                | 480  | 6285823*LLG |
| 90            | without vents, aseptic     | 16                | 480  | 6285824*LLG |
| 60            | with triple vents, sterile | 14                | 1080 | 4678371*LLG |
| 60            | without vents, sterile     | 14                | 1080 | 4678372*LLG |
| 90            | with triple vents, sterile | 16                | 480  | 6285816*LLG |
| 90            | without vents, sterile     | 16                | 480  | 6285817*LLG |
| 150           | with triple vents, sterile | 19                | 140  | 4680144*LLG |

Mini centrifuge LLG-uniCFUGE 2



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-uniCFUGE 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-strips.

**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) |
| Dimensions (diam. x H): | 140 x 120 mm                                        |
| Power supply:           | 100 ... 240 V, 50/60 Hz                             |
| Warranty:               | 3 years                                             |

| Description                         | Plug type | PK | Cat. No.    |
|-------------------------------------|-----------|----|-------------|
| LLG-uniCFUGE 2 with universal rotor | EU        | 1  | 6263510*LLG |

Safe-lock reaction tubes, PP



- A small clasp on the patented cap locking device clips onto the rim of the tube
- Autoclavable when open (121 °C, 20 min.)
- With frosted labelling area.
- Excellent mechanical stability for centrifugation
- Graduated

| Capacity | Colour           | PK   | Cat. No.    |
|----------|------------------|------|-------------|
| ml       |                  |      |             |
| 0.5      | Transparent      | 500  | 9409320*LLG |
| 1.5      | Transparent      | 1000 | 9409331*LLG |
| 2.0      | Transparent      | 1000 | 9409341*LLG |
| 0.5      | Assorted colours | 500  | 9409357*LLG |
| 1.5      | Assorted colours | 1000 | 9409358*LLG |
| 2.0      | Assorted colours | 1000 | 9409359*LLG |

Centrifuge Frontier™ Multi FC5707



Including rotor for 15 ml and 50 ml tubes



Compact multifunctional centrifuge for general laboratory applications, with splash-proof control panel and touch-wheel control.

- Backlit, two-lined LCD display
- Quiet brushless motor
- 10 acceleration and deceleration rates
- Fast spin for small measurement runs
- Timer 10 s to 99 h 59 min 59 s
- Memory for up to 99 programmes
- Lid locking system
- Imbalance sensor
- Angle rotor for 4 x 50 ml or 4 x 15 ml tubes

**Scope of supply:** Centrifuge, 4 x 50/15 ml angle rotor

Specifications

|                                |                    |
|--------------------------------|--------------------|
| Max. rcf:                      | 4445 x g           |
| Speed:                         | 200 ... 6800 rpm   |
| Permitted ambient temperature: | 2 ... 35 °C        |
| Dimensions (WxDxH):            | 277 x 356 x 236 mm |
| Power supply:                  | 230 V, 50/60 Hz    |
| Weight:                        | 10 kg              |

| Type       | PK | Cat. No.    |
|------------|----|-------------|
| FC5707+R09 | 1  | 6492207*LLG |

Eppendorf Tubes® BioBased, PP, with screw cap, HDPE



Eppendorf Tubes® BioBased are made of 90% bio-based plastic. For cell culture and cell biology applications, as well as for sample preparation in microbiology and molecular biology laboratories.

- Sterile
- Pyrogen-, DNase-, RNase- and DNA-free
- Lid with grooved sides
- Conical with screw cap
- Large labeling field
- ISCC PLUS and ACT certification

| Nom. capacity | Max. rcf | Package       | PK  | Cat. No.    |
|---------------|----------|---------------|-----|-------------|
| L             | x g      |               |     |             |
| 5             | 2500     | 2 bags of 100 | 200 | 4687109*LLG |
| 15            | 19500    | 10 bags of 50 | 500 | 4687110*LLG |
| 25            | 17000    | 8 bags of 25  | 200 | 4687111*LLG |
| 50            | 19500    | 20 bags of 25 | 500 | 4687112*LLG |



## Ultrapure water system arium® mini plus extend/mini plus extend UV



- For type 1 and type 3 water
- Removable dosing unit
- Compact

SARTORIUS



arium® mini plus extend

A combined ultrapure water system was developed to provide ASTM type 1 and type 3 water. arium® mini is the first ultrapure water system with integrated bag tank technology. The 5-litre bags are made of multilayer and specialised film, conforming to biocompatibility standards. The pure water can be stored in the side integrated 5-litre bag until the production of type 1 pure water.

The arium® mini extend versions have a removable dispenser with magnetic holder for ergonomic and splash-free filling. The combination of the dispenser with the ultrapure water system enables a small footprint. Can be combined with Sterile Plus final filter or Cell Plus filter.

| Type                       | PK | Cat. No.    |
|----------------------------|----|-------------|
| arium® mini plus extend    | 1  | 6493291*LLG |
| arium® mini plus extend UV | 1  | 6493292*LLG |

## Accessories for Ultra Pure Water System arium® mini plus

| Type                               | PK | Cat. No.    |
|------------------------------------|----|-------------|
| Sterile filter                     | 1  | 6288218*LLG |
| Pre-treatment cartridge            | 1  | 7647749*LLG |
| Scientific kit ultrapure cartridge | 1  | 7647755*LLG |
| 5-litre bag                        | 1  | 7647756*LLG |

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



With blue PP screw cap and pouring ring. ISO 4796-1 compliant. Thread acc. to DIN 168-1 and approximate graduations.

| Capacity | Diam. | Height | Neck thread | PK | Cat. No.         |
|----------|-------|--------|-------------|----|------------------|
| ml       | mm    | mm     | GL          |    |                  |
| 1000     | 101   | 230    | 45          | 1  | 218015455*SCHOTT |
| 2000     | 136   | 265    | 45          | 1  | 218016357*SCHOTT |
| 3500     | 160   | 295    | 45          | 1  | 218016957*SCHOTT |
| 5000     | 182   | 335    | 45          | 1  | 218017353*SCHOTT |
| 10000    | 227   | 415    | 45          | 1  | 218018658*SCHOTT |
| 15000    | 268   | 450    | 45          | 1  | 218018855*SCHOTT |
| 20000    | 288   | 510    | 45          | 1  | 218019157*SCHOTT |

## Distilled water



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

### Specifications

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

| Capacity | PK | Cat. No.    |
|----------|----|-------------|
| L        |    |             |
| 10.0     | 1  | 6273852*LLG |
| 20.0     | 1  | 6280900*LLG |
| 60.0     | 1  | 6289280*LLG |

## Overhead stirrer EUROSTAR 20 digital



Overhead stirrer designed for simple stirring tasks for quantities up to 15 l (H<sub>2</sub>O). Continuous comparison of shaft speed to desired speed is maintained, and variations are adjusted automatically. This guarantees a constant speed even with changes in viscosities of the sample.

- Digital speed display
- Infinitely adjustable speed
- Push-through agitator shafts
- Overload protection
- Short-term overload operation



### Specifications

|                                            |                   |
|--------------------------------------------|-------------------|
| Stirring quantity max. (H <sub>2</sub> O): | 15 l              |
| Max. viscosity:                            | 10000 mPas        |
| Motor rating input/output:                 | 70/42 W           |
| Speed range:                               | 0/30 to 2000 rpm  |
| Max. torque at stirring shaft:             | 20 Ncm            |
| Display:                                   | LED               |
| Chuck range:                               | 0.5 to 10 mm      |
| Dimensions (W x D x H):                    | 86 x 208 x 248 mm |
| Weight:                                    | 4.4 kg            |
| Protection class DIN EN 60529:             | IP 42             |
| Power supply:                              | 230 V, 50/60 Hz   |

| Type                | Connector | PK | Cat. No.    |
|---------------------|-----------|----|-------------|
| EUROSTAR 20 digital | EU        | 1  | 9816691*LLG |
| EUROSTAR 20 digital | UK        | 1  | 9816692*LLG |
| EUROSTAR 20 digital | CH        | 1  | 9816693*LLG |

## Crescent-shaped stirring rotors, PTFE



The semi-circular shape of the paddle is ideal for mixing in round-bottom flasks. The pivoting blade allows insertion into vessels with narrow necks and/or ground joints. The stirrer shafts consist of a PTFE-jacketed, stainless steel shaft and a stirrer paddle made of solid PTFE.

**Operating temperature: -200 °C to +250 °C**

| Ø agitator | Ø agitator shaft | To fit chuck diam. | PK | Cat. No.    |
|------------|------------------|--------------------|----|-------------|
| mm         | mm               | mm                 |    |             |
| 65         | 8                | 6.5                | 1  | 9197121*LLG |
| 90         | 8                | 6.5                | 1  | 9197122*LLG |
| 90         | 10               | 8.0                | 1  | 9197127*LLG |
| 90         | 10               | 8.0                | 1  | 9197124*LLG |

## Magnetic stirrer Mini MR standard



- For stirring quantities up to 1 L (H<sub>2</sub>O).
- Infinitely variable speed from 0 to 2500 rpm
- White top plate suitable for observing colour reactions
- Power supply with adapter for EU/CH/UK/USA

### Specifications

|                                           |                         |
|-------------------------------------------|-------------------------|
| Max. stirring volume, (H <sub>2</sub> O): | 1 l                     |
| Speed range:                              | 0 ... 2500 rpm          |
| Permissible ambient temperature:          | 5 ... 40 °C             |
| Permissible relative moisture:            | 80%                     |
| Plate material:                           | Polyester film          |
| Top plate dimensions (W x D):             | 115 x 115 mm            |
| Overall dimensions (W x D x H):           | 115 x 129 x 37 mm       |
| Supply requirements:                      | 100 ... 240 V, 50/60 Hz |
| Protection to DIN EN 60529:               | IP42                    |

| Type             | Plug type    | PK | Cat. No.    |
|------------------|--------------|----|-------------|
| Mini MR standard | EU/CH/UK/USA | 1  | 9720211*LLG |

## Propeller, 3 blades, PTFE



The blades are inclined at 45°. Recommended for medium to high speed operations.

The stirrer shafts consist of a PTFE-jacketed, stainless steel shaft and a stirrer paddle made of solid PTFE. High chemical resistance makes it almost universally suitable.

**Operating temperature: -200 °C to +250 °C**

| Ø agitator | Ø agitator shaft | To fit chuck diam. | PK | Cat. No.    |
|------------|------------------|--------------------|----|-------------|
| mm         | mm               | mm                 |    |             |
| 50         | 6                | 4.0                | 1  | 9197138*LLG |
| 75         | 8                | 6.5                | 1  | 9197130*LLG |
| 75         | 10               | 8.0                | 1  | 9197140*LLG |

## Eppendorf ThermoMixer™ FP/F0.5/F1.5/F2.0

eppendorf



Inclusive block



The devices combine precise heating and mixing with the highest stability, even at maximum mixing frequency. Mixing and incubation steps can be performed independently.

- For 24 reaction vessels or one microplate/deepwell plate
- Simple and intuitive operation using predefined temperature keys (37 °C, 42 °C, 56 °C and 95 °C)
- Improved temperature homogeneity with the new ThermoTop

### Specifications

Temperature operation range:  
Temperature adjustable range:  
Accuracy/Resolution:  
Max. heating time:

Shaking frequency ThermoMixer™  
F1.5/F2.0:  
Shaking frequency ThermoMixer™  
FP/F0.5:  
Orbit:  
Weight:  
Electrical heating power:  
Power supply:

### FP // F0.5 // F1.5 // F2.0

Min. 4 °C above RT, max. 100 °C  
1 °C/100 °C  
±0.5 °C at 20 ... 45 °C  
18 °C/min // 15 °C/min //  
11 °C/min // 13 °C/min

300 to 1500 rpm

300 to 2000 rpm

3 mm

6.1 kg // 6.2 kg // 6.3 kg // 6.3 kg

200 W

220-240 V, 50/60 Hz

| Type              | Dimensions<br>(W x D x H)<br>mm | PK | Cat. No.    |
|-------------------|---------------------------------|----|-------------|
| ThermoMixer™ FP   | 206 x 304 x 164                 | 1  | 9776905*LLG |
| ThermoMixer™ F0.5 | 206 x 304 x 163                 | 1  | 9776936*LLG |
| ThermoMixer™ F1.5 | 206 x 304 x 170                 | 1  | 9776904*LLG |
| ThermoMixer™ F2.0 | 206 x 304 x 170                 | 1  | 9776937*LLG |

## Roller mixer CTR-6

grant



- For CO<sub>2</sub> incubators
- With remote control



This roller mixer is specifically designed for use in harsh environments such as high CO<sub>2</sub> and humidity and provides reproducible results for cell culture growth. Removable rollers make the unit flexible and allow for performing various procedures and techniques with various cultivation vessels.

- With remote control to protect the electronics from the CO<sub>2</sub> environment of the incubator
- With stepper motor, guaranteed service life up to 10000 h
- Timer from 1 min to 96 h, continuous
- Stackable with optional stacking kits (up to 3 devices)

| Type  | Movement<br>type  | PK | Cat. No.    |
|-------|-------------------|----|-------------|
| CTR-6 | rotating/wobbling | 1  | 6523372*LLG |

## Stacking kits for roller mixer CTR-6

| Type    | Description   | PK | Cat. No.    |
|---------|---------------|----|-------------|
| CTR SK2 | For 2 devices | 1  | 6523373*LLG |
| CTR SK3 | For 3 devices | 1  | 6523374*LLG |

## Centrifuge/Vortexer MSC-2P

grant



- 2 functions in one device
- For PCR plates

MSC-2P is a compact, benchtop digital centrifuge and vortex mixer for unskirted or semi-skirted PCR plates. The combination of centrifugation and mixing functionality ensures fast operation and repeatable results. Suitable for high sample throughput and particularly small volumes. With 4 independent modes for centrifugation, vortexing (up to 5 min), combined centrifugation/vortexing motion and the spin-mix-spin algorithm (up to 10 cycles), which reduces errors during sample preparation.

**Scope of supply:** Centrifuge, rotor for 2 PCR plates



| Type   | Movement<br>type | PK | Cat. No.    |
|--------|------------------|----|-------------|
| MSC-2P | circling         | 1  | 4708897*LLG |

Spectrophotometers  
XD 7000 VIS and XD 7500 UV-VIS



XD 7000 VIS

UV-VIS and VIS spectrophotometers with dual beam optics. The instruments benefit from a barcode test recognition system, over 150 pre-programmed analytical methods and automatic cuvette detection. Further functions of the spectrophotometers include measurement of transmission and absorbance, scanning of spectra, kinetics analysis and creation of user-defined methods.

- Premium optical system with reference beam
- Automatic test recognition with internal barcode reader
- Supports round cuvettes with 13, 16, 24 mm and rectangular cuvettes with 10, 20, 50 mm
- Automatic cuvette type detection
- More than 150 analytical methods implemented
- 7" colour display and keypad
- Ethernet, USB
- 20 user profiles possible
- Up to 1000 user programmes
- Creation of up to 100 further user-defined methods
- Password protection possible

Specifications

Optical System:

Wavelength range:  
Bandwidth:  
Wavelength accuracy:  
Wavelength repeatability:  
Photometric range:  
Photometrical resolution/Transmission:

XD 7000 VIS // XD 7500 UV-VIS  
grid monochromator with reference beam  
320 - 1100 nm // 190 - 1100 nm  
4 nm  
±1 nm on all Holmium peaks  
better than 0.5 nm  
-3.3 to +3.3 Abs

Internal Storage:  
Lamps:

0.001 Abs/0.1%  
0.003 Abs below 0.6 Abs  
40 MB for approx. 5000 data sets  
Tungsten-halogen-lamp // Xenon flash lamp  
422 x 323 x 195 mm  
approx. 4.5 kg  
100 - 240 V, 50/60 Hz  
IP 30

Dimension (W x D x H):  
Weight:  
Power supply:  
Protection class:

| Type           | PK | Cat. No.    |
|----------------|----|-------------|
| XD 7000 VIS    | 1  | 6272436*LLG |
| XD 7500 UV-VIS | 1  | 6272437*LLG |

Disposable cuvettes



Disposable cuvettes for spectroscopy, in optical-quality PS and UV grade PMMA with optical windows for optimum transmittance when using wavelengths from 340 nm to 800 nm (PS) and from 280 nm to 800 nm (PMMA). The range ±1% absorption, this is the vital when batch analysis is being undertaken.

| Description                      | Capacity | Material | PK  | Cat. No.    |
|----------------------------------|----------|----------|-----|-------------|
|                                  | ml       |          |     |             |
| Standard cuvettes                | 4.5      | PS       | 100 | 9406431*LLG |
| Semi-micro cuvettes, low form    | 1.5      | PS       | 100 | 9406432*LLG |
| Semi-micro cuvettes, high form   | 2.5      | PS       | 100 | 9406433*LLG |
| Standard cuvettes, 4 clear faces | 4.5      | PS       | 100 | 9406434*LLG |
| Standard cuvettes                | 4.5      | PMMA     | 100 | 9406435*LLG |
| Semi-micro cuvettes, high form   | 2.5      | PMMA     | 100 | 9406436*LLG |
| Semi-micro cuvettes, low form    | 1.5      | PMMA     | 100 | 9406437*LLG |
| Standard cuvettes, 4 clear faces | 4.5      | PMMA     | 100 | 9406438*LLG |

LLG-Cuvette rack, PP



Ideal for storing up to 16 cuvettes with 12.5 mm width. 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 |



## Cold Light Source KL 1600 LED Package



- Suitable for photo documentation
- Very long service life

**SCHOTT**  
glass made of ideas



- Powerful illumination system with a brightness of 680 lm
- Ripple free illumination for digital imaging applications
- Colour temperature of 5.600 K does not change when the light source is dimmed

**Scope of supply:**

LED Cold light source KL 1600 LED incl. 2-armed gooseneck light guide, 2 focus lenses, according power cord

**Specifications**

|                                     |                         |
|-------------------------------------|-------------------------|
| Colour temperature:                 | 5600 K                  |
| Light flux:                         | 680 lm                  |
| Dimensions KL 1600 LED (W x D x H): | 114 x 231 x 137 mm      |
| Dimensions light guide (Ø x L):     | 4.5 x 600 mm            |
| Weight:                             | 3.9 kg                  |
| Power supply:                       | 100 ... 240 V, 50/60 Hz |

| Type                | Plug type | PK | Cat. No.    |
|---------------------|-----------|----|-------------|
| KL 1600 LED Package | EU        | 1  | 4666289*LLG |

## Square cover slips



**epredia** Enhancing precision  
cancer diagnostics

Made of D263 M borosilicate glass. Accurate cutting free of flaws and blisters.

| Width | Length | Thickness | PK  | Cat. No.    |
|-------|--------|-----------|-----|-------------|
| mm    | mm     | mm        |     |             |
| 15    | 15     | 0.13-0.16 | 200 | 9161015*LLG |
| 20    | 20     | 0.13-0.16 | 200 | 9161020*LLG |
| 22    | 22     | 0.13-0.16 | 200 | 9161022*LLG |
| 24    | 24     | 0.13-0.16 | 200 | 9161024*LLG |
| 20    | 20     | 0.13-0.16 | 100 | 9161019*LLG |
| 22    | 22     | 0.13-0.16 | 100 | 9161023*LLG |
| 24    | 24     | 0.13-0.16 | 100 | 9161025*LLG |

## Microscope, RED 100



- Ideal For educational purposes
- Cost-effective

**Motic**  
MORE THAN MICROSCOPY

RED 100 Series, the ideal microscope series for pupils and students.

- Widefield eyepiece WF10X/18 mm, with pointer
- Cordless LED illumination 20 mA, 3.5 V, 70 mW with intensity control
- 10 years warranty
- Monocular head, 45° inclined, 360° rotating
- Reversed triple revolving nosepiece
- Achromatic objectives EA 4X, 10X, 40X S
- Coarse and fine focusing system with tension adjustment
- Side gliding stage, movable back and forth
- "one-touch" sample clips
- Built-in 0.65 N.A. condenser and iris diaphragm



| Type    | Description | PK | Cat. No.    |
|---------|-------------|----|-------------|
| RED 100 | Monocular   | 1  | 6285856*LLG |

## LLG-Hand tally counter



**LLG**  
LABWARE

Mechanical hand tally counter with a counting capacity of 9999 for counting, e.g. blood cells, or bacterial colonies.

| Description           | PK | Cat. No.    |
|-----------------------|----|-------------|
| LLG handpiece counter | 1  | 6328021*LLG |

## Microscope slides



**epredia** Enhancing precision  
cancer diagnostics

According to ISO 8037/1. Prewashed and polished. Nominal thickness 1 mm. Size 76 x 26 mm. Also available with 20 mm, frosted, writing patch at one end.

| Type                | Description | Edge finish | PK | Cat. No.    |
|---------------------|-------------|-------------|----|-------------|
| Without frosted end | Extra white | Cut         | 50 | 9161110*LLG |
| With frosted end    | Extra white | Cut         | 50 | 9161145*LLG |
| Without frosted end | Extra white | Ground 45°  | 50 | 9161120*LLG |
| With frosted end    | Extra white | Ground 45°  | 50 | 6050042*LLG |
| Without frosted end | Extra white | Ground 90°  | 50 | 6229386*LLG |
| With frosted end    | Extra white | Ground 90°  | 50 | 6050000*LLG |

## Vacuum Ovens VO

Reliable, convenient and energy-efficient. Separately controllable and directly heated thermoshelves ensure precise temperature control and, thanks to the digital pressure control, the load is dried quickly and gently.

- Safety glass door with armoured glass on the inside and splinter shield on the outside
- Digital pressure control
- Directly heated and individually controllable thermoshelves
- With 2 thermoshelf connections
- Optional: Pump base cabinet and energy-efficient vacuum pump

### ControlCOCKPIT with two colour displays

**Scope of supply:** Vacuum drying oven, 1 aluminium thermoshelf, calibration certificate (for 160 °C at 20 mbar), software AtmoCONTROL

### Specifications

|                            |                                         |
|----------------------------|-----------------------------------------|
| Working temperature range: | at least 5 above ambient<br>to +200 °C  |
| Setting temperature range: | 20 °C to +200 °C                        |
| Setting accuracy:          | up to 99.9: 0.1 °C/<br>from 100: 0.5 °C |
| Vacuum:                    | 5 to 1100 mbar                          |
| Power supply:              | 230 V, 50/60 Hz                         |



VO29

| Type  | Nom. capacity | Max. shelves | Included shelves | Internal dimensions (W x D x H) mm | External dimensions (W x D x H) mm | Rated capacity kW | Net weight kg | PK | Cat. No.    |
|-------|---------------|--------------|------------------|------------------------------------|------------------------------------|-------------------|---------------|----|-------------|
| VO29  | 29            | 1            | 1                | 385 x 250 x 305                    | 550 x 400 x 607                    | 0.82              | 55            | 1  | 4663352*LLG |
| VO49  | 49            | 2            | 1                | 385 x 330 x 385                    | 550 x 480 x 687                    | 2.02              | 83            | 1  | 4663353*LLG |
| VO101 | 101           | 2            | 1                | 545 x 400 x 465                    | 710 x 550 x 767                    | 2.42              | 110           | 1  | 4663354*LLG |

## Piston pump LLG-uniVACUUPUMP 1

The **portable** piston pump LLG-uniVACUUPUMP 1 has been developed for **vacuum and pressure applications** in the laboratory. The LLG-uniVACUUPUMP 1 operates oil-free and can also be used as a compressor to a pressure up to 3.3 bar. Not recommended for pumping organic, acidic or basic vapours.

### Advantages:

- Cost-effective alternative for water pumps
- Oil-free, suitable for continuous operation
- Suction/pressure connection: hose nozzle DN 6 for hose inner diameter 6 mm

**Scope of supply:** Pump, incl. 2 hose clamps, EU + UK-plug power cord



### Specifications

|                                              |                    |
|----------------------------------------------|--------------------|
| Pump speed 50/60 Hz at atmospheric pressure: | 9.2/11 l/min       |
| Final pressure:                              | 292 mbar           |
| Max. overpressure:                           | 3.3 bar            |
| Max. operating gas temperature:              | 60 °C              |
| Permissible ambient temperature:             | 10 ... 40 °C       |
| Suction/pressure connection:                 | DN 6               |
| Dimensions (W x D x H):                      | 194 x 114 x 191 mm |
| Weight:                                      | 2.0 kg             |
| Power supply:                                | 230 V/50 Hz        |
| IP code:                                     | IP 20              |
| Warranty:                                    | 3 years            |

| Type               | PK | Cat. No.    |
|--------------------|----|-------------|
| LLG-uniVACUUPUMP 1 | 1  | 6263580*LLG |

## Mini Diaphragm Vacuum Pumps LABOPORT®



For Filtration, SPE, Degassing, Fluid aspiration.

- PTFE-coated diaphragm is ideal for aggressive/corrosive gases and vapours
- Pump head made from PPS (Polyphenylsulfide), valves made from FFPM (Perfluoro rubber)

### Specifications

|                                            |                    |
|--------------------------------------------|--------------------|
| Connectors for tube:                       | ID6 mm             |
| N 816.3 KT.18:                             | 5 to 40 °C         |
| Permissible media and ambient temperature: | Up to 1.8 m³/h     |
| Flow rate:                                 | Up to 20 mbar abs. |
| Ultimate vacuum:                           | IP 20              |
| IP code:                                   |                    |

| Type          | Flow rate l / min. | Max. pressure bar | PK | Cat. No.    |
|---------------|--------------------|-------------------|----|-------------|
| N 816.3 KT.18 | 16                 | 0.5               | 1  | 7620376*LLG |

## Moisture balances MB23 and MB25



The Moisture Analysers MB-23 and MB-25 provide stable results with 0.1% or 0.05% moisture resolution because of precision weighing technology. They are supplied with either an infra-red or halogen heating system. Applicable for most applications.

- Halogen (MB-25) or infra-red (MB23) technology
- Sample holder included in MB25 but as option in MB23
- Delivered with 50 x 90 mm aluminium sample dishes and protective cover

### Specifications

|                         | <b>MB23 // MB25</b>                          |
|-------------------------|----------------------------------------------|
| Capacity:               | 110 g                                        |
| Repeatability 3 g/10 g: | 0.3%/0.2% // 0.2%/0.05%                      |
| Readability:            | 0.1% or 0.01 g // 0.05% or 0.005 g           |
| Timer:                  | 1 ... 99 min, 30-second increments to 60 min |
| Temperature range:      | 50 ... 160 °C                                |
| Operating temperature:  | 5 ... 40 °C                                  |
| Pan size (diam.):       | 90 mm                                        |
| Dimensions (W x D x H): | 170 x 130 x 280 mm                           |
| Net weight:             | 2.3 kg                                       |
| Power supply:           | 100 - 240 V, 50/60 Hz                        |

| Type | PK | Cat. No.    |
|------|----|-------------|
| MB23 | 1  | 9947604*LLG |
| MB25 | 1  | 9947605*LLG |

## Hanging Scales HDB-N



Convenient for hanging loads.

- Ideal for quick checking in goods receiving and shipping, also suitable for cases
- Data hold function: For easy reading of the weight, the display can be "frozen" in different ways. Either automatically when the weighing value remains unchanged or manually by pressing the Hold key
- Hook (stainless steel), can be hinged
- Batteries included, 2 x 1.5 V AAA, operating time approx. 180 h



| Type     | Capacity | Readability | Weight | PK | Cat. No.    |
|----------|----------|-------------|--------|----|-------------|
|          | kg       | g           | g      |    |             |
| HDB 5K5N | 5        | 5           | 200    | 1  | 6231173*LLG |

## Ioniser AD-1683A



Suitable for all scales



**New**

The ioniser can be used as a stand-alone unit with all balances from any manufacturer, making it a useful addition to any weighing environment. The positive and negative ions generated by the ioniser neutralise static charges almost immediately. The tungsten electrode needles maintain the ambient ion balance. The integrated IR sensor allows touchless ON/OFF control, making the removal of static charges even more efficient.

- Adjustable discharge time in either timer mode (3 s or 10 s) or manual mode (any time)
- No risk of contamination as the ioniser uses the direct current method and does not require a fan to discharge the ions
- External IR switch (AX-IR-SWITCH) optionally available (For switching the ioniser on and off close to hand.)

| Type         | PK | Cat. No.    |
|--------------|----|-------------|
| AD-1683A     | 1  | 6524445*LLG |
| AX-IR-SWITCH | 1  | 6493501*LLG |

## Playing card rejects



Standard size for use as disposable sample carriers or spatulas.  
Pack size: 1 kg, not sorted.

| Type                                  | PK | Cat. No.    |
|---------------------------------------|----|-------------|
| Unprinted and laminated on both sides | 1  | 6051731*LLG |

# LABORTOPS

## Analytical balance ADT

**KERN**



- Internal adjustment
- Touch display

Analytical balance with flexible functionality and touch display for use in the pharmaceutical industry as well as other fields. Data query and remote control of the balance is carried out via computer or CRM/ERP systems using the KERN Communication Protocol.

- Backlit LCD display
- GLP/ISO record keeping
- RS 232 data interface and USB (Device)

**Scope of supply:** Analytical balance, draught shield

**New**



### Specifications

|                         |                         |
|-------------------------|-------------------------|
| Readability:            | 0.0001 g                |
| Automatic adjustment:   | internal                |
| Weighing surface (WxD): | Ø 90 mm                 |
| Plug type:              | EU/UK/CH/US/AUS         |
| Power supply:           | 100 ... 240 V, 50/60 Hz |
| Warranty:               | 3 years                 |

| Type      | max. load | Plug type | PK | Cat. No.    |
|-----------|-----------|-----------|----|-------------|
|           | g         |           |    |             |
| ADT 100-4 | 120       | EU/UK/CH  | 1  | 4711753*LLG |
| ADT 200-4 | 220       | EU/UK/CH  | 1  | 4711754*LLG |
| ADT 300-4 | 320       | EU/UK/CH  | 1  | 4711755*LLG |