Assistent-Precision

Catalogue 33

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PRECISION-GLASS INSTRUMENTS AND DEVICES FOR DOCTOR AND LABORATORY

Company

For more than 90 years the **Glaswarenfabrik Karl Hecht** produces high-quality precision devices and glass instruments for physician and laboratory. We supply the specialised trade under the well-known trade mark Assistent® through numerous domestic and abroad representatives. Many of them are exclusive distribution partners. Our comprehensive standard programme, e. g. volumetric measuring instruments made of glass and plastics or different liquid handling products, is completed by an extensive range of consumables, disposable articles and electric devices. Due to our long-time experience and our trained and motivated staff's professional competence we are the ideal contact if individual solutions are in demand.

On request we are also producing custom-made products even in small quantities. Since 1995 the quality management system of the Glaswarenfabrik Karl Hecht is certified by TÜV Hessen according to DIN EN ISO 9001. The "Assistent" products are distributed worldwide through the specialist trade (laboratory specialist trade, medical technical specialist trade). Our employees and representatives visit and advise the business partners in Germany, Switzerland, France, Austria and Scandinavia. Thanks to fully developed logistics a fast and reliable delivery is guaranteed. In Germany the supply partly takes place with own vehicles.

History

The enterprise was founded in April 1919 in Unterweißbach-Sitzendorf, Thuringia, by Mr. Karl Hecht and is engaged in the production and distribution of high-quality precision devices and glass instruments for physician and laboratory. In 1945 the relocation with a new start in Sondheim/Rhön took place due to the political situation. The branch with production and warehouse in Bernhausen near Stuttgart was founded in the year 1948. The foundation of an own sales office with warehouse in Kreuzlingen, Switzerland in 1962, (move to larger premises in Altnau in 1971),

an own sales office with warehouse in Igny (near Paris), France in 1967 and eventually in 1972 the foundation of an own sales office with warehouse in Fritzens, Austria, took place in order to be more present in Europe.In 1982 the branch in Bernhausen was abandoned due to better infrastructure. Sondheim/Rhön became head office and only production plant. In 2008 the warehouse in France has been closed, but the sales office for French customers remains. Currently about 85 employees work here under the guidance of Mr. Karl-Heinz Hecht and Mr. Thomas Diepholtz.

Quality management system
In 1995 our quality management system was initially certified. Currently our company is certified according to **DIN EN ISO 9001:2008.**
We strive to constantly improve our processes. The upcoming recertification will take place according to the coming DIN EN ISO 9001:2015.

Authorised economic operator (AEO)
We are authorised economic operator. Therefore we can export our goods in a simplified customs procedure.

Volumetric instruments
cover a wide section of the "Assistent" range.
Please refer in particular to the article group "volumetric instruments".
Following information may be useful:

The **"ASSISTENT-PERMANENT" graduation** is subject to regular quality controls i.e. checking of colour-fastness, accuracy etc.

Blue, white and red graduations are fused onto the glass surface and are fired-in. Therefore they are acid-resistant and alkali-proof.

Amber graduation is fused into the glass surface and thereby provides absolute durability.

The most modern calibrating equipment has steadily improved the **accuracy** of the volumetric instruments.
Following types are available:

Standard type

1.5 times of the tolerance of class A/class AS for the total capacity (therefore more accurate than class B)

Conformity certified type

Regulation until 31 December 2014:

The mark **HE** (on the instrument) confirms that the device is in accordance with the German Calibration Directive valid until 31.12.2014.

Regulation as of 1 January 2015:

By the mark **DE-M** (followed by the two last digits of the year in which the mark has been affixed)
we confirm that the volumetric instruments are in accordance with the valid German Ordinance of Measurement and Verification.

CE type

These products meet the requirements of the EU directive.

GENERAL INFORMATION

Calibration to contain: marked "IN"

The quantity of liquid contained serves as measuring basis for calibration. We recommend rinsing capillary pipettes "calibrated to tip".

Calibration to deliver: marked "EX"

The quantity of liquid delivered serves as measuring basis for calibration.
Don't blow out residual liquid (except "blowout pipettes" which are marked as such).

Partial delivery (calibrated between zero at top and lowest mark, not to tip)

The above is applicable as well. Adjust meniscus to lowest mark (e.g. enzyme test pipettes, burettes, volumetric pipettes with 2 marks).

General information for using measuring pipettes and volumetric pipettes and burettes:

Fill burettes 5 mm, measuring and volumetric pipettes 10 mm above the desired mark.
After discharging the liquid to the mark, remove remaining drop from the tip by sliding it off.
Hold pipette in upright position and put tip against inner wall of vessel.
Cut off flow of liquid at approx. 10 mm (pipettes) or 5 mm (burettes) above mark of the desired capacity and let balance discharge on completion of waiting time (as stated in the product description or on the instrument).

The **surface hardened tips** of the pipettes and burettes are calibrated to achieve volumetric accuracy. They must not be damaged.

Measuring pipettes of 5 ml to 25 ml are **with constriction in upper part** (for cotton plug).

Repairs

Repairs will be carried out if the defective device is cleaned, sterilised and decontaminated and in case the repair is economic. We reserve the right to ask for a letter of non-objection (certificate of decontamination).

Ordinance of Measurement and Verification

The new German Ordinance of Measurement and Verification - valid from 1 January 2015 - requires certification of conformity by the manufacturer for volumetric instruments used for medical, pharmaceutical and commercial measurements (e.g. manufacture and testing of drugs).
The regulatory compliance is certified by the marking DE-M.
The conformity guarantees the compliance of the instrument with the German Ordinance of Measurement and Verification and the valid standards.
For details of the procedure please refer to the German Ordinance of Measurement and Verification.
The user is responsible for the application and keeping available of conformity certified instruments.
The certificate of conformity is valid indefinitely unless otherwise specified by the manufacturer.
Conformity certified instruments which have been manufactured before 1 January 2015 can continue to be used.
The conformity of volumetric instruments is certified by "Assistent" directly on the instrument; in case of disposable micropipettes on the inner packing.
For some liquid handling instruments in the directions for use accompanying the instrument.

Medical products law

The medical products law regulates the putting into circulation of products falling under the directive 93/42/EEC and 98/79/EC. The products have to bear the CE mark and may be distributed within the EU with CE mark only.
The manufacturer of the products is responsible for correctly putting into circulation. The manufacturer has to be indicated on the product itself or on the packaging.
We emphasise that the medical products law stipulates the setting up of a system which enables to trace back the origin of the medical products and also to report possible incidents in connection with these products.

		Heat resistance in °C (continuous)	Sterilisation
EPDM	Ethylene propylene diene M-class rubber	-45 up to +150	A, C, D
ETFE	Ethylene-tetrafluoroethylene copolymer	-100 up to +150	A, C, D
FEP	Fluorinated ethylene propylene	-200 up to +205	A, C, D
MF	Melamine-formaldehyde resin	-35 up to +80	A, C, D
NR	Natural rubber	-40 up to +60	C, D
PBT	Polybutylene terephthalate	-45 up to +180	
PC	Polycarbonate	-135 up to +135	A, B, C, D
PE	Polyethylene	LDPE -50 up to +80 HDPE -100 up to +90	B, C, D B, C, D
PMMA	Polymethyl methacrylate	-40 up to +85	B, C
POM	Polyoxymethylene	-40 up to +110	A, B (limited), C, D
PP	Polypropylene	-10 up to +120	A, B (limited), C, D
PS	Polystyrene	-10 up to +70	B, C
PTFE	Polytetrafluoroethylene	-200 up to +260	A, C, D
PVC	Polyvinylchloride	-20 up to +70	C, D
SAN	Styrene acrylonitrile	-20 up to +85	C, D
UF	Urea-formaldehyde resin	0 up to +80	B, C, D

A   Autoclavable at +121 °C

B   β/γ rays 25 kGy

C   Chemical (formalin, ethanol)

D   Gas (ethylene oxide)

PLASTICS RESISTANCE CHARTS

	Alcohol	Aldehydes	Alkali	Ester	Ether	Hydro-carbons	Ketones	Diluted acids	Conc. acids	Oxidising acids
EPDM	√	√	√√	√√	o	√√	√√	√√	√√	o
ETFE	√√	√√	√√	√√	√√	√√	√	√√	√√	√
FEP	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√
MF	√√			o	o	o	o			
PBT	√√	√√	√	√	√√	√	√	√√	√	o
PC	√	o	o	√√	o	o	o			
PE	√	√	√√	√	o	o	√	√	√	o
POM	√	√	√	o	√	√	√	o	o	o
PP	√	√	√	√	o	√	√	√√	√	√
PS	o	o	√	√	o	o	o			
PTFE	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√
PVC	√	o	√√	√	o	o	o			
SAN	o	o	√	√√	o	√	o			
UF	√√	√√	o	√√	√√	√√	√√	√	o	o

√√   Very good resistance

√   Good to limited resistance

o   Low to no resistance

Glass qualities

Glass type	Linear expansion coefficient α (20 °C/68 °F; 300 °C/572 °F) DIN ISO 7991	Transformation temperature T_g	Hydrolytic class DIN ISO 719	Acid class DIN 12116	Alkali class DIN ISO 695
AR-Glas® (soda glass)	$9.1 \cdot 10^{-6}\,K^{-1}$	+525 °C/+977 °F	3	1	2
DURAN® borosilicate glass 3.3	$3.3 \cdot 10^{-6}\,K^{-1}$	+525 °C/+977 °F	1	1	2
FIOLAX® (borosilicate glass)	$4.9 \cdot 10^{-6}\,K^{-1}$	+565 °C/+1049 °F	1	1	2

If the product description does not include the glass type, the quality is corresponding to the details given for **AR-Glas®.**

Registered trademarks

AR-Glas®	Schott AG, Germany
Assistent®	Glaswarenfabrik Karl Hecht GmbH & Co KG, Germany
CERAN®	Schott AG, Germany
Combitips®, Combitips® Plus	Eppendorf AG, Germany
D 263®	Schott AG, Germany
DURAN® borosilicate glass 3.3	Schott AG, Germany
Finnpipette®	Thermo Fisher Scientific Oy, Finland
FIOLAX®	Schott AG, Germany
Galinstan®	Geratherm Medical AG, Germany
LABOGAZ®	Application des Gaz sas, France
Lupolen®	Basell nv, the Netherlands
Micro Life®	Roland Birke, Germany
NASARA®	Chang Lim Kim, Republic of Korea
Parafilm®	Bemis Company, Inc., USA
Plexiglas®	Evonik Röhm GmbH, Germany
Polysine®	Gerhard Menzel B.V. & Co. KG, Germany
Sprout®	Heathrow Scientific LLC, USA
SuperFrost®	Gerhard Menzel B.V. & Co. KG, Germany
Viton®	E. I. Dupont de Nemours, USA

All registered trademarks mentioned in the catalogue are registered property of the respective owner.

Blood Test and Urinalysis

Inoculation Loops, Hooks and Needles

for blood coagulation tests and microscopical as well as bacteriological purposes (smears)

Hooks made of nickel-chromium steel wire, stainless

without handle

	Wire thickness	Length angled part	Length
40033010	approx. 0.5 mm	approx. 5 mm	approx. 55 mm

with glass handle

	Wire thickness	Length angled part	Total length
40034010	approx. 0.5 mm	approx. 5 mm	approx. 200 mm

Loops made of nickel-chromium steel wire, stainless

without handle

	Wire thickness	Loop diameter	Length
40035010	approx. 0.5 mm	approx. 3-4 mm	approx. 50 mm

with glass handle

	Wire thickness	Loop diameter	Total length
40036010	approx. 0.5 mm	approx. 3-4 mm	approx. 200 mm

Needles made of nickel-chromium steel wire, stainless

without handle

	Wire thickness	Length
40037010	approx. 0.6 mm	approx. 40 mm
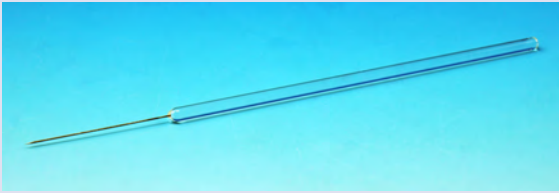
Needles made of nickel-chromium steel wire, stainless, with glass handle

	Wire thickness	Total length
40038010	approx. 0.6 mm	approx. 200 mm

Needle holders according to Kolle

made of aluminium with plastic handle, sterilisable
Diameter approx. 8.5 mm
40039016   Length approx. 16 cm
40039025   Length approx. 25 cm

Inoculation loops with needle, CE

Loop capacity 1 µl, white
Disposable, for inoculating nutrient media, made of polystyrene, gamma-sterilised
Packing: 1000 pieces (50 bags of 20 pieces)
40040010   Length approx. 195 mm

Loop capacity 10 µl, blue
Disposable, for inoculating nutrient media, made of polystyrene, gamma-sterilised
Packing: 1000 pieces (50 bags of 20 pieces)
40041010   Length approx. 200 mm

Blood Lancets

Safety blood lancets Safe Lite II

CE 0459
User safety: Needle is fully shielded before and after use
User convenience: Pre-loaded, button-operated design
Patient safety: Disposable, sterilised by gamma irradiation
Patient comfort: High-quality, ultrasharp tri-bevel needle,
high-speed penetration
Efficiency: Different types of points and penetration depths are
suitable for most capillary blood requirements
Application: Blood glucose and other diagnostic in-vitro tests
Shelf life: 5 years
Packing unit: 100 pieces

	Specification	Penetration depth	Colour code
40365011	18G blade	approx. 1.8 mm	green
40365012	28G needle	approx. 1.8 mm	violet
40365013	26G needle	approx. 1.8 mm	yellow
40365014	26G needle	approx. 2.4 mm	blue
40365015	21G needle	approx. 1.8 mm	orange
40365016	21G needle	approx. 2.4 mm	pink

Blood lancets

CE 0297
Disposable, gamma-sterilised, individually sealed, no danger of
infection, burr-free, optimal, sharp lancet tip, right insertion depth,
good blood discharge, handy lancet shaft, good handling, made of
stainless steel.
The asymmetrical shape in connection with a material thickness of
only 0.16 mm leads to an one-sided cut and therefore decreases the
cracking of the wound.
The sensation of pain is reduced because of the minor skin injury
and the healing of the wound happens faster.
Packing: 200 pieces/box

40366010   Material thickness approx. 0.16 mm

Blood Diluting Pipettes, Enzyme Test Pipettes and Capillary Pipettes

Blood diluting pipettes

according to Thoma, red, with division

for red corpuscles (erythrocytes) 1:101
White back, DIN 12750, fused blue graduation
"ASSISTENT-PERMANENT", 11 marks
Packing: 10 pieces/box

40355010   Standard type, for export outside EU only
40355710   CE type

according to Thoma, white, with division

for white corpuscles (leucocytes) 1:11
White back, DIN 12750, fused blue graduation
"ASSISTENT-PERMANENT", 11 marks
Packing: 10 pieces/box

40357010   Standard type, for export outside EU only
40357710   CE type

according to Thoma, white, without division

for white corpuscles (leucocytes) 1:11
White back, DIN 12750, fused blue graduation
"ASSISTENT-PERMANENT", 3 marks (0.5-1-11)
Packing: 10 pieces/box

40358710   CE type

Blood diluting pipettes according to Malassez-Potain

fused blue graduation "ASSISTENT-PERMANENT"
Division at 1, 2, 3, 4 and 5

	for dilutions of	Mixture ratio	Type	for blood cells
40359001	1:100, 1:200, 1:300, 1:400, 1:500	1:101	Standard type	red
40359002	1:10, 1:20, 1:30, 1:40, 1:50	1:11	Standard type	white
40359701	1:100, 1:200, 1:300, 1:400, 1:500	1:101	CE type	red
40359702	1:10, 1:20, 1:30, 1:40, 1:50	1:11	CE type	white

40359001 and **40359002** for export outside EU only

according to Thoma, red, without division

for red corpuscles (erythrocytes) 1 : 101
White back, DIN 12750, fused blue graduation "ASSISTENT-PERMANENT"

40356710   CE type

Enzyme test pipettes

Conformity certified

Clear glass, with elongated, strong tip, precision type, for partial delivery (not calibrated to tip), calibrated to deliver (Ex), short delivery time, zero point at top, main points, fused amber graduation "ASSISTENT-PERMANENT", length approx. 35 cm, amber.
Available with individual certificate on request (against extra charge).
Packing: 10 pieces/box

	40545718	**40545724**	**40545730**	**40545736**	**40545760**
Division	0.01	0.01	0.02	0.05	0.1
Capacity	0.5 ml	1 ml	2 ml	5 ml	10 ml
Colour code	2 x yellow	yellow	black	red	orange
Tolerance	5 µl	7 µl	10 µl	30 µl	50 µl

40545718 in addition to DIN, not conformity certified, does not meet the requirements of the standard

Accessories for blood pipettes

Mouthpieces

	Material	Version
40360001	Polystyrene	red
40360002	Polystyrene	milk-white

Mouthpieces with silicone tubing
Length approx. 150 mm

	Material	Version
40361001	Polystyrene	red
40361002	Polystyrene	milk-white

Pipetting by mouth is prohibited according to current regulations. We reject any kind of product liability in case of using mouthpiece with rubber tubing.
We recommend our pipetting aids no. 40558010 and 40558001.

Capillary pipettes and accessories for prothrombin determination

Glass tubes for coagulation
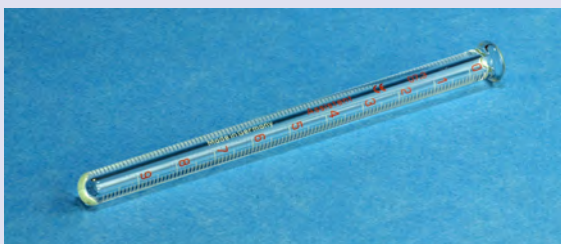with round bottom, without rim, clear glass

	Diameter	Length
40514020	approx. 12 mm	approx. 55 mm

Pipettes, clear glass, with rubber teat
Spare rubber teat: no. 42620010
40514030   1 mark each at 0.5 and 1.0 ml

Hematocrit tubes according to Wintrobe, CE

for determination of the volume of blood corpuscles, fused white graduation "ASSISTENT-PERMANENT", clear glass, double series in different colours white/red
40535010   Division 0-105 : 1 mm

Blood Sedimentation Apparatus and Accessories

Blood sedimentation apparatus

Stainless steel, MACRO

with tilting device for rapid sedimentation
Complete with:
Blood sedimentation pipettes no. 40380010,
protecting caps for pipettes,
blood mixing tubes with rubber stoppers no. 40379010,
special rubber caps no. 40377015
directions for use in an individual carton.

Pipettes with fused graduation "ASSISTENT-PERMANENT".

40367003   with 3 pipettes
40367005   with 5 pipettes
40367010   with 10 pipettes

Plexiglas®, MACRO

Stable model, with tilting device for rapid sedimentation (3 and 5
tests only). With marking area.
Complete with:
Blood sedimentation pipettes no. 40380010,
Senkograd olives according to Dr. Schütz no. 40377014,
blood mixing tubes with rubber stoppers no. 40379010
directions for use in an individual carton.

Pipettes with fused graduation "ASSISTENT-PERMANENT"

40377003   with 3 pipettes
40377005   with 5 pipettes
40377010   with 10 pipettes

Blood mixing tubes

Dimensions approx. 60 x 11/12 mm, suitable for all blood
sedimentation apparatus
40379010   with rubber stopper

Pipettes and accessoires

Special rubber caps

to be put on the pipette tip for filling by an insertion of a syringe needle. The cap can be used 10 to 20 times, closes automatically after insertion. Cleaning by rinsing in water.

40377015   Dimensions approx. 15 x 0.75 mm

Rubber olives "Senkograd"

for filling of pipettes by puncturing with syringe - air bubbles are avoided. No aspiration, no valve. Fine adjustment of zero point by slightly turning the olive.
Safe transport of filled pipette, easy cleaning of rubber olive by rinsing in water, reusable.

40377014   according to Dr. Schütz

Blood sedimentation pipettes according to Westergren-Katz, CE
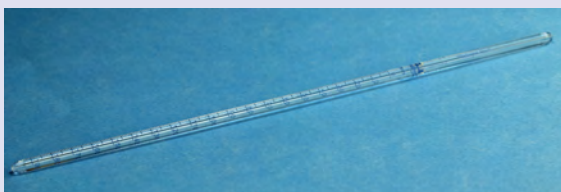
DIN EN ISO 13079, clear glass, fused blue graduation "ASSISTENT-PERMANENT", macro method, division 0-200 mm : 1 mm
Packing: 10 pieces/box
Amber graduation is also available.

**40380010**   Length 300 mm
40380015   Length 305 mm

Blood sedimentation pipettes, micro, CE

Clear glass, fused blue graduation "ASSISTENT-PERMANENT"
Amber graduation is also available.

	Division	Packing/box	Length
40382010	0-200 : 1 mm	10 pieces	300 mm

Blood sedimentation pipettes according to Westergren-Adler, CE
with shoulder

	40385010
Division	0-200 : 1 mm
Distance between tip+lower edge of shoulder	approx. 240 mm
Total length	approx. 300 mm
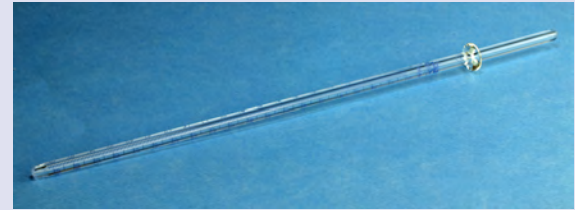
Brushes for Westergren pipettes

40388001 Dimensions approx. 410 x 70 x 4 mm

Suction rubber caps

for placing on top of the blood sedimentation pipette (macro or micro).
Blood is drawn from the mixing tube up to the zero mark of the pipette by turning the moistened suction rubber cap.

Filled pipette with attached suction rubber cap at top is fit in through crossbar opening of Plexiglas® apparatus onto rubber pad at base and is fixed by tightening screw. When drying pipettes, fix them in same way, but tips should not touch pad.

40389010 Capacity approx. 2 ml

Blood Test Devices

Hemometers

in solid case

with 2 glass colour standards, for hemoglobin examinations
according to the Sahli method (hydrochloric acid hematine).
Measuring tubes and Sahli pipettes with fused graduation
"ASSISTENT-PERMANENT"
with directions for use

consisting of:
Measuring tube no. 40457010
Brush no. 40458010
Stand no. 40459010
Sahli pipette no. 40460010
Mouthpiece with rubber tubing no. 40361002
Bottle with screw cap no. 41314010
Glass rod no. 40470010
Dropping pipette no. 40471010

Pipetting by mouth is prohibited according to current regulations.
We reject any kind of product liability in case of using mouthpiece
with rubber tubing.
We recommend our pipetting aids no. 40558010 and 40558001.

40455010   for export outside EU only

in cardboard box

with 2 glass colour standards, for hemoglobin examinations
according to the Sahli method (hydrochloric acid hematine).
Measuring tubes and Sahli pipettes with fused graduation
"ASSISTENT-PERMANENT"
with directions for use

consisting of:
Measuring tube no. 40457010
Brush no. 40458010
Stand no. 40459010
Sahli pipette no. 40460010
Mouthpiece with rubber tubing no. 40361002
Bottle with screw cap no. 41314010
Glass rod no. 40470010
Dropping pipette no. 40471010

Pipetting by mouth is prohibited according to current regulations.
We reject any kind of product liability in case of using mouthpiece
with rubber tubing.
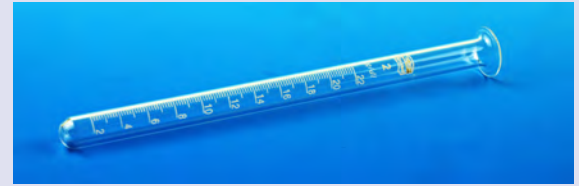We recommend our pipetting aids no. 40558010 and 40558001.

40456010   for export outside EU only

Hemometer measuring tubes with gram scale
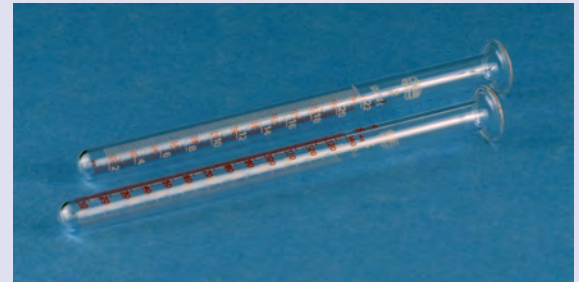g/dl = grams of hemoglobin in 100 ml blood
40457010   Length approx. 120 mm

Hemometer measuring tubes with double scale
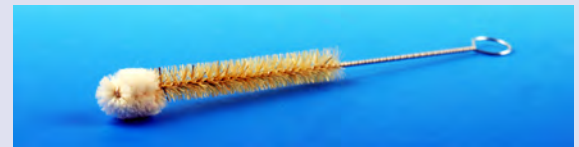Double scale = gram scale g/dl and hemometer units "HE"
Length approx. 120 mm
40457002   16 g/dl = 100 HE

Brushes for hemometer measuring tubes
with cotton tip
40458010   Dimensions approx. 140 x 60 x 9 mm

Hemometer stand
with 2 glass colour standards and plate made of frosted glass,
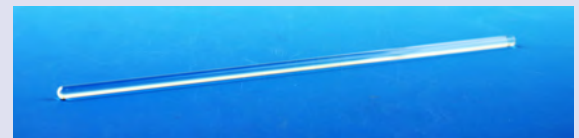without measuring tube
40459010   Hemometer stand

Hemometer stirring rods
Clear glass
40470010   Dimensions approx. 140 x 3 mm Ø

Hemometer dropping pipettes
Clear glass

	Wall thickness	Dimensions
40471010	approx. 0.9 mm	approx. 140 x 6 mm Ø

Hemoglobin pipettes

according to Sahli, 20 µl, conformity certified, CE

White back, fused amber graduation "ASSISTENT-PERMANENT",
calibrated to contain = In, (hemometer pipettes)
Available with individual certificate on request (against extra charge).

	Tolerance	Packing/box	Length
40460710	0.4 µl	10 pieces	approx. 12.5 cm

according to Sahli, 20 µl, for export outside EU only

Standard type, white back, fused blue graduation "ASSISTENT-
PERMANENT", calibrated to contain = In, (hemometer pipettes)

	Tolerance	Packing/box	Length
40460010	0.4 µl	10 pieces	approx. 12.5 cm

Blood counting pad

according to Schilling
Useful form for daily practice in the laboratory
40467010   50 blank forms

Blood capillaries

for determination of the coagulation time, for blood typing
and similar purposes, cut ends
Packing: 100 pieces/plastic tube
40560010   Length approx. 90 mm

Nissl tubes

for the volumetric determination of fibrin, fused blue graduation
"ASSISTENT-PERMANENT", capacity approx. 3 ml, with directions for
use - "heat fibrin according to Schulz"
41145010   Packing: 3 pieces/box

Pipetting device

Simple to clean, can be used again
Sterilisable up to +134 °C/+273.2 °F

40559010   with interchangeable receivers for microbiological
analyses

Fermentation saccharometer

according to Dr. Einhorn with measuring tube

Fused graduation "ASSISTENT-PERMANENT" in ml
and % for gas and sugar
Packing: Each in a box

41370010   Graduation white

Measuring tube

for above fermentation saccharometer
Fused amber graduation "ASSISTENT-PERMANENT"

41370020   Mark at 10 ml

Tubes for urinalysis

Clear glass, U-form, with stem and circular base
41375010   Height approx. 135 mm

Micropipettes and Capillaries

Volume capillaries, disposable

calibrated to contain from end to end, conformity certified, CE, with capillary holder no. 40553001 (short tube with rubber teat)
250 pieces per pack - 4 packs in a carton
Accuracy ≤ ± 0.5 %

Filling and discharging can be effected with or without capillary holder.

Heparinised volume capillaries are also available (all sizes) on order of adequate quantities.

	Capacity	Precision
40551003	1 µl	≤ 1.5 %
40551006	2 µl	≤ 1 %
40551012	5 µl	≤ 1 %
40551015	10 µl	≤ 1 %
40551018	20 µl	≤ 1 %
40551021	25 µl	≤ 1 %
40551024	50 µl	≤ 1 %
40551027	100 µl	≤ 2 %

40551003 and **40551006** not conformity certified

Capillary holder
with rubber teat and stopper
40553001   Length of glass tube approx. 35 mm

Disposable capillary pipettes according to Prof. Delbrück, CE

conformity certified, calibrated to contain = In from end to end, heparinised
Filled pipette is being emptied in reaction tube by shaking.
Length approx. 30.5 mm, precision ≤ 1 %, accuracy ≤ ± 0.5 %
Packing: Tube of 100 pieces

40554020   Capacity 20 µl
40554050   Capacity 50 µl

Micropipettes with ring mark

Disposable, CE

Calibrated to contain = In, conformity certified
Packing: 250 pieces/pack - 4 packs/carton
(except 200 µl: 200 pieces/pack)

Accuracy: Difference between mean and nominal value in %
Precision: Percentage of standard deviation in relation to average
Tolerance: Difference between upper and lower limit of admissible
               deviation
               The tolerance is guaranteed by statistical quality control.

Pipetting by mouth is prohibited according to current regulations.
We reject any kind of product liability in case of using mouthpiece
with rubber tubing.
We recommend our pipetting aids no. 40558010 and 40558001.

	Capacity	Colour code	Precision	Accuracy
40555003	1-2-3-4-5 µl	white	≤ 0.6 %	≤ ± 0.3 %
40555006	10 µl	orange	≤ 0.5 %	≤ ± 0.25 %
40555009	20 µl	black	≤ 0.5 %	≤ ± 0.25 %
40555012	20 + 40 µl	2 x red	≤ 0.5 %	≤ ± 0.25 %
40555015	25 µl	2 x white	≤ 0.5 %	≤ ± 0.25 %
40555018	40 µl	2 x red	≤ 0.5 %	≤ ± 0.25 %
40555021	50 µl	green	≤ 0.5 %	≤ ± 0.25 %
40555024	50 + 100 µl	blue	≤ 0.5 %	≤ ± 0.25 %
40555027	100 µl	blue	≤ 0.5 %	≤ ± 0.25 %
40555030	200 µl	red	≤ 0.5 %	≤ ± 0.25 %

40555003 Mark at 5 µl is conformity certified

Pipetting aids

Spare adapter made of PVC

Transparent, resistant to steam sterilisation at +121 °C/+249.8 °F

40557001   for article no. 40558010
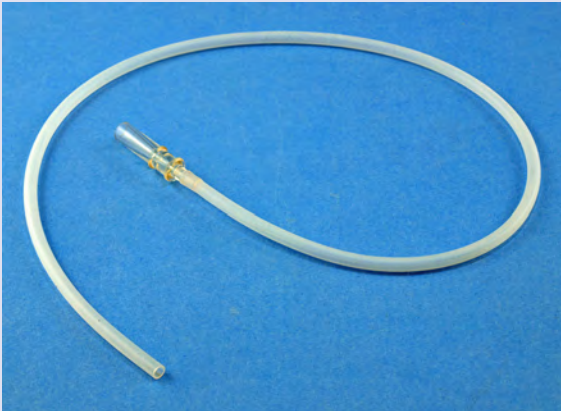
Spare adapter made of PVC, with silicone tubing

Adapter and tubing resistant to steam sterilisation
at +121 °C (+249.8 °F), 2 bar, for article no. 40557010, 3 pieces/pack

40557002   Length approx. 500 mm

Spare suction bellows made of silicone

Autoclavable at +121 °C/+249.8 °F, 3 pieces/pack

40558002   for Micro-Pipex no. 40558001

Pipetting aid "micro-classic"

for pipetting with disposable micropipettes and other small pipettes
up to approx. 1 ml, autoclavable at +121 °C/+248.8 °F (2 bar)
Most suitable for working with a microscope because of the
advantageous, right-angled position of the pipette.
Very easy to handle.
The pipetting aid may not be used for capillaries calibrated to
contain end to end!

40558010   with adapter and tubing

Pipetting aid Micro-Pipex

Cone Ø max. 5 mm, autoclavable at +121 °C/+249.8 °F
Contaminated disposable micropipettes up to 50 µl can be dropped
without touching because of the releasing device, which is integrated
in the appliance.
The pipetting aid may not be used for capillaries calibrated to
contain end to end!

40558001   for pipetting liquids by using disposable micropipettes
with a ring mark as well as many pipettes up to
approx. 1 ml

Hematocrit capillaries and sealing material, CE

Micro hematocrit capillaries, heparinised

Disposable, fire-polished ends; inside diameter equally over the total length (conicity 0.02 mm).
Ungraduated for a volume of 40 µl, for use in hematocrit centrifuges.
Manufactured according to international specifications, with colour code. Heparinised over the entire internal surface, with sodium heparin
with a red colour code at one end
Packing: 100 pieces in a tube, 10 tubes in a box

	Inside Ø	Outside Ø	Length
40563010	1.1 - 1.2 mm	approx. 1.5 mm	75 mm ± 1 mm

Micro hematocrit capillaries, not heparinised

Disposable, fire-polished ends; inside diameter equally over the total length (conicity 0.02 mm).
Ungraduated for a volume of 40 µl, for use in hematocrit centrifuges.
Manufactured according to international specifications, with colour code.
with blue colour code at one end
Packing: 100 pieces in a tube, 10 tubes in a box

	Inside Ø	Outside Ø	Length
40564010	1.1 - 1.2 mm	approx. 1.5 mm	75 mm ± 1 mm

Micro hematocrit capillaries, heparinised, with mark at 60 mm

with sodium heparin, fire-polished end
Filling of the tubes up to the mark by capillary effect.
Can be closed with sealing material no. 40566010
Packing: 100 pieces in a tube, 10 tubes in a box

|	Inside Ø	Outside Ø	Length
40565010	0.55 mm ± 0.05 mm	1.55 mm ± 0.05 mm	75 mm ± 0.5 mm

Hematocrit sealing material

Non-drying, for sealing micro hematocrit capillaries
Each plate has numbered positions on both sides for placing capillaries. This sealing material prevents the draining of the blood sample.
One plate is enough for sealing several hundred capillaries.
40566010   in plastic plates
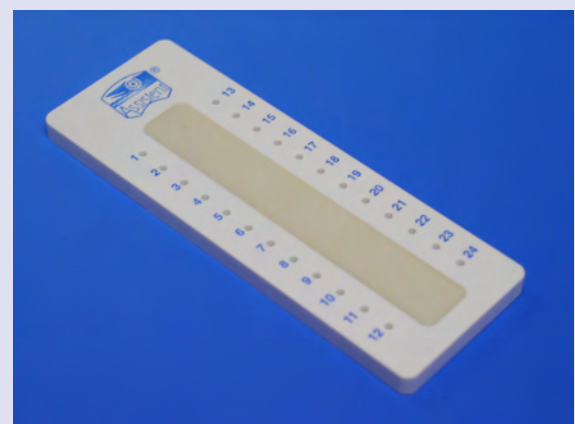
Mechanical and Electronic Counters

Counters, manual

Four figures, with button for manual counting

The casing made of chrome-plated steel lies comfortably in the hand. The manual counter is being held with the forefinger at the finger bow. The counter is turned back to zero by using the lateral reset button.

40344010   Counting 0 - 9999

Blood cell counters, CE

for manual differential counting

Electronic counters and storage devices for the microscopical analysis of differential blood count.

The microscopical image can be monitored continuously, and the resulting figures can be recorded "blindly".
Each instrument comes with directions for use.

Counting limit max. 1000

	Memory options	Version
40345010	8	AC-8
40345012	12	AC-12
40345015	15	AC-15
40345612	12	AC-12 with rechargeable battery
40345615	15	AC-15 PC

40345015 Buttons with LED display, four defined programmes and one free counting programme
40345612 Off-the-grid
40345615 for connecting with a PC

Pasteur Pipettes

made of glass

ISO 7712, precise, uniform shape, disposable,
with constriction in the upper part for cotton plug
Capillary tip inside Ø of approx. 1 mm, body approx. 90 x 7 mm Ø
250 pieces/box - 1000 pieces/carton

	Total length	Version
40567001	approx. 150 mm	short form
40567002	approx. 230 mm	long form
40567091	approx. 150 mm	short form, with cotton plug
40567092	approx. 230 mm	long form, with cotton plug

Pasteur pipettes made of glass

with attached, long tip

	Packing/box	Total length	Body
40568010	25 pieces (in bag)	approx. 155 mm	approx. 95 x 7-8 mm Ø

made of polyethylene

500 pieces/box - 3000 pieces/carton
40569001   Capacity micro, 0.5 ml
40569002   Capacity 1 ml
40569003   Capacity 3 ml

Precision Cuvettes

Disposable, made of polystyrene, macro

Optically excellent transparency. Deepened windows as a protection against scratches. Arrow marking of the transmission direction

	40705010
Light path	10 mm
Application range	from 340 nm on
Windows	approx. 10 x 35 mm
Dimensions	approx. 12.5 x 12.5 x 45 mm
Capacity	min. 2.5 ml, max. 4.5 ml
Standard deviation at 360 nm	± 0.005 extinction units

Disposable, made of polystyrene, semi-micro

Optically excellent transparency. Deepened windows as a protection against scratches. Arrow marking of the transmission direction

	40706010
Light path	10 mm
Application range	from 340 nm on
Windows	approx. 5 x 23 mm
Dimensions	approx. 12.5 x 12.5 x 45 mm
Capacity	min. 1.5 ml, max. 3.0 ml
Standard deviation at 360 nm	± 0.005 extinction units

Precision cuvettes, optical glass, height outside 45 mm, width 12.5 mm

Two opposite sides and bottom optically processed, the other two sides frosted on the outside, without cover, common type for serial measurements

40710010   Light path 10 ± 0.1 mm
40710020   Light path 20 ± 0.1 mm
40710040   Light path 40 ± 0.2 mm
40710050   Light path 50 ± 0.2 mm

Precision cuvettes, optical glass, height outside 40 mm, width 24 mm

Two opposite sides and bottom optically processed, the other two sides frosted on the outside, without cover

40712005   Light path 5 ± 0.1 mm
40712010   Light path 10 ± 0.1 mm
40712020   Light path 20 ± 0.1 mm
40712040   Light path 40 ± 0.2 mm
40712050   Light path 50 ± 0.2 mm

Precision cuvettes, optical glass, height outside 50 mm, width 12.5 mm

Two opposite sides and bottom optically processed, the other two sides frosted on the outside, without cover

40713009   Light path 10 ± 0.1 mm

Precision cuvettes with grooved cover made of PTFE

Light path indicated on each cuvette.
Height outside 45 mm, width 12.5 mm

40715001	Light path 1 ± 0.01 mm, special optical glass
40715002	Light path 2 ± 0.01 mm, special optical glass
40715005	Light path 5 ± 0.01 mm, special optical glass
40715010	Light path 10 ± 0.01 mm, special optical glass
40715020	Light path 20 ± 0.02 mm, special optical glass
40715040	Light path 40 ± 0.02 mm, special optical glass
40715050	Light path 50 ± 0.02 mm, special optical glass
40715601	Light path 1 ± 0.01 mm, quartz glass
40715602	Light path 2 ± 0.01 mm, quartz glass
40715605	Light path 5 ± 0.01 mm, quartz glass
40715610	Light path 10 ± 0.01 mm, quartz glass
40715620	Light path 20 ± 0.02 mm, quartz glass
40715640	Light path 40 ± 0.02 mm, quartz glass
40715650	Light path 50 ± 0.02 mm, quartz glass

Fluorescence cuvettes with grooved cover made of PTFE

All four sides and bottom optically processed.
Light path indicated on each cuvette.
Height outside 45 mm, width 12.5 mm

40717010	Light path 10 ± 0.01 mm, special optical glass
40717020	Light path 20 ± 0.01 mm, special optical glass
40717610	Light path 10 ± 0.01 mm, quartz glass
40717620	Light path 20 ± 0.01 mm, quartz glass

Cuvettes, semi-micro, with grooved cover made of PTFE

Two opposite sides and bottom optically processed, the other two sides frosted on the outside, funnel-shaped top.
Light path indicated on each cuvette.
Width of inner gap 4 mm, height outside 45 mm, width 12.5 mm

40720005	Light path 5 ± 0.01 mm, special optical glass
40720010	Light path 10 ± 0.01 mm, special optical glass
40720020	Light path 20 ± 0.02 mm, special optical glass
40720040	Light path 40 ± 0.02 mm, special optical glass
40720050	Light path 50 ± 0.02 mm, special optical glass
40720605	Light path 5 ± 0.01 mm, quartz glass
40720610	Light path 10 ± 0.01 mm, quartz glass
40720620	Light path 20 ± 0.02 mm, quartz glass
40720640	Light path 40 ± 0.02 mm, quartz glass
40720650	Light path 50 ± 0.02 mm, quartz glass

Micro cuvettes with grooved cover made of PTFE

Two opposite sides and bottom optically processed, the other two sides frosted on the outside, funnel-shaped top.
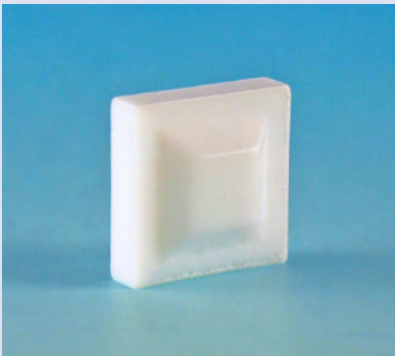Light path indicated on each cuvette.
Light path 10 ± 0.01 mm, width of inner gap 2 mm,
height outside 25 mm, width 12.5 mm
Width of inner gap also available with 4 mm on request.

40722010   made of special optical glass
40722610   made of quartz glass

Cover made of PTFE, grooved

When ordering, please indicate catalogue number and light path of the cuvette!

40729010   for light path 10 mm

Stirring spatula made of plastic, with crossbar

Crossbar improves mixing of samples, especially in rectangular cuvettes

	Length	Crossbar
40734010	approx. 120 mm	approx. 9 mm

Urinometers

according to Vogel

without thermometer

1.000 - 1.060 g/cm³
Division 0.001 g/cm³, reference temperature +20 °C/+68 °F, length approx. 15 cm
with steel metal ballast

40240010   for export outside EU only
40240710   CE type, tolerance ± 0.001 g/cm³

Urinometers according to Vogel with thermometer

1.000 - 1.060 g/cm³
Division 0.001 g/cm³, reference temperature +20 °C/+68 °F, length approx. 17 cm
with steel metal ballast

40240720   CE type, tolerance ± 0.001 g/cm³

Glass jar with base and spout
for urinometers
40241010   Dimensions approx. 175 x 28 mm

Urinometer, large model with glass jar
1.000 - 1.060 g/cm³
Urinometer no. 40240010 or no. 40240710 with jar no. 40241010 in a box
40242010   for export outside EU only
40242710   CE type

Urinometer, small model

according to Squibb
1.000-1.060 g/cm³, with steel metal ballast,
Division 0.002 g/cm³, reference temperature +20 °C/+68 °F, length approx. 9 cm
40245010   for export outside EU only
40245710   CE type, tolerance ± 0.002 g/cm³

Glass jar with base and spout
for urinometers no. 40245010 and 40245710
40247010   Dimensions approx. 110 x 20 mm

Urinometer with glass jar

1.000 - 1.060 g/cm³, urinometer no. 40245010 or no. 40245710 with glass jar no. 40247010 in a box

40248010   for export outside EU only

40248710   CE type

Urine jars and cups

Urine jars

made of glass, curved shape, with spout, without handle, without scale

	Largest outside Ø	Height	Capacity
44122010	approx. 60 mm	approx. 70 mm	approx. 75 ml

Urine specimen cups

Clear glass, with frosted label for inscription, with spout, without handle, conical, stackable

44125010   Capacity approx. 150 ml

Water Bath with Thermostat

Thermostatic water bath, CE

Digital

Complete with Plexiglas® tank no. 43194001 (without accessories)
All immersing, bare metal parts are made of stainless steel. Fully
electronic wear-free temperature control with digital display.
Cooling coil and connection for external use are available as spare
parts.

Technical data
Temperature display / resolution: LED / 0.1 K
Temperature setting / resolution: digital / 0.1 K
Temperature control: adjustable nominal value limit and alarm circuit
Operating temperature range:
+5 °C / +41 °F above room temperature up to +100 °C / +212 °F
Operating temperature range with external cooling:
-30 °C / -22 °F up to +100 °C / +212 °F
Pump capacity: max. 5 l/min.

	43180010
Heating	1000 watts
Dimensions	approx. 120 x 130 x 330 mm (w x d x h)
Voltage	230 volts
Safety class	3 (DIN 12876)
Weight	3 kg
Pressure	max. 0.12 bar
Temperature constancy	± 0.1 K

Accessories for thermostatic water bath

ThermoClean DC - Stabilising solution for water baths
Plastic bottle containing 100 ml concentrate for 100 l water

Properties
- suitable for all kinds of thermostats and circulation pumps made of metal, glass or any plastics
- can also be used for closed temperature control systems, e.g. pH blood gas analyser
- prevents algae and bacterial growth, no odour formation
- no obstructions in tubings and temperature control system
- frequent cleaning of the tank is unnecessary
- solution is without aggressive phosphates and oxidising or reducing substances
- only minor pH value change of the water
- solvent-free
- prevents foam formation, even with strong circulation

Application
Take 1 ml of the solution for 1 l of distilled water (Clean the
tank before use!)

43170001 Concentrate methylene blue
43170003 Concentrate clear

Flow monitors made of plastic (SAN)
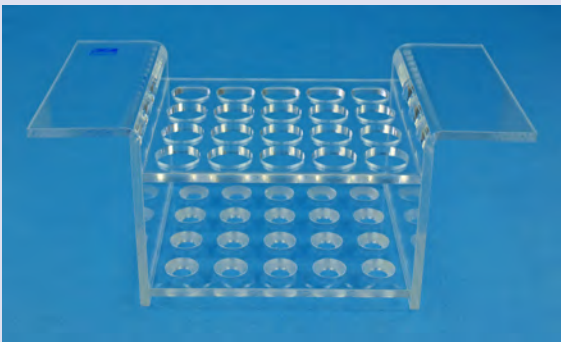Transparent, for control of the water flow
43178010   for tubing of 6-11 mm inside Ø

Plexiglas® tanks with inclined bottom
for better circulation
43187003   Dimensions approx. 43 x 13 x 15 cm

Water bath racks made of Plexiglas®
for hanging into the tank

	Holes	for	Ø
43188002	16	16 small bottles	approx. 23 mm
43188003	20	20 centrifuge or test tubes	approx. 18 mm
43188004	24	24 reaction tubes	approx. 11 mm
43188006	24	24 coagulometer tubes up to approx. 12 mm Ø	approx. 13 mm

Plexiglas® tank without inclined bottom
for thermostatic water bath no. 43180010
43194001   Dimensions approx. 34.5 x 14 x 15.5 cm

Water bath racks made of stainless steel
Circular; fits into a beaker, low form, 1000 ml
for 9 tubes up to approx. 18 mm Ø
44263010   Diameter approx. 10 cm

Counting Chambers and Hemocytometers

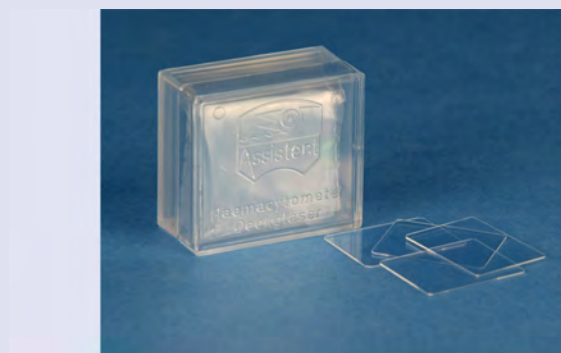**Cover glasses for hemocytometers, CE**
Different sizes
Packing: 10 pieces/box, thickness 0.4 mm

40412710   30 x 30 mm
40415710   20 x 26 mm
40416710   22 x 22 mm
40417710   24 x 24 mm

Hemocytometers

without CE marking, for export outside EU only
complete in plastic case

consisting of:
1 erythrocyte pipette
1 leucocyte pipette
2 rubber tubings with mouthpieces
1 counting chamber
2 optically plane cover glasses
directions for use

40420002 Hemocytometers, Thoma double ruling
40421002 Hemocytometers, Neubauer double ruling
40422002 Hemocytometers, improved Neubauer double ruling
40422012 Hemocytometers, improved Neubauer double ruling,
              bright-line
40429002 Hemocytometers, Fuchs-Rosenthal double ruling

Other types are available on request.

Pipetting by mouth is prohibited according to current regulations.
We reject any kind of product liability in case of using mouthpiece
with rubber tubing.
We recommend our pipetting aid no. 40558010 and 40558001.

Counting chambers

made of special optical glass

Assistent® counting chambers are precision measuring instruments. They are used to count the number of particles per volume unit of a liquid.
The counting chambers are supplied with CE mark as per IVD directive 98/79/EC. Counting chambers without CE mark are available for use outside the European Union only.

The size of the counting chambers is approx. 76 x 32 mm.
The lateral fields for inscription are separated by grooves from the three ground and polished supports.
The central support is deeper than the outer ones and is referred to as "depth of chamber".
The depth (tolerance ± 2 %) depends on the ruling - see the following descriptions.
The rulings are engraved into the central support. Counting chambers with double ruling are common. The central support of those chambers is divided by an additional groove.
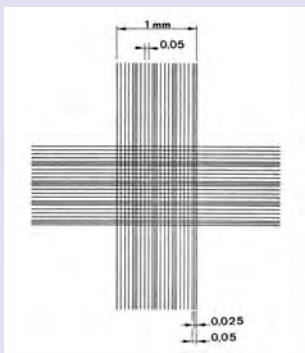
Counting chambers bright-line
The central support is coated by a rhodium layer wherein the rulings are engraved. The coating provides a sharp contrast and the lines appear brightly illuminated.

Special production
Other depths are available on request.

Packing
Counting chamber, with 2 optically plane cover glasses, in a transparent plastic box

Counting chambers Thoma
for counting thrombocytes and erythrocytes
for export outside EU only, chamber depth 0.1 mm

Ruling
Large central square: 1 mm²
consisting of
groups of 16 squares 0.2 x 0.2 mm - surface area 0.04 mm² (result from the intermediate line at every 1st, 6th, 11th and 16th square) divided into 400 small squares 0.05 x 0.05 mm - surface area 0.0025 mm²

40440001	Single ruling, without clamps, without CE mark
40440002	Double ruling, without clamps, without CE mark
40440003	Double ruling, without clamps, without CE mark

Counting chambers Thoma
Chamber depth 0.1 mm, CE

40440701	Single ruling, without clamps
40440702	Double ruling, without clamps
40440703	Double ruling, with clamps
40440712	Double ruling, bright-line, without clamps

Counting chambers Neubauer

for counting erythrocytes and leucocytes
for export outside EU only, chamber depth 0.1 mm

Ruling
9 large squares of 1 mm² each = 9.0 mm².
Ruling like Thoma - additionally 4 squares in the corners
each divided into 16 equal squares

40441001	Single ruling, without clamps, without CE mark
40441002	Double ruling, without clamps, without CE mark
40441003	Double ruling, with clamps, without CE mark
40441012	Double ruling, bright-line, without clamps, without CE mark

Counting chambers Neubauer

Chamber depth 0.1 mm, CE

40441701	Single ruling, without clamps
40441702	Double ruling, without clamps
40441703	Double ruling, with clamps
40441712	Double ruling, bright-line, without clamps

Counting chambers improved Neubauer

for counting erythrocytes and leucocytes
for export outside EU only, chamber depth 0.1 mm

Ruling
9 large squares of 1 mm² = 9 mm²
The central square of 1 mm² contains 25 groups of squares divided
into 16 mini squares of 0.05 x 0.05 mm each.
Triple marginal lines **at all sides** of the square groups distinguish this
ruling from Neubauer. The middle line is decisive for the counting.

40442002	Double ruling, without clamps, without CE mark
40442012	Double ruling, bright-line, without clamps, without CE mark

Counting chambers improved Neubauer

Chamber depth 0.1 mm, CE

40442702	Double ruling, without clamps
40442712	Double ruling, bright-line, without clamps

Counting chambers Bürker

for counting thrombocytes or erythrocytes
for export outside EU only**,** chamber depth 0.1 mm

Ruling
9 large squares - surface area 1 mm² each = 9 mm²
Each large square is divided into 16 groups of squares 0.2 x 0.2 mm.
Additionally there are small squares of an surface area of
0.0025 mm² each.

40443001	Single ruling, without clamps, without CE mark
40443002	Double ruling, without clamps, without CE mark
40443003	Double ruling, with clamps, without CE mark
40443013	Double ruling, bright-line, with clamps, without CE mark
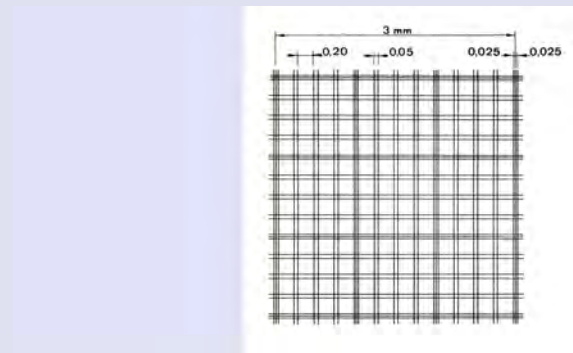
Counting chambers Bürker

Chamber depth 0.1 mm, CE

40443701 Single ruling, without clamps
40443702 Double ruling, without clamps
40443703 Double ruling, with clamps
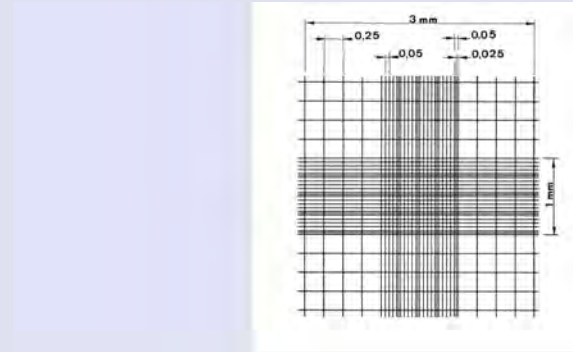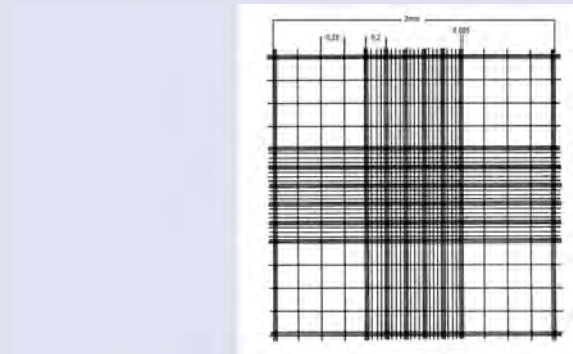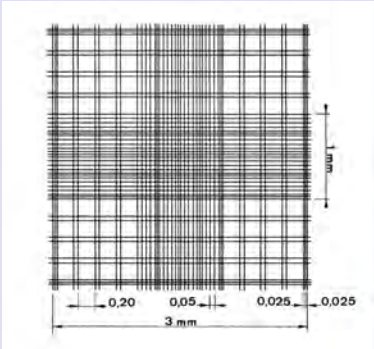**40443712** Double ruling, bright-line, without clamps
40443713 Double ruling, bright-line, with clamps

Counting chambers Türk

for export outside EU only, chamber depth 0.1 mm

Ruling
Total surface area: 9 mm²
The overall size and the central square correspond to the Neubauer ruling.
The groups of squares in the corners are divided by double lines.

40444002 Double ruling, without clamps, without CE mark

Counting chambers Türk

Chamber depth 0.1 mm, CE

40444702 Double ruling, without clamps
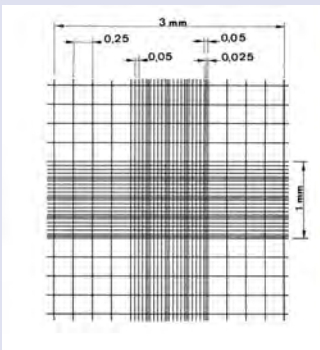
Counting chambers Bürker-Türk

for export outside EU only**,** chamber depth 0.1 mm

Ruling
combination of Buerker and Thoma
9 large squares of 1 mm² each
consisting of 16 groups of squares of 0.2 x 0.2 mm
Large central square: 16 small squares of 0.05 x 0.05 mm - surface area of 0,0025 mm² each

40445002 Double ruling, without clamps, without CE mark
40445003 Double ruling, with clamps, without CE mark

Counting chambers Bürker-Türk

Chamber depth 0.1 mm, CE

40445702 Double ruling, without clamps
40445703 Double ruling, with clamps

Counting chambers Nageotte

for the examination of lumbar fluid
for export outside EU only, chamber depth 0.5 mm

Ruling
Total area: 100 mm²
divided into 40 rectangles of 10 x 0.25 mm each = 2.5 mm²
The middle of the ruling is marked by a double line.

40446001   Single ruling, without clamps, without CE mark

40446002   Double ruling, without clamps, without CE mark

Counting chambers Nageotte

Chamber depth 0.5 mm, CE

40446701   Single ruling, without clamps

40446702   Double ruling, without clamps

Counting chambers Thoma new
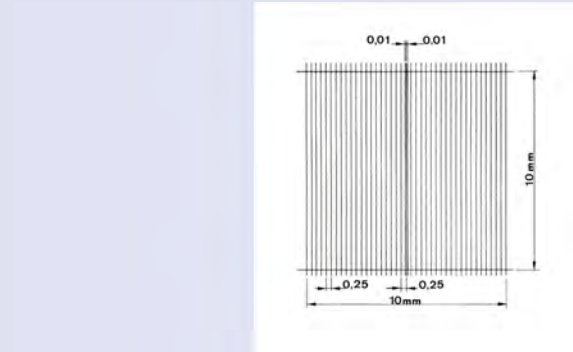
for export outside EU only, chamber depth 0.1 mm

Ruling
Total surface area: 1.21 mm²
divided into 16 groups of squares like Thoma ruling, but without
marginal squares, where the erythrocytes easily agglomerate
at the triple lines.

40447002   Double ruling, without clamps, without CE mark
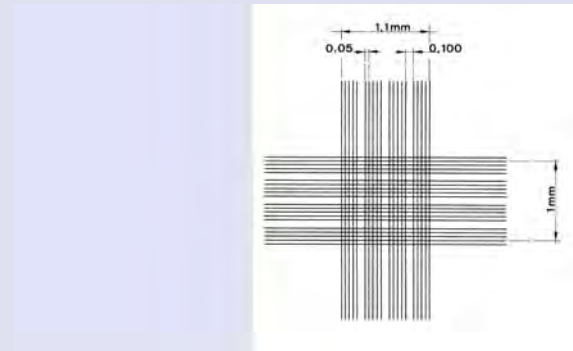
Counting chambers Thoma new

Chamber depth 0.1 mm, CE

40447701   Single ruling, without clamps

40447702   Double ruling, without clamps

40447703   Double ruling, with clamps

Counting chambers Fuchs-Rosenthal

for counting cells in cerebrospinal fluid
for export outside EU only, chamber depth 0.2 mm

Ruling
Total surface area: 16 mm²
16 squares of 1 mm² each
each consisting of 16 mini squares of 0.25 x 0.25 mm -
surface area 0.0625 mm² each

40449001   Single ruling, without clamps, without CE mark

40449002   Double ruling, without clamps, without CE mark

40449003   Double ruling, with clamps, without CE mark

40449012   Double ruling, bright-line, without clamps, without CE
mark

40449013   Double ruling, bright-line, with clamps, without CE
mark

Counting chambers Fuchs-Rosenthal
Chamber depth 0.2 mm, CE
40449701   Single ruling, without clamps
40449702   Double ruling, without clamps
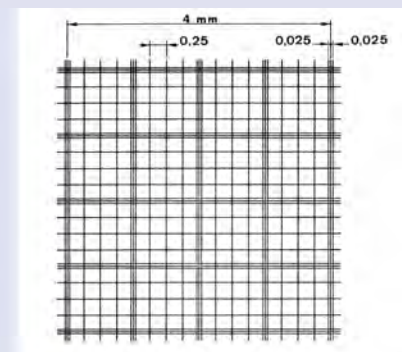**40449703**   Double ruling, with clamps
40449712   Double ruling, bright-line, without clamps
40449713   Double ruling, bright-line, with clamps

Counting chambers Jessen
for counting cells in cerebrospinal fluid
for export outside EU only, chamber depth 0.4 mm

Ruling
Total surface area: 25 mm², volume: 10 mm³
25 groups of squares of 1 mm² each
consisting of 16 small squares 0.25 x 0.25 mm -
surface area 0.0625 mm² each
40450002   Double ruling, without clamps, without CE mark

Counting chambers Jessen
Chamber depth 0.4 mm, CE
40450702   Double ruling, without clamps

Counting chambers Schilling-Kreuznetz (cross-shaped ruling)
for export outside EU only, chamber depth 0.1 mm

Ruling
Total surface area: 9.0 mm²
Central square: 9 groups of squares with mini squares
of 0.0025 mm² each
The corner squares are divided into 25 small squares
of 0.04 mm² each
40452002   Double ruling, without clamps, without CE mark
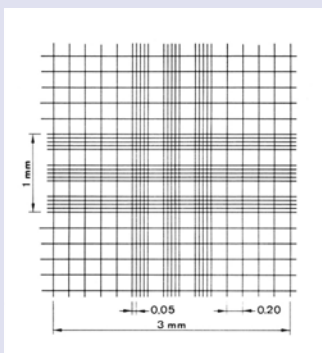
Counting chambers Schilling-Kreuznetz
Chamber depth 0.1 mm, CE
40452702   Double ruling, without clamps

Counting chambers Malassez

for export outside EU only**,** chamber depth 0.2 mm

Ruling
Total surface area: 5.0 mm² (2 x 2.5 mm)
100 rectangles 0.20 x 0.25 mm
consisting of
25 fields divided into 20 squares of 0.05 x 0.05 mm -
surface area 0.0025 mm² each
25 fields divided into 5 rectangles of 0.20 x 0.05 mm -
surface area 0.01 mm² each
25 fields divided into 4 rectangles of 0.25 x 0.05 mm -
surface area 0.0125 mm² each
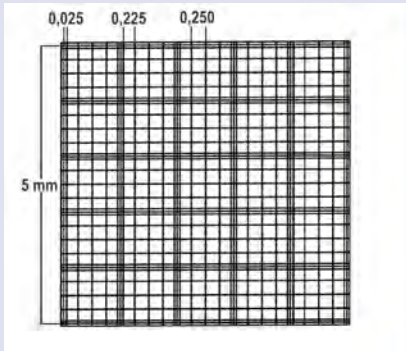25 fields of 0.20 x 0.25 mm - surface area 0.05 mm² each - without
division

40453001   Single ruling, without clamps, without CE mark
40453002   Double ruling, without clamps, without CE mark
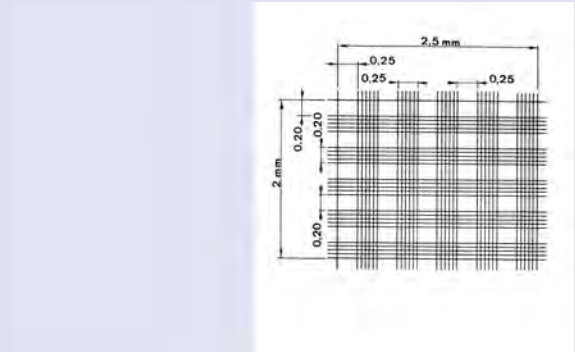
Counting chambers Malassez

Chamber depth 0.2 mm, CE

40453701   Single ruling, without clamps
40453702   Double ruling, without clamps

Counting chambers according to McMaster

for veterinary medicine (e.g. helminth eggs counting)
with 2 counting areas, cover glass with 2 counting grids glued on
3 supports

	Counting area	Dimensions
40454010	10 x 10 x 0.5 mm	approx. 76 x 32 mm
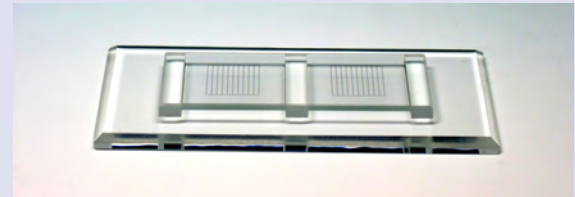
Shakers and Mixers

Rocking shakers

Small model, CE

with variable number of revolutions and digital display.
The electronic feedback control of the device ensures a smooth start as well as a constant and accurate speed. The rocking platform is designed to rock along the middle axis.

A provided, anti-slip mat holds small containers. Optionally available is a removable, washable plastic plate.

The rocking shaker comes with an illuminated "ON/OFF" switch and a speed control of the shaking frequency. The timer can be set up to max. 99 hours. The device turns off after the expiration of the set time.

Motor: Brushless AC motor with electronic feedback speed control

	40348022
Max. charge	1 kg
Voltage	110 or 230 volts (see rating plate)
Weight	2.2 kg
Size of platform	210 x 210 mm
Total dimensions	213 x 213 x 110 mm
Tilt angle	adjustable to 5° or 7° (7° preset)
Shaking rate	steplessly adjustable from 5-50 rpm
Shaking motion	teetering
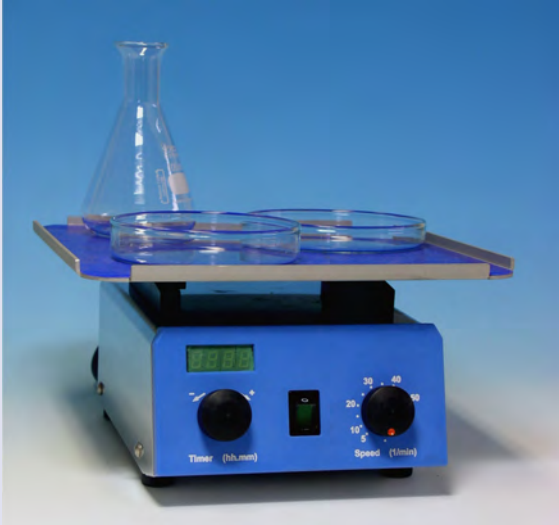
Large model, CE

with variable number of revolutions
The tilt angle can be adjusted to 3°, 6°, 9° or 12° (adjusted to 12° on delivery). The electronic feedback control of the device ensures a smooth start as well as a constant and accurate speed.

The rocking platform is designed to rock along the middle axis. The provided, rubber-like and anti-slip mat holds Petri dishes, microplates and other small containers.
The rocking shaker comes with an illuminated "ON/OFF" switch and a speed control of the shaking frequency.

Motor: Brushless DC motor with electronic feedback speed control

	40348014
Voltage	230 volts, 50 hertz, 15 watts
Size of platform	420 x 350 mm
Total dimensions	520 x 350 x 100 mm
Cable	approx. 1.5 m with plug
Weight	approx. 3.8 kg
Shaking rate	steplessly adjustable from 10-100 rpm

Shaker with platform, CE

The revolutions are being measured opto-electronically and readjusted electronically.
The supporting device for the shaking platform attachment is driven by an eccentric mechanism of 3 mm lifting capacity (from edge to edge). The rotation of the eccentric driveshaft is transmitted from powerful ball bearings to the supporting device.
Four tubular connecting pieces prevent the supporting device from turning. In contrast to the traditional single-point suspension, these silicone connecting pieces symmetrically adapt themselves to the centre of rotation. The result is an uniform, horizontal and circular rotation at every point of the supporting device.
A toggle switch permits different functions: "0" = "OFF", "I" = "Continuous operation" and "II" = "Timer". The timer can be set from 1 to 60 minutes.
The shaking platform is equipped with an anti-slip rubbery mat, which holds small containers securely in place. The mat can be easily cleaned with water and detergent.

Motor: Capacitor motor

	40348018
Voltage	230 volts, 50 hertz, 40 watts
Cable	approx. 1.5 m with plug
Total dimensions	approx. 150 x 160 x 103 mm (l x w x h)
Size of platform	approx. 200 x 400 mm
Total weight	approx. 4.7 kg (device 4060 g, platform 650 g)
Motor	Capacitor motor
Shaking rate	steplessly adjustable from 100-1100 rpm

Rotating mixers

with removable rolls, CE

Tumbling rotating mixer with five synchronous, diagonally eccentric and removable PVC rolls
The synchronous rolls are designed as a consistently rotating surface for sample bottles etc. These bottles are rotating around its long axis and rocking along its contact surface.
In case of using large containers, the rolls can be removed. Rolls are optionally available without tumbling motion (but only rotating).
This device is especially designed for the constant mixing of samples (e.g. whole blood) for haematological determination and for the gentle mixing of other cell suspensions. It also prevents sedimentation or dispersion of other samples such as colours, paints, oils and cosmetics etc.
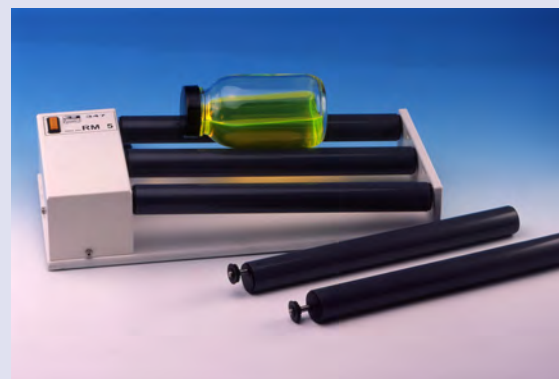
with cable and Schuko plug

	40347010
Voltage	230 volts, 50 hertz
Roll length	320 mm
Dimensions	430 x 180 x 95 mm (l x w x h)
Weight	approx. 3.7 kg
Speed	approx. 36 rpm
Loading weight	max. 2.0 kg

Rotating mixer with integral rolls, CE

Tumbling rotating mixer with five synchronous, diagonally eccentric PVC rolls.

	40348010	40348026
Voltage	110 or 230 V, 50 Hz	230 V, 50 Hz
Dimensions	430 x 180 x 95 mm	332 x 180 x 95 mm
Roll length	approx. 330 mm	approx. 200 mm
Speed	approx. 35 rpm	approx. 32 rpm

Tumbling rotating mixer with variable speed control, CE

Five or ten synchronously rotating PVC rolls provide an uniform and gently tumbling mixing of the tubes etc. These bottles are rotating around its long axis and rocking along its contact surface.
This device is especially designed for the uniform mixing of medical laboratory tests (e.g. whole blood) for haematological determinations and other cell suspension samples. It also prevents sedimentation or dispersion of other samples such as colours, paints, oils and cosmetics etc.
Voltage 110 or 230 volts, roll length approx. 324 mm

	40349006	40349012	40349018
Max. charge	2.0 kg	2.0 kg	5.0 kg
Speed	2-30 rpm, steplessly adjustable	10-80 rpm, steplessly adjustable	2-30 rpm, steplessly adjustable
Weight	3.8 kg	3.8 kg	7.6 kg
Dimensions	436 x 180 x 105 mm	436 x 180 x 105 mm	436 x 358 x 105 mm
Rolls	5 (not removable)	5 (not removable)	10 (removable)
Motor	Shaded-pole motor, 40 watts	Shaded-pole motor, 40 watts	Shaded-pole motor, 90 watts

Rotary mixer, CE

The device consists of a solid base body, in which the drive, the electrical components and the bearing for the swash plate can be found. The swash plate is furnished with a screw thread (left-hand thread) and screwed to the bearing journal. The swash plate is composed of 60 holes with three different diameters in order to carry sample bottles.
20 holes of 10 mm diameter; 20 holes of 12.5 mm diameter and 20 holes of 15.5 mm diameter.
The sample bottles, inserted in the swash plate, are held in position by an elastic clamping device so that they cannot fall out during the process of mixing. The base frame is painted in an acid-proof manner. The swash plate is made of plastic which is, to the greatest extent, resistant to chemicals and solvents.
During one revolution of the swash plate, the sample tubes once rotate around their own axis, resulting in a pivoting of the tube contents from the top to the bottom and back. The swash plate rotates at a fixed speed of approx. 6 rpm.
This contributes to a steady, gentle mixing of the samples.

	40350010
Width	200 mm
Length	200 mm
Swash plate	220 mm Ø
Voltage	230 volts, 50/60 hertz, 6 watts
Height	250 mm
Weight	approx. 2.5 kg
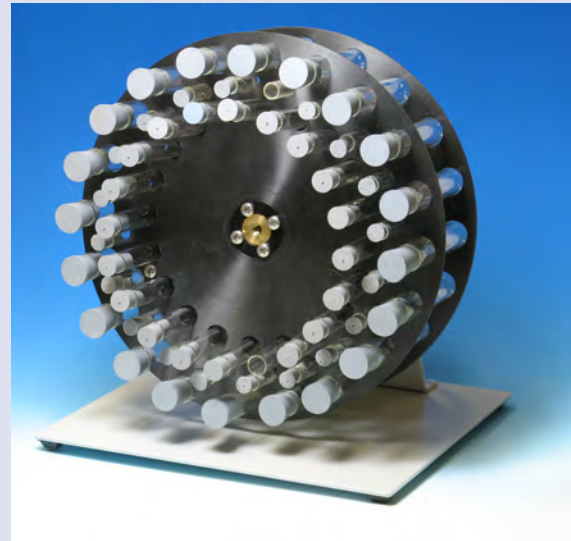
Shakers with digital display

3D movement, CE
The soft 3D movement of this shaker is ideal for low foaming agitation as well as DNA extractions. The platform holds Petri dishes, microplates and other small containers. A detachable plastic platform is optionally available.

- brushless AC motor with electronic feedback speed control
- shaking frequency: steplessly adjustable 5 - 50 rpm
- maximum time limit: 99 hours
- tilt angle: 5° or 7° (preset at 7°)
- platform: approx. 217 x 217 mm

	40351010
Max. charge	1 kg
Voltage	110 volts or 230 volts (see rating plate)
Weight	approx. 2.2 kg
Dimensions	approx. 213 x 213 x 110 mm
Shaking rate	steplessly adjustable from 5-50 rpm
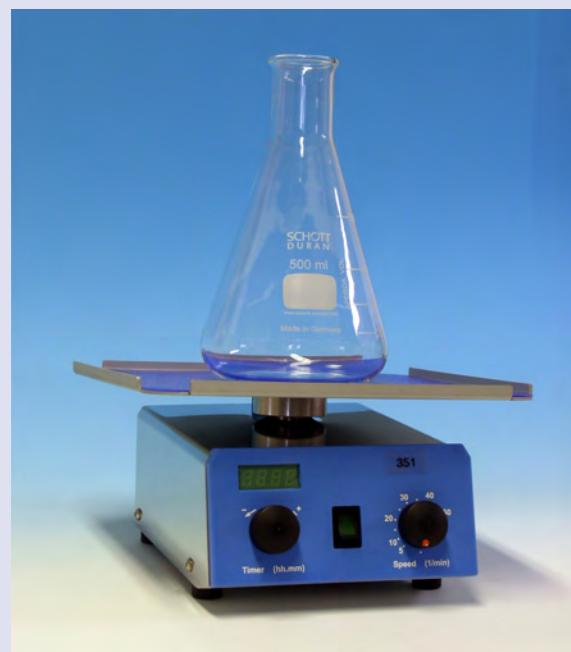
Shaker with digital display, CE

without attachment

The microprocessor technology of this shaker allows the data transfer by RS 232 interface for computer control. The special indexing mechanism stops the shaking platform always at a defined position.

The powerful laboratory shaker with linear reciprocal motion and 20 mm stroke is especially designed to shake flasks for biological cultures and Erlenmeyer flasks in sizes of 250 and 500 ml.

- designed to be used continuously
- speed control: 40 to 200 rpm in steps of 10 rpm
- feedback control by a micro controller
- two-line alphanumeric display with 16 characters each to show speed and time of operation
- maximum time limit: 99 days, 23 hours and 59 minutes - shortest unit 1 minute

40353010   Maximum load 1.5 kg

Standard attachments including respective clamps

without shaker, for shaker no. 40353010

40353030   for 6 Erlenmeyer flasks 250 ml
40353034   for 4 Erlenmeyer flasks 500 ml

Mini centrifuge

Sprout®, CE

This compact mini centrifuge is ideal for quick spin-downs of reaction tubes (micro cell separations and HPLC samples). Ergonomically designed lid with automatic start-stop for one-handed operation. Rotor accelerates quickly to 6000 rpm (RCF max. 2000 x g). As a safety feature, the rotor will not operate if the lid is open. Rubber footplate keeps unit stable and deadens vibration smooth. Durable, easy to clean ABS finish, with rack for reaction tubes. With 2 rotors of polycarbonate. Easy snapspin rotor change
Rotor 1: circular, for 6 tubes of 1.5 and 2.0 ml and - with included adapters - for 6 tubes of 0.4 and 0.5 ml
Rotor 2: rectangular, for two strips of 8 PCR tubes of 0.2 ml or for 16 single PCR tubes of 0.2 ml
with connecting cable and safety plug

	Voltage	Dimensions	Weight
40352010	230 V, 50/60 Hz, 0.1 A	approx. 153 x 128 x 104 mm	approx. 795 g

Reaction tubes made of polypropylene, with lid

suitable for mini centrifuge no. 40352010
49040010   Capacity approx. 1.5 ml

Microscopy and Staining

Storage Folders and Cases

Slide folders made of cardboard
without lid
42698010   for 20 microscope slides of 76 x 26 mm

with lid
for microscope slides of 76 x 26 mm
42700001   for 1 microscope slide
42700002   for 2 microscope slides
42700003   for 3 microscope slides
42700005   for 5 microscope slides
42700010   for 10 microscope slides
42700020   for 20 microscope slides

Slide cases, frame made of polypropylene, antistatic
Black, with numbered plastic grooves (antistatic, resistant to xylene), imprinted from 1-100, stackable
42701020   for 100 microscope slides of 76 x 26 mm

Slide cases, wooden frame, antistatic

Black-coated, bottom part and lid are connected by metal hinges and clasps, with numbered plastic grooves (antistatic, resistant to xylene) and numbered index.

42701010   for 100 microscope slides of 76 x 26 mm

Slide cases, wooden frame, antistatic

Black-coated, bottom part and lid are connected by metal hinges and clasps, with numbered plastic grooves (antistatic, resistant to xylene) and numbered index.

42702010   for 50 microscope slides of 76 x 26 mm

Slide cases, wooden frame, antistatic

Black-coated, bottom part and lid are connected by metal hinges and clasps, with numbered plastic grooves (antistatic, resistant to xylene) and numbered index.

42703010   for 25 microscope slides of 76 x 26 mm

Slide cases made of polypropylene, for 100 microscope slides of 76 x 26 mm

made of solid polypropylene, with hinged lid, stackable, dimensions approx. 210 x 168 x 33/34 mm

42704001   White
42704002   Blue
42704003   Red

Slide boxes made of polystyrene, for 50 microscope slides of 76 x 26 mm

Storage boxes made of polystyrene with tight-closing lid, removable index card and numbered bottom, stackable

42705002   Blue
42705003   Red
42705010   White

Cover Glasses for Microscopy

The cover glasses are manufactured from cover glass D 263® M, a colourless borosilicate glass, according to ISO 8255. Appropriate manufacturing processes guarantee low tolerances.

The outstanding features of D 263® M include:
- Virtually free of any colour distortion because super-transparent and colourless
- Excellent internal glass quality with very low levels of inclusions, striae, bubbles, streaks, etc.
- High spectral transmission
- Excellent flatness
- Optimum resistance to chemical attack
- Refractive index finely adapted to microscopes

Cover glasses for microscopy

in boxes of 100 - special thickness, CE

Cover glasses are available in different thicknesses:
0 = 0.08 - 0.12 mm
1 = 0.13 - 0.16 mm
1.5 = 0.16 - 0.19 mm
2 = 0.19 - 0.23 mm

Cover glasses will be regularly supplied in standard thickness 1. Cover glasses of thicknesses 0 - 1.5 and 2 are special designs and cannot be returned or exchanged.
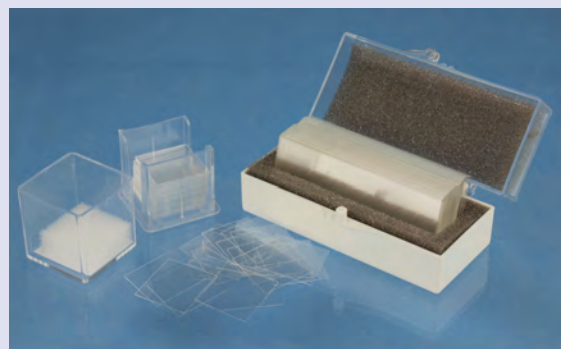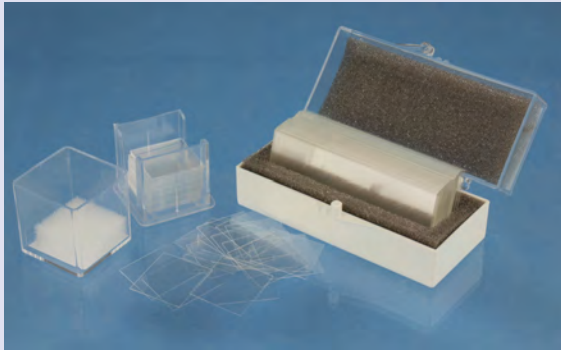
Cover glasses in boxes of 100 - thickness 1, CE
in plastic boxes, 10 boxes in a carton (1000 glasses)
Special sizes are available as well.

	Dimensions:
40990101	10 x 10 mm
40990103	12 x 12 mm
40990106	15 x 15 mm
40990109	18 x 18 mm
40990112	20 x 20 mm
40990115	22 x 22 mm
40990118	24 x 18 mm
40990121	24 x 24 mm
40990122	25 x 25 mm
40990124	26 x 21 mm
40990127	30 x 24 mm
40990130	32 x 22 mm
40990133	32 x 24 mm
40990136	36 x 24 mm
40990139	40 x 22 mm
40990142	40 x 24 mm
40990145	40 x 25 mm
40990148	46 x 24 mm
40990151	50 x 24 mm
40990157	55 x 24 mm
40990160	55 x 25 mm
40990166	60 x 24 mm

in boxes of 50 - thickness 1, CE
in plastic boxes, 20 boxes in a carton (1000 glasses)
Special sizes are available as well.

	Dimensions:
41000103	12 x 12 mm
41000106	15 x 15 mm
41000109	18 x 18 mm
41000112	20 x 20 mm
41000115	22 x 22 mm
41000118	24 x 18 mm
41000121	24 x 24 mm
41000124	26 x 21 mm
41000127	30 x 24 mm
41000133	32 x 24 mm
41000136	36 x 24 mm
41000139	40 x 22 mm
41000142	40 x 24 mm
41000148	46 x 24 mm
41000151	50 x 24 mm
41000154	50 x 25 mm
41000163	60 x 22 mm
41000166	60 x 24 mm

Cover glasses in boxes of 100 - thickness 1, CE - circular
10 boxes in a carton (1000 glasses)
Special sizes are available as well.

	Diameter:
41001103	3 mm
41001105	5 mm
41001108	8 mm
41001110	10 mm
41001112	12 mm
41001113	13 mm
41001114	14 mm
41001115	15 mm
41001117	17 mm
41001118	18 mm
41001120	20 mm
41001122	22 mm
41001124	24 mm
41001125	25 mm
41001130	30 mm

Selected thickness 0.17 ± 0.01 mm, CE
in plastic boxes of 50 pieces, except: 26 x 21 and 32 x 24 mm of
100 pieces, 20 or 10 boxes in a carton (1000 glasses)
Special sizes are available as well.

	Dimensions:
41014509	18 x 18 mm
41014512	20 x 20 mm
41014515	22 x 22 mm
41014521	24 x 24 mm
41014524	26 x 21 mm
41014533	32 x 24 mm
41014542	40 x 24 mm
41014551	50 x 24 mm

Selected thickness 0.17 ± 0.02 mm, CE
in plastic boxes of 50 pieces, except: 26 x 21 and 32 x 24 mm of
100 pieces, 20 or 10 boxes in a carton (1000 glasses)
Special sizes are available as well.

	Dimensions:
41015609	18 x 18 mm
41015612	20 x 20 mm
41015615	22 x 22 mm
41015621	24 x 24 mm
41015624	26 x 21 mm
41015633	32 x 24 mm
41015642	40 x 24 mm
41015651	50 x 24 mm
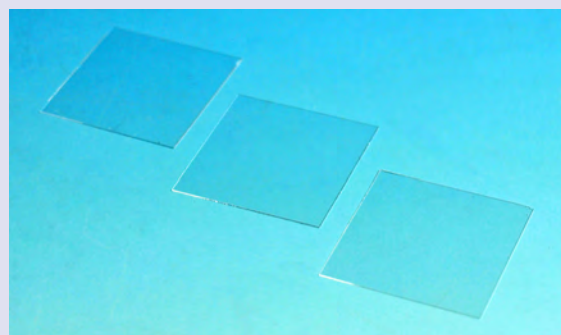
Diagnostic Microscope Slides

Micro Life microscope slides

Micro Life®
Microscope slide, special pipette and directions for use
for observation of long-term cultures of microorganisms

42426010   The "living" microscope slide
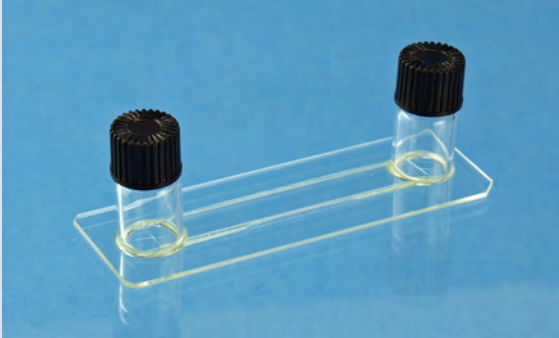
Immunofluorescent printed slides, CE

Black epoxy coating, 8 numbered circles of approx. 6 mm Ø

	Packing/box	Thickness	Dimensions
42420010	100 pieces	approx. 1 mm	approx. 75 x 25 mm
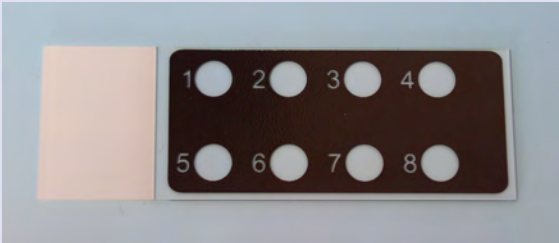
Black epoxy coating, 3 circles of approx. 14 mm Ø

	Packing/box	Thickness	Dimensions
42421010	100 pieces	approx. 1 mm	approx. 75 x 25 mm
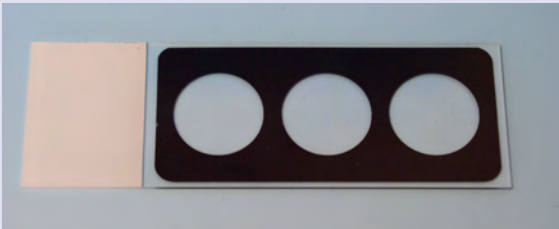
Black epoxy coating, 3 numbered circles of approx. 10 mm Ø

	Packing/box	Thickness	Dimensions
42422010	100 pieces	approx. 1 mm	approx. 75 x 25 mm

Black epoxy coating, 10 circles of approx. 6 mm Ø

	Packing/box	Thickness	Dimensions
42423010	100 pieces	approx. 1 mm	approx. 75 x 25 mm
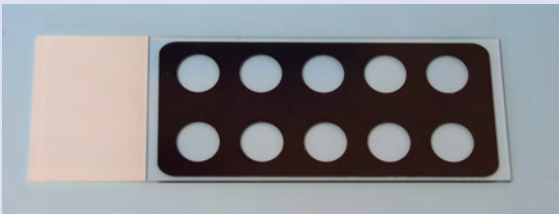
Immunofluorescent printed slides, CE, blue epoxy coating, 1 circle of approx. 8 mm Ø

	Packing/box	Thickness	Dimensions
42424010	100 pieces	approx. 1 mm	approx. 75 x 25 mm

Staining Equipment

Staining stands
made of Plexiglas®

41218010   with 3 Hellendahl jars made of glass no. 42460010

made of hardwood

41220010   with 3 rectangular glass jars approx. 40 x 20 mm no. 41230010

made of hardwood

41221010   with 6 rectangular glass jars approx. 40 x 20 mm no. 41230010

Staining stand made of Plexiglas®, empty, with 3 holes
suitable for staining jars, circular, no. 41231010
bottles, 50 ml, no. 41301006, 41303006, 41311006, 41313006
bottles with frosted label, 50 ml, no. 41321010
pipette bottles, 50 ml, no. 42600008 and 42601008

	Dimensions	Opening Ø
41223010	approx. 18 x 7.5 x 3 cm	approx. 43 mm

Staining stands made of hardwood
with 3 circular glass jars no. 41231010
41224010 Holes of approx. 48-49 mm Ø

made of hardwood
with 6 circular glass jars no. 41231010
41225010 Holes of approx. 48-49 mm Ø

made of hardwood
with 3 oval glass jars no. 41232010
41226010 Holes of approx. 40 x 20 mm

made of hardwood
with 6 oval glass jars no. 41232010

	Dimensions	Holes
41227010	approx. 265 x 70 mm	approx. 40 x 20 mm
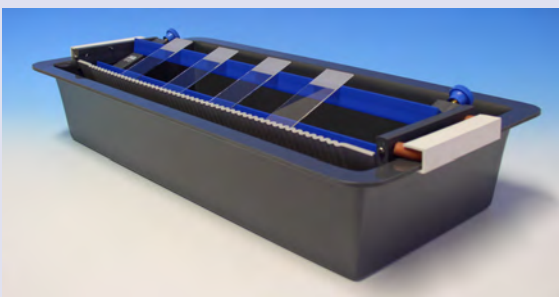
Staining Accessories

Staining bridge made of PVC with staining tray
Large type, extensible, for dishes and basins of 38 cm to 62 cm, can be fixed at a slanted or horizontal position, complete with staining tray made of PVC and 2 clamps made of PVC

41185010 Dimensions approx. 38 x 17 x 8 cm

Staining bridge made of PVC, without tray

Large type, extensible, can be fixed at a slanted or horizontal position, with 2 clamps

41186010   for dishes and basins of 38 cm to 62 cm
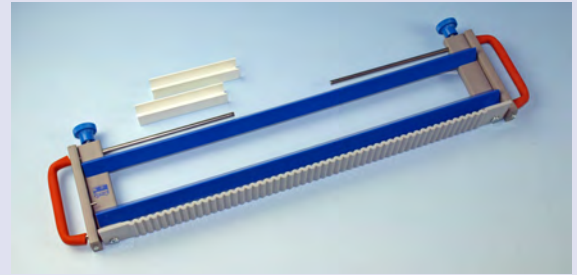
Spare staining tray made of PVC

also suitable as storage dish for pipettes etc.

41187010   Dimensions approx. 38 x 17 x 8 cm

Staining rack with glass tray

Metal rack made of plastic-coated wire with glass tray no. 42900004

41190010   Glass tray approx. 22 x 15 cm

Spare staining rack

made of plastic-coated wire (without glass tray)

41191010   for trays of approx. 22 x 15 cm

Staining tray made of stainless steel with tilting rack

Slanted sides

41192010   Tray size approx. 24 x 14 x 4 cm
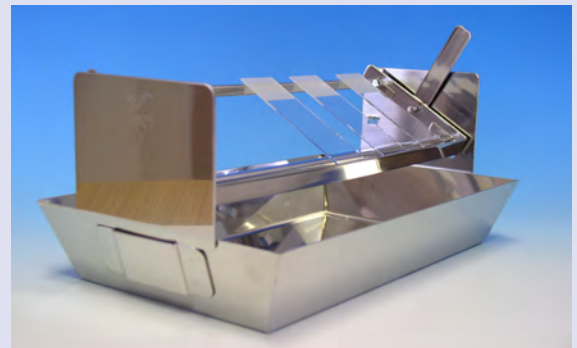
Staining rack made of stainless steel
with reliable device which tilts the microscope slides, suitable for glass trays no. 42900004 (without tray)
41198010   Length approx. 22 cm

Staining rack made of stainless steel according to Bongert
with glass tray no. 42900004
41200010   Glass tray approx. 22 x 15 cm

Staining Troughs and Jars

**Glass jars with ground-in cover with knob
and staining rack made of stainless steel**
suitable for serial stainings, especially for the method according to Papanicolaou.
for microscope slides 26 mm wide
41201014   for 14 microscope slides
41201024   for 24 microscope slides
41201042   for 42 microscope slides
41201098   for 98 microscope slides

Staining rack circular, made of stainless steel, without jar
for microscope slides 26 mm wide

	for	Outside Ø
41202014	14 microscope slides	approx. 83 mm
41202024	24 microscope slides	approx. 96 mm
41202042	42 microscope slides	approx. 137 mm
41202098	98 microscope slides	approx. 191 mm

Glass jars with ground-in cover with knob

suitable for staining rack no. 41202014, 41202024, 41202042, 41202098

	for	Outside Ø	Height
41203014	14 microscope slides	approx. 100 mm	approx. 170 mm
41203024	24 microscope slides	approx. 120 mm	approx. 170 mm
41203042	42 microscope slides	approx. 160 mm	approx. 170 mm
41203098	98 microscope slides	approx. 220 mm	approx. 170 mm

Staining trough

consisting of:
Glass trough with cover and staining tray made of stainless steel, for staining of 10 microscope slides (without microscope slides) suitable for microscope slides of approx. 76 x 26 mm, width up to approx. 45 mm

Spare parts/accessories:

41205010	Staining trough
41205001	Glass trough with cover, approx. 9 x 7 x 6.5 cm
41205002	Glass trough without cover
41205003	Glass cover
41205004	Staining tray made of stainless steel
41205005	Staining tray made of stainless steel with extended handle

Dye-bath set

consisting of:
3 Glass troughs with cover no. 41205001
1 Staining tray no. 41205004
1 Glass tray 27.5 x 15 x 6 cm no. 42900005

41210010   This set is recommended for serial stainings and in order to avoid stains.
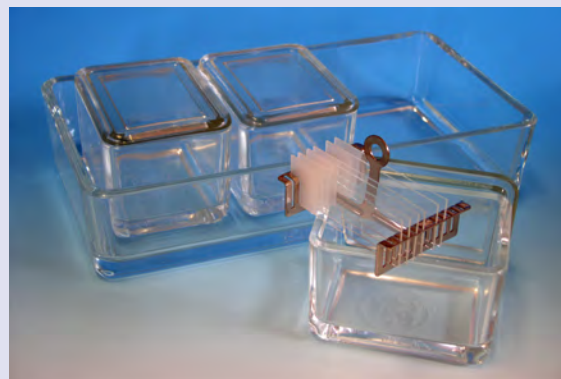
Staining Utensils

Staining trough made of glass with cover
Rectangular

41230010   Dimensions approx. 85 x 40 x 20 mm

Staining jars made of glass with cover, cylindrical
41231010   Dimensions approx. 85 x 40 mm Ø
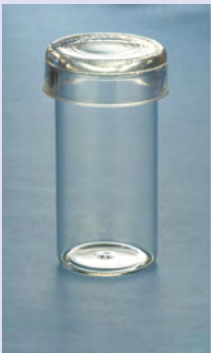
Oval

41232010   Dimensions approx. 85 x 40 mm

Staining prisms made of glass according to Borel
suitable for staining jars, circular, no. 41231010

	Width	Height
41234010	approx. 25 mm	approx. 65 mm

Staining Dishes and Staining Bottles

Staining dishes

according to Schiefferdecker, SMG glass
with cover, for 10 microscope slides of approx. 76 x 26 mm
or for 20 slides back to back
42450110   Dishwasher-safe

according to Schiefferdecker
with cover, for 10 microscope slides of approx. 76 x 26 mm
or for 20 slides back to back
42450010   Soda glass

according to Hellendahl, SMG glass, with extension
with cover, for 8 microscope slides of approx. 76 x 26 mm
or for 16 slides back to back
42460110   Dishwasher-safe

Staining dishes according to Hellendahl, with extension
with cover, for 8 microscope slides of approx. 76 x 26 mm
or for 16 slides back to back
42460010   Soda glass

according to Hellendahl, SMG glass, without extension
with cover, for 8 microscope slides of approx. 76 x 26 mm
or for 16 slides back to back,
dimensions approx. 85 x 35 x 95 mm
42461110   Dishwasher-safe

according to Hellendahl, without extension
with cover, for 8 microscope slides of approx. 76 x 26 mm
or for 16 slides back to back,
dimensions approx. 85 x 35 x 95 mm
42461010   Soda glass

Coplin staining jars made of polypropylene
with screw cap, for 10 microscope slides of approx. 76 x 26 mm

	autoclavable up to	Max. temperature for use	Height
42470020	+121 °C/+249.8 °F (2 bar)	+125 °C/+257 °F	approx. 94 mm

Staining jars according to Coplin, SMG glass
with cover, for 10 microscope slides of approx. 76 x 26 mm
42470110   Dishwasher-safe

Staining jars according to Coplin
with cover, for 10 microscope slides of approx. 76 x 26 mm
42470010   Soda glass
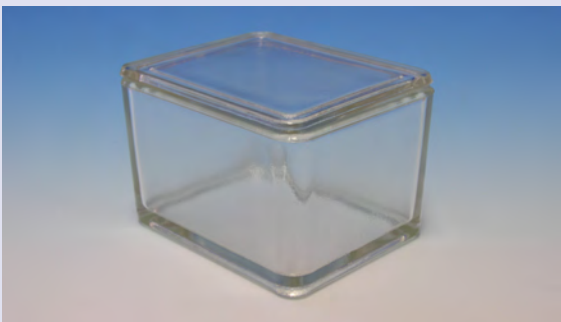
Staining troughs with cover, SMG glass
with cover, suitable for staining tray no. 42481110
Dimensions approx. 105 x 85 x 80 mm
42480110   Dishwasher-safe

Staining troughs with cover
suitable for staining tray no. 42481010
Dimensions approx. 105 x 85 x 80 mm
42480010   Soda glass

Staining trays, SMG glass
fitting into trough no. 42480110,
for 10 microscope slides of approx. 76 x 26 mm or any other width
up to approx. 50 mm (or for 20 slides back to back)
42481110   Dishwasher-safe
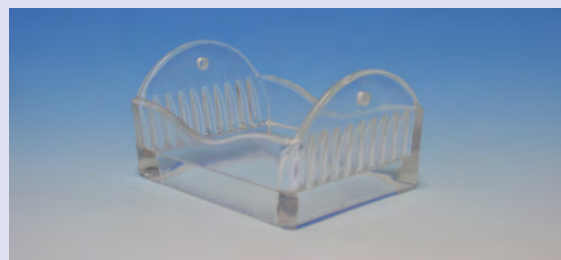
Staining trays
fitting into trough no. 42480010
for 10 microscope slides of approx. 76 x 26 mm or any width
up to approx. 50 mm (or for 20 slides back to back)
42481010   Soda glass

Wire handles
for staining trays no. 42481010 and 42481110
42482010   Wire handles

Staining bottles / Pipette bottles

Pipette bottles made of clear glass
with ground-in interchangeable pipette with olive at top
42600008   Capacity 50 ml
42600016   Capacity 100 ml

Pipette bottles made of amber glass
with ground-in interchangeable pipette with olive at top
42601008   Capacity 50 ml
42601016   Capacity 100 ml

Rubber teats made of siliconised latex
suitable for pipette bottles, Pasteur pipettes etc.

	Capacity	Opening Ø
42620010	approx. 2 ml	approx. 4-5 mm

Staining stands made of hardwood

with 3 amber pipette bottles
no. 42601008, capacity 50 ml
42608010   without rubber teats
42608020   with rubber teats

with 3 pipette bottles, clear glass
no. 42600008, capacity 50 ml
42609010   without rubber teats
42609020   with rubber teats

with 6 amber pipette bottles
no. 42601008, capacity 50 ml
42610010   without rubber teats
42610020   with rubber teats

Staining stands made of hardwood with 6 pipette bottles, clear glass

no. 42600008, capacity 50 ml

42611010   without rubber teats
42611020   with rubber teats

Microscope Slides, Spot Plates and Accessories

Microscope slides

with 1 cavity, CE

Clear glass, ground edges

	Packing/box	Thickness	Dimensions
42410010	50 pieces	approx. 1.5 mm	approx. 76 x 26 mm

Microscope slides with 2 cavities, CE

Clear glass, ground edges

	Packing/box	Thickness	Dimensions
42411010	50 pieces	approx. 1.5 mm	approx. 76 x 26 mm

with 3 cavities, CE

Clear glass, ground edges

	Packing/box	Thickness	Dimensions
42412010	50 pieces	approx. 1.5 mm	approx. 76 x 26 mm

with 1 cavity of approx. 22 mm Ø, CE

Clear glass, ground edges

	Packing/box	Thickness	Cavity	Dimensions
42415010	20 pieces	3-4 mm	approx. 1.75 mm deep	approx. 76 x 26 mm
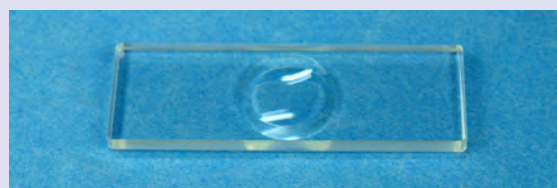
Glass plates with 12 cavities

Frosted surface, individually packed

	Cavities	Dimensions
42417010	approx. 1.8 mm deep, approx. 16 mm Ø	approx. 76 x 60 x 5 mm
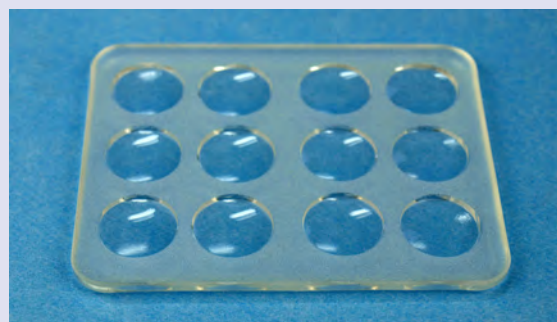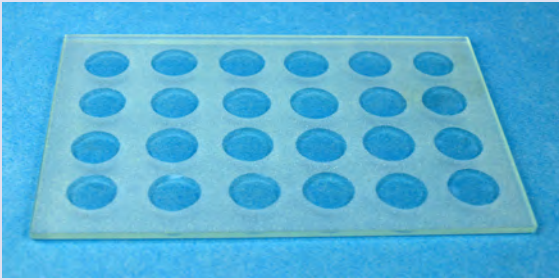
Glass plates with 24 cavities

Frosted surface, individually packed

	Cavities	Dimensions
42418010	approx. 1.6 mm deep, approx. 16 mm Ø	approx. 140 x 85 x 3 mm
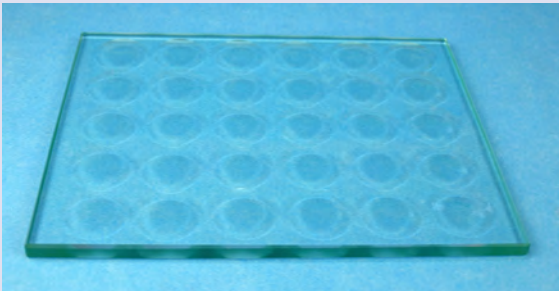
Glass plates with 30 cavities

Blank surface, individually packed

	Dimensions	Cavities
42419010	approx. 180 x 130 x 6 mm	approx. 2 mm deep, approx. 22 mm Ø
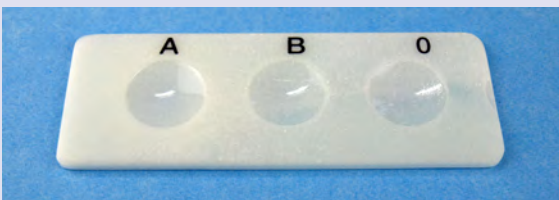
Microscope slides made of opal glass, CE, marked A, B, 0

for blood typing, with frosted label, ground edges, with 3 polished cavities

	Cavities	Dimensions
42430010	approx. 1.75 mm deep, approx. 20 mm Ø	approx. 120 x 40 x 3 mm

Microscope slides made of opal glass, CE, marked Anti-A, Anti-B, Anti-AB, Anti-Rh

for blood typing, with frosted label, ground edges, with 4 polished cavities

	Cavities	Dimensions
42432010	approx. 1.75 mm deep, approx. 20 mm Ø	approx. 130 x 40 x 3 mm

Microscope slide pipette

This system combines the function of pipette and microscope slide. The cover glass with standard thickness 1 - in correct flatness - enables microscopic contrasting procedures such as bright field, dark field, transmitted light-polarisation, fluorescence, phase contrast and interference contrast.
Quick cleaning and - after that - immediate use for serial examinations e.g. in hydrobiology for plankton or the microscopic control of biological floc in sewage treatment plants.
Other areas of application: Chemical or physical tests, e.g. crystal growth or the precipitation of metal salts.
Heat-resistant up to +180 °C/+356 °F (when using a silicone teat) and resistant to diluted acids and alkaline solutions.

	Microscope slide	Cover glass thickness	Capacity	Observation field dimensions
42427010	76 x 26 mm	approx. 0.15 mm	approx. 1 ml	approx. 40 x 8 x 0.25 mm

Dissecting needles
made of chromium-nickel steel, stainless, with wooden handle

	Handle length	Total length
42712010	approx. 100 mm	approx. 140 mm

Blood smear slides and glass spot plates

Blood smear slides according to Undritz, CE
Clear glass, both sides polished, bevelled edges and corners

	Thickness	Dimensions
40619010	1.6 - 1.7 mm	approx. 40 x 20 mm
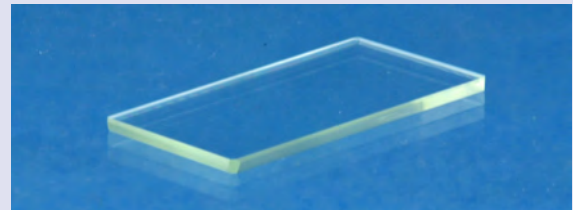
Glass spot plates with 10 cavities
Börner test slides for flocculation tests, with 10 numbered cavities, two edges at the bottom

	Dimensions	Cavity Ø	Cavity
40623010	approx. 105 x 55 x 5 mm	approx. 14 mm	approx. 2 mm deep
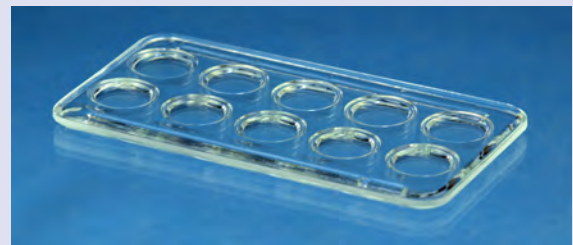
Glass spot plates with 12 cavities
for flocculation tests, with 12 numbered cavities,
two edges at the bottom

	Dimensions	Cavity Ø	Cavity
40624010	approx. 89 x 57 x 4 mm	approx. 15 mm	approx. 0.8 mm deep
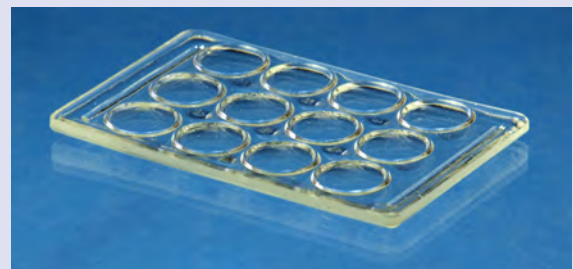
Porcelain plate for spot tests with 12 cavities
Glazed

	Dimensions	Cavity Ø	Cavity
40625010	approx. 115 x 91 x 12 mm	approx. 17 mm	approx. 2 mm deep

Microscope Slides

SuperFrost®, CE

Cut edges

Fully developed marking system for all preparations in medical and scientific laboratories.

The microscope slides SuperFrost® have a coated labelling field in one of 6 standard colours.
Preparations can be identified or marked according to urgency, examination method, staining technique etc. The coating of the labelling field is resistant to common solvents.

Dimensions: approx. 76 x 26 mm
Thickness: approx. 1 mm
Packing: 50 pieces/box

42408010	blue
42408020	yellow
42408030	green
42408040	orange
42408050	rose
42408060	white
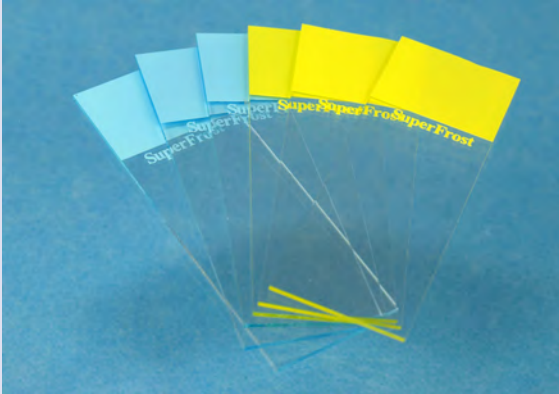
SuperFrost® Plus, ground edges 90°

A permanent positive charge has been placed on these microscope slides.
Therefore they attract electrostatically fresh frozen tissue section and cytology preparations, binding them to the slides.
Recommended for anatomic and molecular pathology laboratories. The microscope slides SuperFrost® Plus have proven to be superior for cell adhesion in cytocentrifuge preparations in standard Papanicolaou smears.

Preparations can be marked and identified by the coated labelling field. The coating of the labelling field is resistant to common solvents.

Thickness approx. 1 mm

	Packing/box	Dimensions	Colour code
42409110	72 pieces	approx. 75 x 25 mm	white
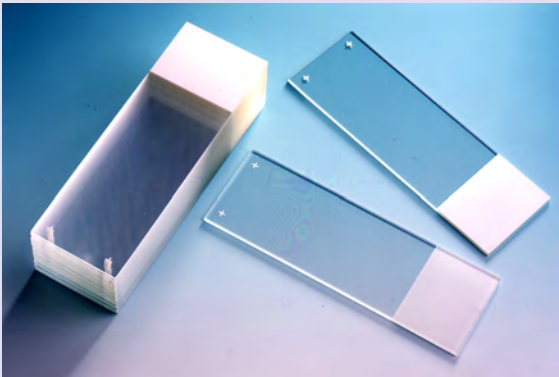
Polysine®, ground edges 90°

These slides come with a permanent adhesive. This provides superior cell and tissue adhesion and saves money and time by eliminating the need for expensive adhesives and time-consuming coating techniques.

These glass slides attract electrostatically and chemically
- fresh frozen tissue sections
- formalin fixed, paraffin embedded tissue sections
- cytocentrifuge preparations and cytology smears
- alcohol fixed, paraffin embedded tissues
- Bouin's or non-crosslinking fixed, paraffin embedded tissue sections

Thickness approx. 1 mm

	Packing/box	Dimensions	Colour code
42409210	72 pieces	approx. 75 x 25 mm	white
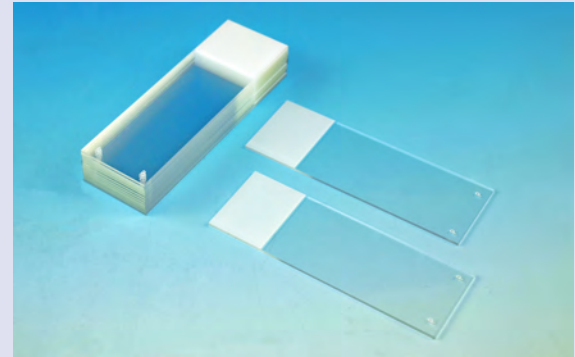
SuperFrost®, ground edges 90°

Fully developed marking system for all preparations in medical and scientific laboratories.

The microscope slides SuperFrost® have a coated labelling field in one of 6 colours, packing 50 pieces, dimensions approx. 76 x 26 mm. Preparations can be identified or marked according to urgency, examination method, staining technique etc. The coating of the labelling field is resistant to common solvents.

Thickness approx. 1 mm
42409010	blue
42409020	yellow
42409030	green
42409040	orange
42409050	rose
42409060	white

Microscope slides ELKA, cut edges, half-white, CE

Standard thickness, selected glass quality, non-corrosive, cleaned, ready for use
Packing: 50 pieces/box - 5000 pieces/carton

	Thickness	Dimensions
42400010	approx. 1 mm	approx. 76 x 26 mm

Microscope slides ELKAmed ECO, cut edges, CE

Proven glass quality, cleaned, ready for use
Packing: 50 pieces/box, 2500 pieces/carton

	Thickness	Dimensions
42400110	approx. 1 mm	approx. 76 x 26 mm
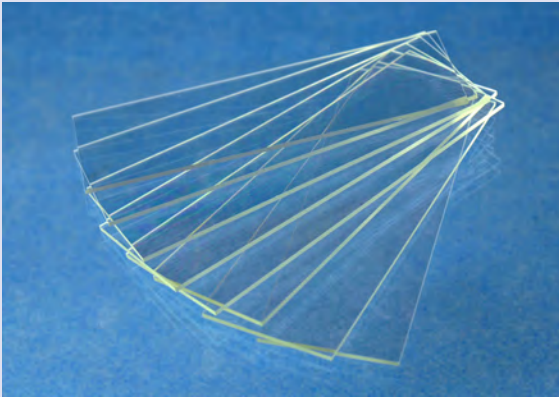
Microscope slides ELKA, ground edges 90°, half-white, CE

Standard thickness, selected glass quality, non-corrosive,
cleaned, ready for use
Packing: 50 pieces/box - 5000 pieces/carton

	Thickness	Dimensions
42401010	approx. 1 mm	approx. 76 x 26 mm
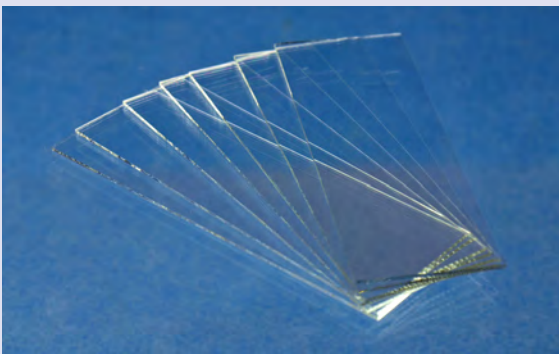
Microscope slides ELKA, cut edges, half-white, extra thin, CE

Selected glass quality, non-corrosive,
cleaned, ready for use
Packing: 50 pieces/box - 5000 pieces/carton

	Thickness	Dimensions
42404010	0.6-0.8 mm	approx. 76 x 26 mm

Microscope slides, with frosted end, cut edges, half-white, CE

Selected glass quality, non-corrosive, cleaned, ready for use,
dimensions approx. 76 x 26 mm, thickness approx. 1 mm
Packing: 50 pieces/box, 5000 pieces/carton

42406010   with frosted end on both sides
42406020   with frosted end on one side

Microscope slides ELKAmed ECO, cut edges, with frosted end on both sides, CE

Proven glass quality, cleaned, ready for use
Packing: 50 pieces/box, 2500 pieces/carton

	Thickness	Dimensions
42406110	approx. 1 mm	approx. 76 x 26 mm
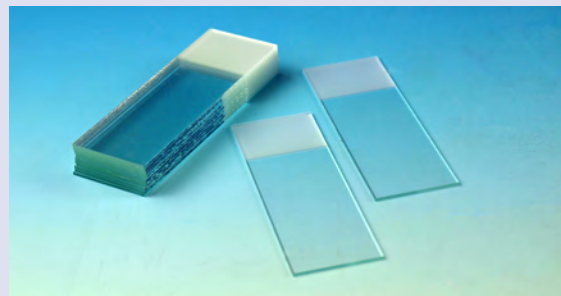
Microscope slides, with frosted end, ground edges 90°, half-white, CE

Selected glass quality, non-corrosive, cleaned, ready for use, dimensions approx. 76 x 26 mm, thickness approx. 1 mm
Packing: 50 pieces/box, 5000 pieces/carton

42407010 with frosted end on both sides
42407020 with frosted end on one side
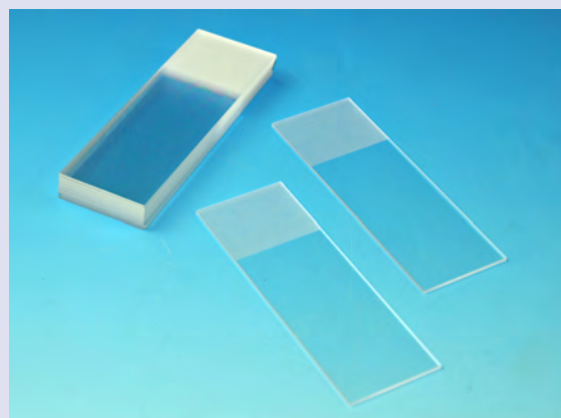
Drying rack made of Plexiglas® for 12 microscope slides

for the drying of coloured slides with 12 numbered positions. The microscope slides are placed vertically on replaceable blotting paper. In the base of the drying rack is storing place for 2 packs of paper. Every drying rack comes with 2 packs of paper.

	Dimensions	Article
41238010	Height 105 mm	Drying rack
41238020	approx. 200 x 45 mm	Blotting paper 25 sheets/pack
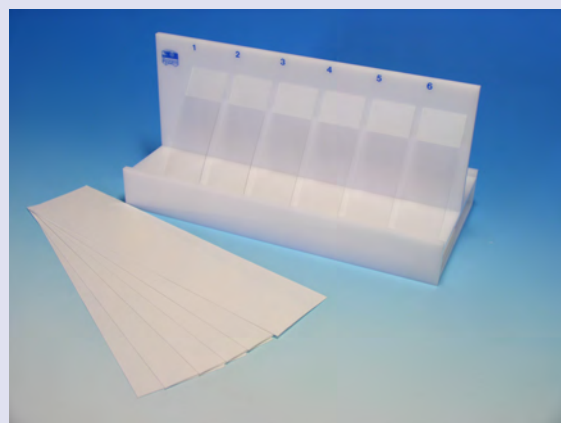
Rack made of Plexiglas®

with numbering 1-12 and field for inscriptions
41240010 for 12 microscope slides
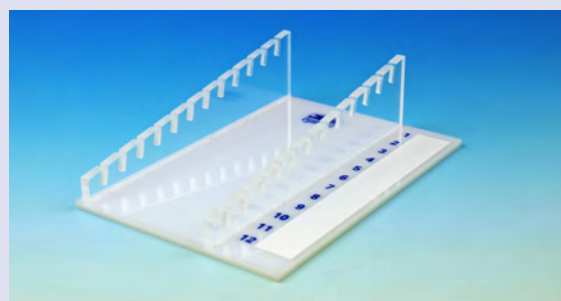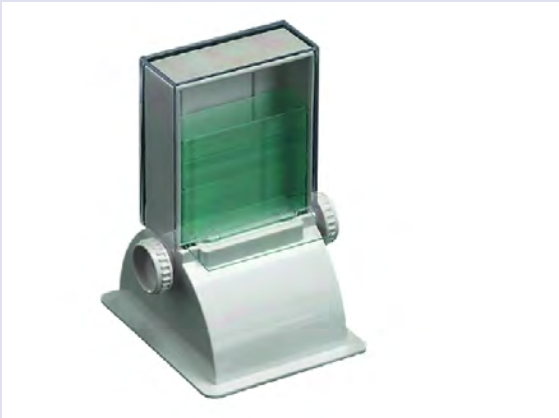
Microscope slide dispenser
Dustproof, practical storage, no finger prints by removing slides through touching the sides only, without slides
42440010   for 72 microscope slides of standard size 76 x 26 mm
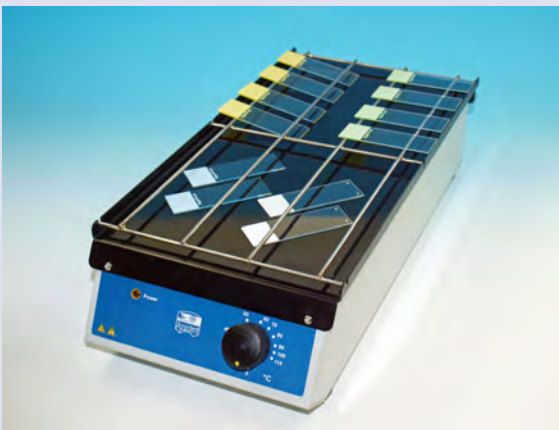
Microscope slide drying bench with heating, CE
speeds up the preparation of up to 48 slides of standard size 76 x 26 mm. The slides can be placed in any position:
- on bars
- against bars
- flat on heating foil

	42395010
Weight	approx. 1.5 kg
Dimensions	approx. 400 x 186 x 105 mm (l x w x h)
Heating element	Heating foil
Case	Painted aluminium
Capacity	max. 150 W 230 V 50/60 Hz
Heating temperature	from room temperature up to max. +100 °C/+212 °F
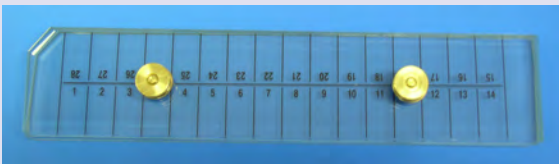
Glass plates
for detection of trichinae

	Fields	Dimensions
41956028	28	approx. 230 x 50 mm

Equipment for Microscopy and Staining

Equipment
Bottles for cedar oil
with interchangeable ground-in, amber pipette, plastic cap and glass rod

	Total height	Capacity	Ø	Height of flask
40920010	approx. 100 mm	approx. 40 ml	approx. 54 mm	approx. 60 mm

Lens tissue paper
Special paper for cleaning optical glass
Packing: 500 pieces/dispenser box
41019010   Dimensions approx. 90 x 72 mm
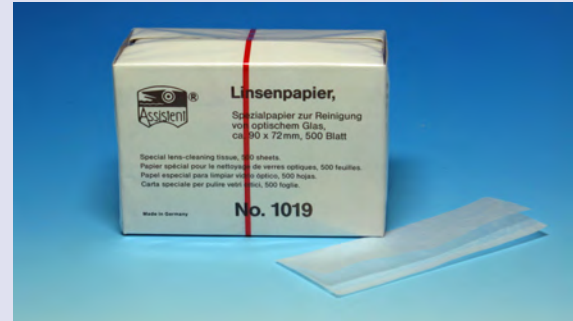
Cover glass forceps
Nickel-plated, bent
41020010   Length approx. 105 mm

Histokitt
Mounting medium for histology/microscopy.
Light-resistant, neutral, colourless, does not affect colour of the
specimen, soluble e.g. in benzene, chloroform, dioxane, xylene
in UN certified tinplate bottle

	Hardening time	Capacity	Cold-resistant
41025010	20 minutes	500 ml	down to -17 °C/+1.4 °F

Petri dishes made of glass
with cover, sterilisable up to +121 °C/+249.8 °F

	Height of base	Cover Ø
41042006	approx. 1.2 cm	approx. 4 cm
41042012	approx. 1.5 cm	approx. 6 cm
41042018	approx. 1.5 cm	approx. 8 cm
41042024	approx. 2 cm	approx. 10 cm
41042030	approx. 2 cm	approx. 12 cm
41042036	approx. 2.5 cm	approx. 15 cm
41042042	approx. 5 cm	approx. 20 cm
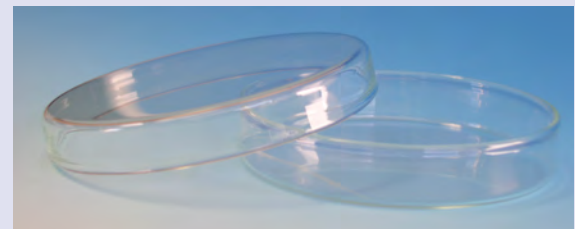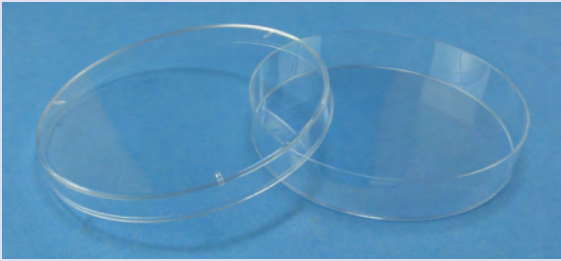
Petri dishes made of polystyrene
Disposable, with vents and cover, packing: 480 pieces/box
41043010   Diameter approx. 90 mm
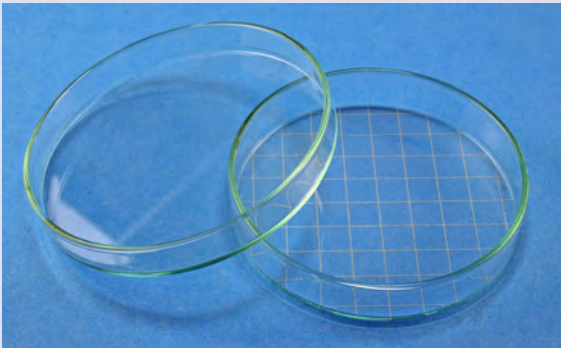
Petri dishes made of glass with grid and cover
for examining trichinae

	Size of grid	Dimensions Petri dishes
41044010	approx. 10 x 10 mm	approx. 10 x 2 cm
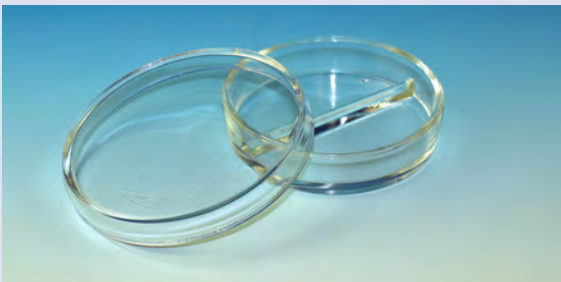
Petri dishes with cover, DURAN® borosilicate glass 3.3
Cover approx. 10 cm Ø, height of base approx. 2 cm
41045002   Base with 2 equal compartments
41045003   Base with 3 equal compartments
41045004   Base with 4 equal compartments

Drigalski spatulas made of glass
for bacteriological work – equal spreading

	Total length	Side length	Width of spatula	Rod Ø
41049010	approx. 146 mm	approx. 35 mm	approx. 45 mm	approx. 5 mm

Marker pens
with clip, fineliner – for writing on glass, waterproof
41181004   red
41181008   black
41181010   blue

Glass-writing diamond pen

41182010   Total length approx. 150 mm

Bottles for Canada balsam with ground-on cap
with glass rod 4 mm Ø

	Capacity	Rod length
41710030	approx. 30 g	approx. 92 mm
41710060	approx. 60 g	approx. 120 mm

Bottles for Canada balsam with loose cap
with glass rod 4 mm Ø

	Capacity	Rod length
41720030	approx. 30 g	approx. 92 mm
41720060	approx. 60 g	approx. 120 mm

Staining blocks (Vaccine dishes), clear glass
with one cavity and cover made of clear glass
42020010   Dimensions approx. 4 x 4 cm

Staining blocks (Vaccine dishes), black glass
with one cavity and cover made of clear glass
42021010　　Dimensions approx. 4 x 4 cm

Liquid Handling

Assimat

Dispenser Assimat

The economic dispenser for the daily routine
All parts which come in contact with liquids are made of polypropylene (PP), polyethylene (PE) and ethylene-propylene-diene rubber (EPDM rubber). This allows for precise dispensing of many media.

Limitations of use:
Liquids which do not affect the materials of the device can be dispensed with respect to the following limits:

- Vapour pressure up to 500 mbar
- Density up to 13.6 g/cm³
- Temperature up to +40 °C
  (+104 °F)

Liquids that should not be dispensed include e.g. concentrated or oxidising acids, non-polar solvents like hydrocarbons and halogenated hydrocarbons.

Accuracy ≤ ± 1.2 %*, coefficient of variation ≤ 0.2 %**
* Final test values refer to the nominal volume (max. volume), which is imprinted on the device, at same temperature (+20 °C/+68 °F) of device, surrounding area and distilled water as well as at smooth, jerk-free operation.

Advantages:
– economical dispensing of non-aggressive liquids
– easy cleaning and maintenance
– all wearing parts, also pistons and cylinders, easily replaceable
– faultless volume adjustment, easy to read
– if required, dispensing cartridge easily and economically
   replaceable
– the lifting effect of a spring pushes the piston up,
   therefore the dispensing cartridge is being filled automatically
– directly attachable to standard bottles with GL 45 threads

	Division	Capacity
40163010	0.2 ml	1.0 - 10 ml
40163025	0.5 ml	2.5 - 25 ml

consisting of:
1 Assimat no. 40163...
2 dispensing cartridges no. 40164...
1 discharge tube no. 40165001
1 filling tube no. 40165...
2 adapters PP (GL 45/32 and GL 45/S 40)
Directions for use
(without bottle)

Accessories for Assimat

Dispensing cartridge
consisting of piston (PE) and cylinder (PP)
Pack of 3 pieces
40164010   for 10 ml
40164025   for 25 ml

Filling tube made of polypropylene
Pack of 2 pieces
40165002   Length approx. 250 mm
40165003   Length approx. 500 mm

Discharge tube made of polypropylene
Individually packed
40165001   Standard type (for 10 and 25 ml)

Valve set
40165004   consisting of 1 filling valve and 1 discharge valve, 2
                 seals

Piston Pipettes

Single channel pipettes and accessories

CappTrio Single channel pipettes fix including 3 detachable volume knobs

Volume change by quickly replacing the pre-calibrated volume knobs.
Completely autoclavable (except volume knobs).
Ideal for everyday work.

40101003 Volume µl 2, 10 and 20
40101006 Volume µl 25, 50 and 100
40101009 Volume µl 200, 500 and 1000

40101110 customer-specific

Knobs

40102110 customer-specific

Knobs for variable volume

40102113 2 - 20 µl
40102116 10 - 100 µl
40102119 100 - 1000 µl

Knobs for fixed volume

40102003 Volume 2 µl
40102006 Volume 5 µl
40102009 Volume 10 µl
40102012 Volume 20 µl
40102015 Volume 25 µl
40102018 Volume 50 µl
40102021 Volume 100 µl
40102024 Volume 200 µl
40102027 Volume 500 µl
40102030 Volume 1000 µl

Capp Combi stand
expendable by attaching the plug connector
40104010   for up to 3 pipettes

Disposable pipette tips, yellow
Conformity certified, transparent, autoclavable, removable,
made of non-wetting plastic - also suitable for piston pipettes from
Brand, Eppendorf, La Fontaine, Gilson, Lab Systems
40110010   for volumes 1-100 µl

Disposable pipette tips, blue
Conformity certified, transparent, autoclavable, removable,
made of non-wetting plastic - also suitable for piston pipettes from
Brand, Eppendorf, La Fontaine, Gilson, Lab Systems
40111010   for volumes 101-1000 µl

Disposable pipette tips, colourless
Conformity certified, for Brand, Labsystems Finnpipette®
40112010   for volumes 500-5000 µl

Assipettor

Digital, conformity certified

Capillary piston pipette, digital type, variable, volume fixing by locking lever, complete with precision glass capillary and directions for use

- is continuously variable and fixable with one hand
- can pipette nearly all kinds of liquids, even aggressive ones
- the pipetting liquid comes only in contact with chemically resistant materials (glass, stainless steel, PTFE and plastic)
- no air cushion because the PTFE or stainless steel plunger displaces directly; in this way extremely low spreading, which can be ignored in most cases
- Precision capillaries and plastic tips are reusable, which, in turn, leads to fewer expenses and garbage
- maintenance-free, replacement of capillaries and tips very easy, no readjustment necessary
- Capillaries and piston seals can be sterilised according to any method
- highest precision and accuracy possible because of precision capillaries and precision plastic tips
- Devices, capillaries and repair sets are marked with the well-known colour code

	Division	Capacity	Colour code	Coefficient of variation	Accuracy
40131008	0.01 µl	2.5-10 µl	orange	≤ 0.8 %	≤ ± 1.0 %
40131016	0.1 µl	5-25 µl	2x white	≤ 0.5 %	≤ ± 0.8 %
40131024	0.1 µl	10-50 µl	green	≤ 0.4 %	≤ ± 0.6 %
40131032	0.1 µl	20-100 µl	blue	≤ 0.4 %	≤ ± 0.6 %

Accuracy and coefficient of variation refer to distilled water at +20 °C (+68 °F) and the maximum volume.

Macro Assipettor digital, conformity certified

Piston pipette, digital volume display, variable, continuously adjustable - volume specification by locking lever, complete with precision plastic tip and directions for use

Accuracy ≤ ± 0.5 %, coefficient of variation ≤ 0.2 %

Accuracy and coefficient of variation refer to distilled water at +20 °C (+68 °F) and the maximum volume.

	Division	Capacity	Colour code
40132006	1 µl	100-500 µl	green
40132012	1 µl	200-1000 µl	yellow
40132018	10 µl	1-5 ml	red
40132024	10 µl	2-10 ml	orange

Assipettor fix, conformity certified

Capillary piston pipette, fixed volume, complete with precision capillary and directions for use

	Capacity	Colour code	Coefficient of variation	Accuracy
40140004	5 µl	white	≤ 0.8 %	≤ ± 1.0 %
40140012	10 µl	orange	≤ 0.8 %	≤ ± 1.0 %
40140020	20 µl	black	≤ 0.5 %	≤ ± 0.8 %
40140028	50 µl	green	≤ 0.4 %	≤ ± 0.6 %
40140036	100 µl	blue	≤ 0.4 %	≤ ± 0.6 %
40140042	200 µl	red	≤ 0.2 %	≤ ± 0.5 %

Accuracy and coefficient of variation refer to distilled water at +20 °C (+68 °F) and the maximum volume.

Storage stand for 2 Assipettors digital well as for accessories

40135010   made of Plexiglas®

Accessories and spare parts for Assipettor

Precision capillaries for Assipettor digital, 25 µl
Packing: 100 pieces/tube
40134030   Conformity certified

Tips made of polypropylene for macro Assipettors digital no. 40132...
Conformity certified, dispenser box fitting into the macro Assipettor stand no. 40135010, packing: 10 tips/dispenser box
40137006   for 500 µl
40137012   for 1000 µl
40137018   for 5 ml
40137024   for 10 ml

Spare plunger seals for macro Assipettors digital no. 40132...
made of polyethylene, conformity certified
Packing: 3 pieces

40138006	for 500 µl
40138012	for 1000 µl
40138018	for 5 ml
40138024	for 10 ml

Precision capillaries for Assipettors fix
Conformity certified
Packing: 100 pieces/tube

40144004	for 5 µl
40144020	for 20 µl

Repair sets for Assipettors fix
conformity certified
consisting of: 1 Allen key, 3 PTFE seals*, 1 mounting block for seals*,
1 plunger rod (with seal*), 3 O-rings for capillary mounting, 1 setting
gauge, 1 screw, 1 screwdriver (* for sizes from 20 µl)

40146004	for fix 5 µl
40146020	for fix 200 µl
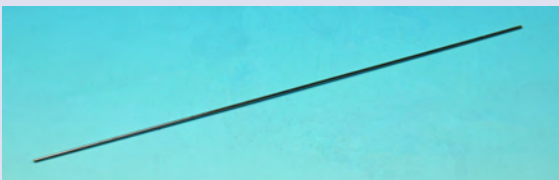
Spare plunger rods for Assipettors fix
Conformity certified, made of stainless steel,
for sizes from size 20 µl with PTFE seal
Packing: 3 pieces/tube

40147004	for 5 µl
40147042	for 200 µl

Precision capillaries for Assipettors fix and digital
Conformity certified

	for	Packing/box
40154012	fix + digital 10 µl	100 pieces/tube
40154028	fix + digital 50 µl	100 pieces/tube
40154036	fix + digital 100 µl + Assipettor fix, 200 µl	50 pieces/tube

Spare seals made of PTFE

Conformity certified, complete with mounting block
Pack of 3 pieces
40155020   for Assipettor fix, 20 µl + digital, 25 µl
40155028   for Assipettor fix + digital, 50 µl
40155036   for Assipettor fix + digital, 100 µl + fix, 200 µl

Repair sets for Assipettors digital and fix

Conformity certified
consisting of: 1 Allen key, 3 PTFE seals*, 1 mounting block for seals*,
1 plunger rod (with seal*), 3 O-rings for capillary mounting, 1 setting
gauge, 1 screw, 1 screwdriver (* for sizes from 20 µl)
40156012   for fix + digital 10 µl
40156020   for fix 20 µl + digital 25 µl
40156028   for fix + digital 50 µl
40156036   for fix + digital 100 µl

Spare plunger rods for Assipettors digital and fix

Conformity certified, made of stainless steel, for sizes from 20 µl
with PTFE seal
Packing: 3 pieces/tube
40157012   for fix + digital 10 µl
40157020   for fix 20 µl + digital 25 µl
40157028   for fix + digital 50 µl
40157036   for fix + digital 100 µl
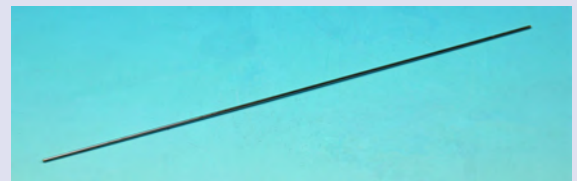
Assi-Stepper and Accessories

Assi-Stepper

Manual dispenser, conformity certified, for quick and easy repetitive dispensing of liquids.
In combination with **PD tips** (precision dispenser tips), **up to 49 repetitive pipetting steps** can be done without refilling. The Assi-Stepper can be used with many devices, due to the easy operation together with the directly displacing PD tips.
Its flexibility is very useful, among other things, in the **microbiological**, **immunologic** and **biochemical** field.
Optimal filling of the individual cavities in microplates.
Ideal for serial pipetting. The device is **not** resistant to steam sterilisation.
The manual dispenser is suitable for PD-tips of Brand, Encode™ tips,

Repet tips, Combitips®, Combitips® plus and other compatible dispenser tips.

Liquids which do not affect polypropylene and HDPE may be pipetted.

40122010   Working temperature range: +15 °C/+59 °F
up to +40 °C/+104 °F

Spare support
for Assi-Stepper no. 40122010
40122001   made of plastic

Precision dispenser tips, non-sterile, conformity certified

for Assi-Stepper
Piston made of HDPE, cylinder made of PP
Working temperature: +15 °C/+59 °F up to +40 °C/+104 °F

	Capacity	Packing unit
40123004	0.1 ml	100 tips
40123008	0.5 ml	100 tips
40123012	1.0 ml	100 tips
40123016	1.25 ml	100 tips
40123020	2.5 ml	100 tips
40123024	5 ml	100 tips
40123028	10 ml	100 tips
40123032	12.5 ml	100 tips
40123036	25 ml	50 tips
40123040	50 ml	25 tips

Precision dispenser tips, sterile, conformity certified

for Assi-Stepper
β-sterile, free of endotoxin, individually wrapped
Piston made of HDPE, cylinder made of PP
Working temperature: +15 °C/+59 °F up to +40 °C/+104 °F

	Capacity	Packing unit
40124004	0.1 ml	100 tips
40124008	0.5 ml	100 tips
40124012	1.0 ml	100 tips
40124016	1.25 ml	100 tips
40124020	2.5 ml	100 tips
40124024	5 ml	100 tips
40124028	10 ml	100 tips
40124032	12.5 ml	100 tips
40124036	25 ml	25 tips
40124040	50 ml	25 tips

The **precision dispenser tips** (PD tips), conformity certified, CE-IVD
   • meet the requirements of DIN ISO 8655
   • are made of high-quality raw materials without chemical additives
   • are manufactured without softening agents, lubricants or other additives.
   • are available non-sterile and sterile/free of endotoxin
   • an adapter is available for the sizes 25 and 50 ml.

Adapters for dispenser tips 25 and 50 ml, non-sterile
Polypropylene, autoclavable
40125010   Packing: 10 pieces/box

Adapters for dispenser tips 25 and 50 ml, sterile
Polypropylene, autoclavable, individually wrapped
40126010   Packing: 5 pieces

Digital Burettes and Accessories

"Contiburette µ 10", CE, without motor

Conformity certified up to 100 ml, with thread connection A 32, **without bottle**
Complete with
- discharge tube, bent
- suction tube
- 2 additional thread adapters A 45 and A 40
- directions for use

Continuous supply and measurement in the most common volume range from 0.01 up to 100 ml - using only one device.
It is possible to titrate even larger volumes up to max. 9999.99 ml.
- can be calibrated
- electronic measuring system
- liquid supplied is indicated to two decimal places
- minimal setting units 10 µl
- no glass piston, no valves, minimal dead volume
- self-venting, measuring errors due to trapped gas or air bubbles are being avoided
- mechanical parts made of highly acid-resistant aluminium oxide (99.7 Al$_2$O$_3$)
- free rotatable on the bottle
- including two batteries AA 1.5 V for approx. 500 operating hours

	Temperature range	Dimensions	Weight
40210010	+10 +40 °C / +50 +104 °F	approx. 170 x 96 x 60 mm	approx. 360 g

Digital burette "Contiburette µ 10", CE, with motor
Conformity certified up to 100 ml, with thread connection A 32, **without bottle, with plug-in power supply**
Features like no. 40210010

	Temperature range	Supply quantity	Dimensions
40212010	+10 +40 °C / +50 +104 °F	approx. 15 ml per minute	approx. 170 x 96 x 60 mm

Spare discharge tube made of PTFE

40210020   for no. 40210010 and 40212010

Dispenser Digital and Variable

Dispenser digital

Type "Easy Calibration", conformity certified, with standard valve, without bottle

Safety is a key aspect of the bottle-top dispenser:
- No risk of spilling – because the dispenser is screwed directly onto the reagent bottle (thread adapters are included – additional adapters are available).
- No contact with aggressive media because the wetted piston is fully coated even in lifted condition.
- The discharge tube is made of FEP, with integrated valve.
- The bottle label is always visible because of movable discharge tube.
- Connection facility for drying tube.
- High precision – by means of precisely ground cylinders made of borosilicate glass, precision valves, exact and easily readable digital display.
- Volume steplessly adjustable
- Universal fields of application - in the entire laboratory field of medicine, chemistry, microbiology, industry, water management, schools and universities etc.
- not suitable for hydrofluoric acid, fluorine compounds, strong alkaline solutions.
- The device can be sterilised up to +121 °C (+249.8 °F), 2 bar.
- with thread A 45, FEP filling tube, FEP discharge tube, bent, and directions for use.

Coefficient of variation ≤ 0.1 %, accuracy ≤ ± 0.6 %

	Division	Capacity	with thread adapter
40173002	0.01 ml	0.2-2 ml	A 25 A 28 A 32 A 38 S 40
40173005	0.02 ml	0.5-5 ml	A 25 A 28 A 32 A 38 S 40
40173010	0.05 ml	1.0-10 ml	A 25 A 28 A 32 A 38 S 40
40173025	0.10 ml	2.5-25 ml	A 32 A 38 S 40
40173050	0.20 ml	5.0-50 ml	A 32 A 38 S 40

Dispenser variable

Conformity certified, with standard valve, without bottle

Description see dispenser digital no. 40173...

	Division	Capacity	with thread adapter	Coefficient of variation	Accuracy
40183006	0.01 ml	0.05-0.5 ml	A 22 A 25 A 28 A 32	≤ 0.2 %	≤ ± 1.0 %
40183012	0.05 ml	0.2-2 ml	A 25 A 28 A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %
40183018	0.1 ml	0.5-5 ml	A 25 A 28 A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %
40183024	0.2 ml	1.0-10 ml	A 25 A 28 A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %
40183030	0.5 ml	2.5-25 ml	A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %
40183036	1.0 ml	5.0-50 ml	A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %
40183042	1.0 ml	10-100 ml	A 32 A 38 S 40	≤ 0.1 %	≤ ± 0.6 %

Accessories for dispensers no. 40173... and no. 40183...

SafetyPrimeTM venting valve for venting bubble-free

for updating the dispensers with standard valve

40175010   for dispensers 1-100 ml

Discharge tubes made of FEP with integrated valve

with safety screw cap

	for dispensers	Length
40187001	1, 2, 5, 10 ml	90 mm
40187002	25, 50, 100 ml	120 mm
40187011	0.5 ml	90 mm
40187012	25, 50, 100 ml	120 mm

40187012 and 40187011 with fine tip

Discharge tubing made of PTFE, flexible
40188001   for 1, 2, 5, 10 ml
40188002   for 25, 50, 100 ml

Thread bottles, amber glass
with screw cap made of polypropylene
Resistant to steam sterilisation up to +121 °C/+249.8 °F

	Capacity	Thread	Pattern
40190018	250 ml	A 32 mm	square
40190024	500 ml	A 32 mm	square
40190030	1000 ml	A 45 mm	square
40190036	2500 ml	A 45 mm	round

Thread adapters

	Outside thread	for bottle thread	Material
40193004	32 mm	A 22	Polypropylene
40193008	32 mm	A 25	Polypropylene
40193012	32 mm	A 28	Polypropylene
40193016	32 mm	A 30	Polypropylene
40193020	45 mm	A 32	Polypropylene
40193028	32 mm	A 45	Polypropylene
40193032	32 mm	A 25	ETFE
40193036	32 mm	A 28	ETFE
40193040	45 mm	A 38	ETFE
40193044	32 mm	A 45	ETFE
40193048	32 mm	S 40	Polypropylene
40193052	45 mm	S 40	Polypropylene

Adapters for standard grounds
made of polypropylene, thread outside 32 mm
40194019   with joint size 19/26
40194024   with joint size 24/29
40194029   with joint size 29/32

Filling tubes made of FEP
Length individually adjustable

	for dispensers	Length
40199002	0.5 - 10 ml	125-240 mm
40199003	0.5 - 10 ml	195-350 mm
40199004	25 - 100 ml	250-480 mm

Multichannel Pipette

CE
Conformity certified, variable with digital display and 8 channels, for precise and safe pipetting of liquids
The operation principle is air displacement in the range of 50 to 300 µl in steps of 5 µl.
Highest quality, technical perfection and light weight are the main features of this pipette, which is suitable for all microtitration techniques.

It offers excellent results in precision and accuracy. The tips can be attached easily with a new tip cone construction.

	Division	Capacity	Precision	Accuracy
40120010	5 µl	50-300 µl	< 0.5 % to < 0.8 %	< 1.0 % to < 1.5 %

Special tips made of polypropylene, CE
300 µl, for no. 40120010, autoclavable at +121 °C/+249.8 °F
40120001   Packing: 96 pieces/tray rack
40120002   Packing: 1000 pieces/box

Volumetric Instruments
and Accessoires

Certificates for instruments, conformity certified

Load certificate and single certificate

Batch certificate

Our conformity certified volumetric glass instruments are furnished with a batch marking. Every complete packaging unit comes with a test certificate.
The test certificate contains information about test object, measuring conditions, average value and standard deviation among other things.
The batch certificate can be requested subsequently. Therefore we need article and batch number.
The batch number is made up of production year followed by the batch, e.g. 16.3

Individual certificate of performance

The delivery of volumetric glass instruments with individual certificate of performance is possible on request. The volumetric glass instrument gets an individual number. The number is attached to the volumetric glass instrument in addition to the batch number and is contained in the individual certificate of performance, e.g. 16.3 0024.
Further information in the individual certificate of performance: Information about test object, ascertained weigh value, measuring conditions.

Volumetric instruments in compliance with USP (United States Pharmacopeia)

Our volumetric instruments are manufactured according to current DIN EN ISO standards. Do you require volumetric instruments which comply with the standards of USP? We manufacture volumetric instruments with the error limits corresponding to the ASTM standards, which current USP describes in Chapter 31.
The measurements of ungraduated volumetric glass instruments meet the current DIN EN ISO standards; error limits specified in the ASTM standards are observed when adjusting.
One batch certificate, with which we confirm the compliance with ASTM standards, is supplied per packing unit.
Normally the production takes place order-related.

Volumetric instruments with DAkkS calibration certificate

Our volumetric instruments can be delivered with DAkkS calibration certificate upon request.
The volumetric glass instruments are checked by an external DAkkS testing laboratory. The testing laboratory issues the calibration certificate. The volumetric glass instruments get an individual serial number for identification.

Order numbers for volumetric instruments with certificate using the example of a volumetric pipette, conformity certified, 10 ml:

Batch certificate: 42556**0**52 - Number remains, batch certificate comes with every PU

Individual certificate of performance: 42556**6**52 – 3rd position righthand changes from 0 to 6

USP batch certificate: 42556**4**52 – 3rd position righthand changes from 0 to 4

DAkkS calibration certificate: 42556**8**52 – 3rd position righthand changes from 0 to 8

Burettes

are manufactured according to DIN EN ISO 385.

Accuracy classes
- Conformity certified
in accordance with class AS, waiting time: 30 s, short delivery times
Graduation with ring marks at main points.
Conformity mark and batch number are printed on each burette. A batch certificate is included in each original packing.

- Standard type
Higher accuracy than standard / class B
Tolerance: 1.5 times of the official tolerance of class AS
Short line graduation
No waiting time is claimed for class B according to the standard.

Calibration
Burettes are calibrated to deliver (marked "Ex").

Stopcocks
straight and lateral - with interchangeable standard ground plugs and reliable retaining devices;
strong quality, reinforced joints, calibrated faceted tips

Micro burettes

according to Bang

Standard type, with lateral stopcock with interchangeable plug, Schellbach stripe and stable plexiglas® base, fused blue graduation "ASSISTENT-PERMANENT", short line graduation, calibrated to deliver (Ex)
Each in a box.

Stopcocks are available with PTFE plug or safety needle valve stopcock with spindle on request.

	Division	Tolerance	Capacity
40521008	0.01 ml	0.015 ml	2 ml
40521012	0.02 ml	0.015 ml	5 ml
40521016	0.02 ml	0.03 ml	10 ml

Micro burettes for use with a stand

for use with a stand, standard type, with straight stopcock with interchangeable plug and Schellbach stripe, fused blue graduation "ASSISTENT-PERMANENT", short line graduation, calibrated to deliver (Ex)
Each in a box.

Stopcocks are available with PTFE plug or safety needle valve stopcock with spindle on request.

	Division	Tolerance	Capacity
40523008	0.01 ml	0.015 ml	2 ml
40523012	0.02 ml	0.015 ml	5 ml
40523016	0.02 ml	0.03 ml	10 ml
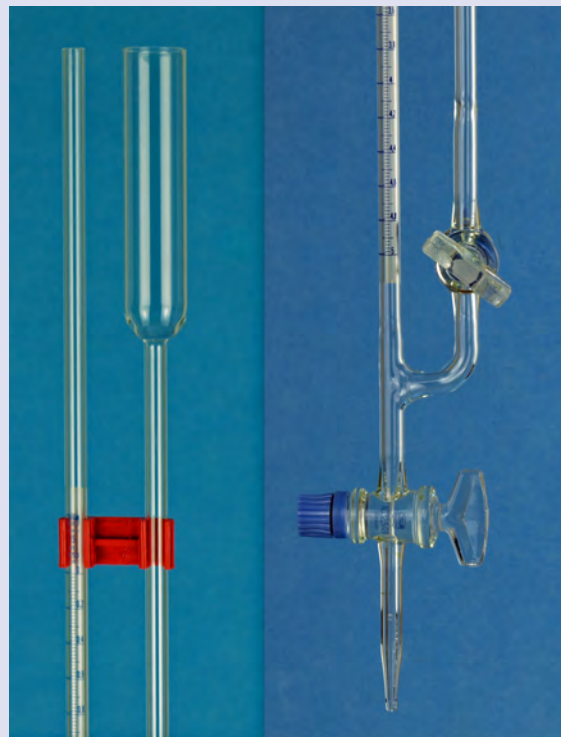
Accessories for burettes

Burette tips

AR-Glas® (soda glass), with rubber tubing,
for burettes with tubing connection

40780009   Length approx. 60 mm

Burettes with Schellbach stripe, DURAN® borosilicate glass 3.3

with straight stopcock with glass plug

Standard type, within 1.5 times of the official tolerance of class AS, short line graduation, short delivery time, fused blue graduation "ASSISTENT-PERMANENT"

	Division	Tolerance	Capacity
40791015	0.02 ml	0.030 ml	10 ml
40791022	0.05 ml	0.045 ml	25 ml
40791025	0.1 ml	0.075 ml	25 ml
40791050	0.1 ml	0.075 ml	50 ml

with straight stopcock with glass plug, conformity certified

Graduation with ring marks at main points, delivery time 35-45 s
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity
40791715	0.02 ml	0.020 ml	10 ml
40791722	0.05 ml	0.030 ml	25 ml
40791750	0.1 ml	0.050 ml	50 ml

Burettes with Schellbach stripe, DURAN® borosilicate glass 3.3, with lateral stopcock with glass plug, conformity certified

Graduation with ring marks at main points, delivery time 35-45 s
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity
40792715	0.02 ml	0.020 ml	10 ml
40792722	0.05 ml	0.030 ml	25 ml
40792750	0.1 ml	0.050 ml	50 ml

with straight stopcock with PTFE plug

Standard type, within 1.5 times of the official tolerance of class AS, short line graduation, short delivery time, fused blue graduation "ASSISTENT-PERMANENT"

	Tolerance	Division	Capacity
40793022	0.045 ml	0.05 ml	25 ml
40793025	0.075 ml	0.1 ml	25 ml
40793050	0.075 ml	0.1 ml	50 ml
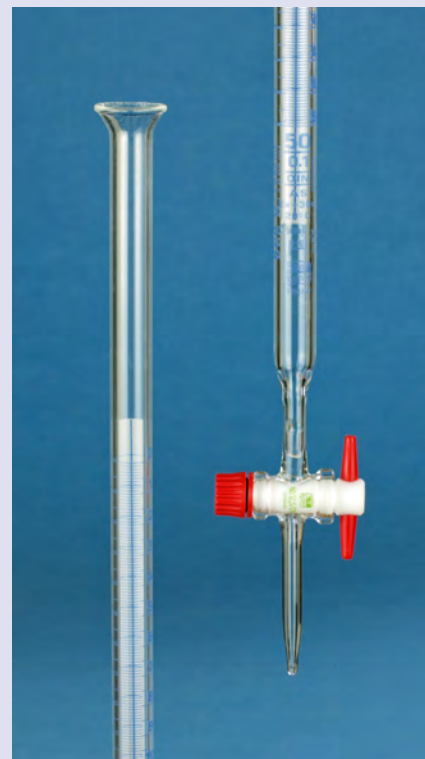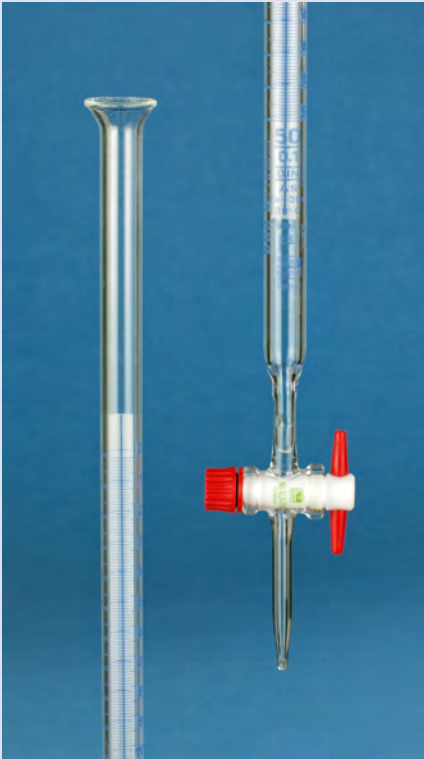
Burettes with Schellbach stripe, DURAN® borosilicate glass 3.3, with straight stopcock with PTFE plug, conformity certified

Graduation with ring marks at main points
Delivery time 35-45 s
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity
40793715	0.02 ml	0.020 ml	10 ml
40793722	0.05 ml	0.030 ml	25 ml
40793750	0.1 ml	0.050 ml	50 ml

with safety needle valve stopcock and PTFE spindle

Standard type, within 1.5 times of the official tolerance of class AS, short line graduation, short delivery time, fused blue graduation "ASSISTENT-PERMANENT"

	Division	Tolerance	Capacity
40795015	0.02 ml	0.030 ml	10 ml
40795022	0.05 ml	0.045 ml	25 ml
40795025	0.1 ml	0.075 ml	25 ml
40795050	0.1 ml	0.075 ml	50 ml

Burettes with Schellbach stripe, DURAN® borosilicate glass 3.3, with safety needle valve stopcock, PTFE spindle, conformity certified

Graduation with ring marks at main points, delivery time 35-45 s
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity
40795715	0.02 ml	0.020 ml	10 ml
40795722	0.05 ml	0.030 ml	25 ml
40795750	0.1 ml	0.050 ml	50 ml

Burettes, amber glass, DURAN® borosilicate glass 3.3

with straight stopcock and glass plug

Standard type, within 1.5 times of the official tolerance of class AS, short line graduation, short delivery time, fused white graduation "ASSISTENT-PERMANENT"

	Tolerance	Capacity
40811025	0.075 ml	25 ml : 0.1
40811050	0.100 ml	50 ml : 0.1
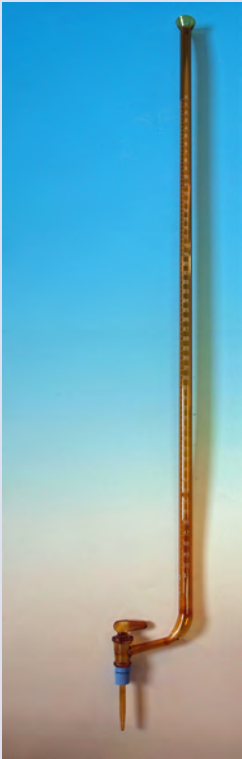
with lateral stopcock and glass plug

Standard type, within 1.5 times of the official tolerance of class AS, short line graduation, short delivery time, fused white graduation "ASSISTENT-PERMANENT"

	Tolerance	Capacity
40812025	0.075 ml	25 ml : 0.1
40812050	0.100 ml	50 ml : 0.1

Schilling burettes

Automatic burette according to Dr. Schilling

Standard type, tolerance 1.5 times of the official tolerance of class AS

- improved special pinch cock with titration screw for precise regulation
- Plastic burette clamp, chemical-resistant, allows discharge drop by drop by slightly pushing
- Storage bottles made of polyethylene, with plastic base, filling of the burette by slightly pressing the bottle, in doing so automatic zero point adjustment
- Plastic tubing as riser
- Upper part of the burette is closed, design like the Pellet titration burette; thus soiling is being avoided
- Burette with Schellbach stripe and fused graduation "ASSISTENT-PERMANENT", calibrated, faceted outlet tip

Spare parts:
- Base no. 40823001 or 40823002
- Bottle
- Burette no. 40821...
- Clamp
- Discharge tubing, natural rubber
- Filling tubing made of PVC

	Division	Tolerance	Capacity	Bottle capacity
40820005	0.05 ml	0.050 ml	5 ml	500 ml
40820010	0.05 ml	0.050 ml	10 ml	500 ml
40820015	0.1 ml	0.100 ml	15 ml	500 ml
40820025	0.1 ml	0.100 ml	25 ml	1000 ml
40820050	0.1 ml	0.100 ml	50 ml	1000 ml

Spare burettes for no. 40820...
Standard type, tolerance 1.5 times of the official tolerance of class AS

	Division	Tolerance	Capacity
40821005	0.05 ml	0.050 ml	5 ml
40821010	0.05 ml	0.050 ml	10 ml
40821015	0.1 ml	0.100 ml	15 ml
40821025	0.1 ml	0.100 ml	25 ml
40821050	0.1 ml	0.100 ml	50 ml
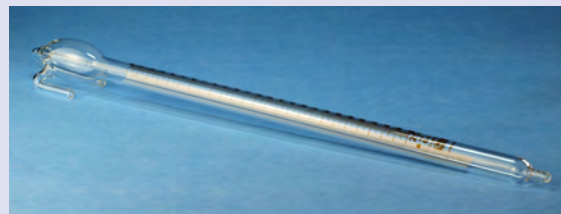
Base made of polyethylene (HDPE) for no. 40820...

40823001   suitable for plastic bottles of 500 ml
40823002   suitable for plastic bottles of 1000 ml
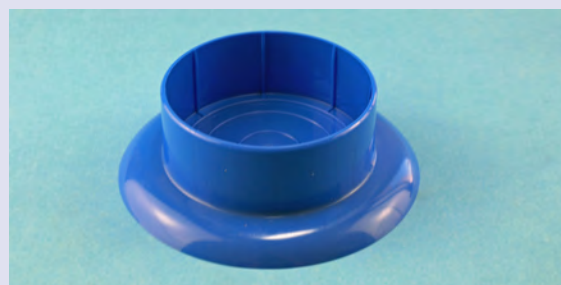
Burettes DURAN® borosilicate glass 3.3, clear glass

with tubing connection

	Division	Capacity
40796015	0.02 ml	10 ml
40796022	0.05 ml	25 ml
40796025	0.10 ml	25 ml
40796050	0.10 ml	50 ml
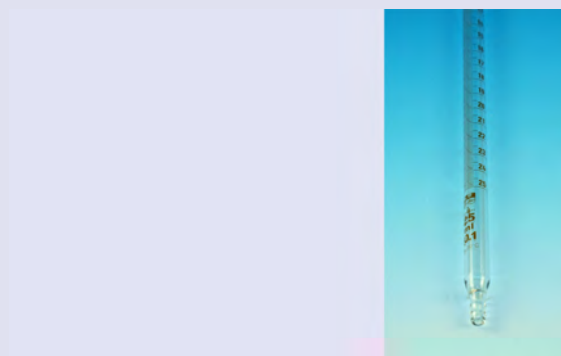
with straight stopcock

	Division	Capacity
40797015	0.02 ml	10 ml
40797022	0.05 ml	25 ml
40797025	0.10 ml	25 ml
40797050	0.10 ml	50 ml

with lateral stopcock

	Division	Capacity
40798015	0.02 ml	10 ml
40798022	0.05 ml	25 ml
40798025	0.10 ml	25 ml
40798050	0.10 ml	50 ml

with straight stopcock with PTFE plug

	Division	Capacity
40799015	0.02 ml	10 ml
40799022	0.05 ml	25 ml
40799025	0.10 ml	25 ml
40799050	0.10 ml	50 ml

Burette stopcocks

Straight, soda-lime glass
with interchangeable standard ground plug, ground joint size 12.5, bore 2 mm Ø

41550010 with glass plug
41550020 with PTFE plug

Straight, DURAN® borosilicate glass 3.3
with interchangeable standard ground plug, ground joint size 12.5, bore 2 mm Ø

41551010 with glass plug
41551020 with PTFE plug

Burette stopcocks, lateral, soda-lime glass

with interchangeable standard ground plug, ground joint size 12.5, bore 2 mm Ø

41552010   with glass plug

Lateral, DURAN® borosilicate glass 3.3

with interchangeable standard ground plug, ground joint size 12.5, bore 2 mm Ø

41553010   with glass plug

Safety needle valve stopcock, lateral, AR-Glas® (soda glass)

with spindle made of PTFE, for burettes

41554010   Bore 2.5 mm Ø

Safety needle valve stopcock, lateral, DURAN® borosilicate glass 3.3

with spindle made of PTFE, for burettes

41555010   Bore 3 mm Ø

One-way stopcocks, DURAN® borosilicate glass 3.3

with glass plug, solid
DIN 12541, with reliable retaining device (screw thread or rubber cap)

	Bore	Outside Ø
41503002	2.5 mm	Joint size 14.5 mm
41503004	4 mm	Joint size 18.8 mm
41503006	6 mm	Joint size 21.5 mm

with plug made of PTFE
DIN 12541, with reliable retaining device (screw thread or rubber cap)

	Bore	Outside Ø
41504002	2.5 mm	Joint size 14.5 mm
41504004	4 mm	Joint size 18.8 mm

One-way stopcocks, soda-lime glass

with glass plug, solid
with reliable retaining device (screw thread)

	Bore	Thread
41510010	2 mm	12.5

with plug made of PTFE
with reliable retaining device (screw thread or rubber cap)

	Bore	Thread
41511010	2 mm	12.5

Two-way stopcocks (patent stopcocks), DURAN® borosilicate glass.3.3

with glass plug, solid
with double oblique bore, with reliable retaining device (screw thread)

	Bore	Thread
41522010	2.5 mm	14.5

with plug made of PTFE
with double oblique bore, with reliable retaining device

	Bore	Thread
41523010	2.5 mm	14.5

Stopcock grease

Silicone stopcock grease

Medium viscosity, excellent heat and cold resistance without considerable change of the consistency between -50 °C/-58 °F and +150 °C/+302 °F

41480035   35 g tube

Accessories for Burettes

Burette stands, base approx. 18 x 10 cm
made of steel
40860010   Rod approx. 450 x 10 mm Ø
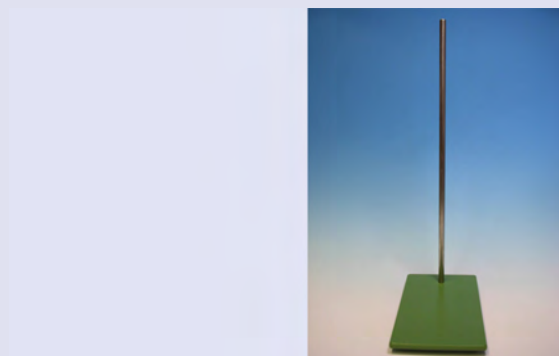
Burette stands, base approx. 21 x 13 cm
made of steel
40861010   Rod approx. 750 x 12 mm Ø
40861020   Rod approx. 1000 x 12 mm Ø

Bossheads, double
made of zinc die cast
40862020   for rods up to 16 mm Ø

Universal bossheads, double
made of zinc die cast, revolvable
40863010   for rods up to 20 mm Ø

Clamps
made of zinc die cast, without bosshead, with round jaws
Handle (hollow) approx. 150 x 12 mm, total length 240 mm

40865010   Opening up to approx. 12 - 25 mm
40865040   Opening up to approx. 20 - 40 mm

Clamps
made of zinc die cast, without bosshead, with round jaws
Handle (hollow) approx. 150 x 12 mm Ø, total length 260 mm

40866010   Opening up to approx. 38 - 60 mm

Rings without bosshead
made of malleable iron
Handle (hollow) approx. 180 x 12 mm Ø

	Inside Ø	Outside Ø
40868007	approx. 50 mm	approx. 70 mm
40868010	approx. 80 mm	approx. 100 mm
40868013	approx. 110 mm	approx. 130 mm

Rings with bosshead
made of malleable iron, for rods up to 16 mm Ø

	Inside Ø	Outside Ø
40869007	approx. 50 mm	approx. 70 mm
40869010	approx. 80 mm	approx. 100 mm
40869013	approx. 110 mm	approx. 130 mm

Burette clamps for one burette
made of zinc die cast, with bosshead
Opening up to approx. 20 mm

40870010   for rods up to 13 mm Ø

Burette clamps for two burettes
made of zinc die cast, with bosshead
Opening up to approx. 20 mm

40871010   for rods up to 13 mm Ø

Condenser clamps

made of malleable iron, without bosshead, revolving

40875010   Opening up to approx. 65 mm

Volumetric Flasks

are manufactured in accordance with DIN EN ISO 1042.

Accuracy classes
- Conformity certified
in accordance with class A
Conformity mark and batch number are printed on each volumetric flask. A batch certificate is included in each original packing.

- Standard type
Higher accuracy than standard / class B
Tolerance: 1.5 times of the official tolerance of class A

Calibration
Volumetric flasks are calibrated to contain (marked "In").

Standard ground joint
The stopper is interchangeable.

Please order glass stoppers separately if flasks with glass stoppers are required.

Volumetric flasks, standard type, DURAN® borosilicate glass 3.3

without stopper, without ground

fused blue graduation "ASSISTENT-PERMANENT", with rim

	Tolerance	Capacity
42089012	0.038 ml	10 ml
42089020	0.06 ml	20 ml
42089028	0.06 ml	25 ml
42089040	0.15 ml	50 ml
42089048	0.15 ml	100 ml
42089060	0.23 ml	200 ml
42089064	0.23 ml	250 ml
42089076	0.38 ml	500 ml
42089080	0.6 ml	1000 ml
42089092	1.2 ml	3000 ml
42089096	1.8 ml	5000 ml
42089099	3.0 ml	10000 ml

42089099 in addition to DIN - in conformity with the basic requirements of the standard

Volumetric flasks, standard type, DURAN® borosilicate glass 3.3, with standard ground joint and stopper made of polyethylene

Tolerance 1.5 times of the official tolerance of class A, fused blue graduation "ASSISTENT-PERMANENT"

	Tolerance	Capacity	Joint size
42094004	0.038 ml	5 ml	7/16
42094008	0.06 ml	5 ml	10/19
42094012	0.038 ml	10 ml	7/16
42094016	0.06 ml	10 ml	10/19
42094020	0.06 ml	20 ml	10/19
42094024	0.09 ml	20 ml	12/21
42094028	0.06 ml	25 ml	10/19
42094032	0.09 ml	25 ml	12/21
42094036	0.09 ml	30 ml (*)	12/21
42094040	0.15 ml	50 ml	12/21
42094044	0.12 ml	50 ml	14/23
42094048	0.15 ml	100 ml	12/21
42094052	0.15 ml	100 ml	14/23
42094056	0.15 ml	150 ml (*)	14/23
42094060	0.23 ml	200 ml	14/23
42094064	0.23 ml	250 ml	14/23
42094068	0.23 ml	300 ml (*)	14/23
42094072	0.38 ml	400 ml (*)	19/26
42094076	0.38 ml	500 ml	19/26
42094080	0.6 ml	1000 ml	24/29
42094084	0.9 ml	1000 ml	29/32
42094088	0.9 ml	2000 ml	29/32
42094092	1.2 ml	3000 ml	29/32
42094096	1.8 ml	5000 ml	34/35
42094099	3.0 ml	10000 ml (*)	45/40

* in addition to DIN
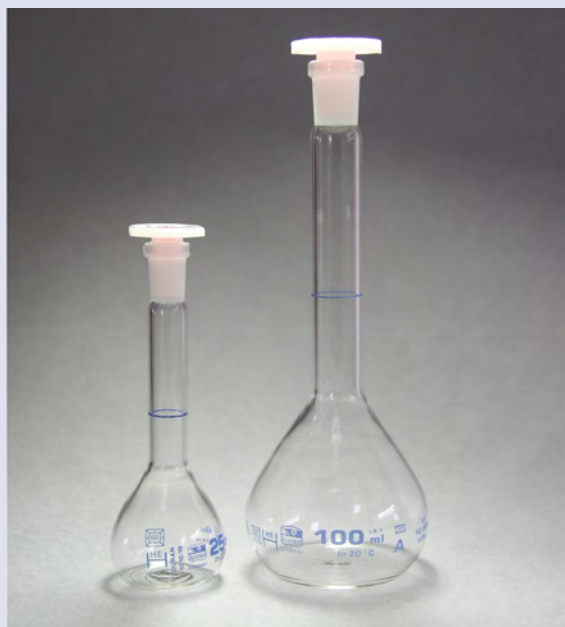
Volumetric flasks, conformity certified, DURAN® borosilicate glass 3.3

with standard ground joint and stopper made of polyethylene

Fused blue graduation "ASSISTENT-PERMANENT"
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Tolerance	Capacity	Joint size
42096004	0.025 ml	5 ml	7/16
42096008	0.04 ml	5 ml (*)	10/19
42096012	0.025 ml	10 ml	7/16
42096016	0.04 ml	10 ml (*)	10/19
42096020	0.04 ml	20 ml	10/19
42096024	0.06 ml	20 ml (*)	12/21
42096028	0.04 ml	25 ml	10/19
42096032	0.06 ml	25 ml (*)	12/21
42096040	0.06 ml	50 ml	12/21
42096044	0.10 ml	50 ml (*)	14/23
42096048	0.10 ml	100 ml	12/21
42096052	0.10 ml	100 ml	14/23
42096060	0.15 ml	200 ml	14/23
42096064	0.15 ml	250 ml	14/23
42096076	0.25 ml	500 ml	19/26
42096080	0.4 ml	1000 ml	24/29
42096084	0.6 ml	1000 ml (*)	29/32
42096088	0.6 ml	2000 ml	29/32
42096096	1.2 ml	5000 ml	34/35
42096099	2.0 ml	10000 ml (*)	45/40

* in addition to DIN

**Volumetric flasks, conformity certified,
DURAN® borosilicate glass 3.3, with standard ground joint, without
stopper**

Fused blue graduation "ASSISTENT-PERMANENT"
Available with individual certificate of performance, USP batch
certificate or DAkkS calibration certificate. Please indicate the
request in your order! (see chapter beginning)

	Tolerance	Capacity	Joint size
42097004	0.025 ml	5 ml	7/16
42097008	0.04 ml	5 ml	10/19
42097012	0.025 ml	10 ml	7/16
42097016	0.04 ml	10 ml (*)	10/19
42097020	0.04 ml	20 ml	10/19
42097024	0.06 ml	20 ml (*)	12/21
42097028	0.04 ml	25 ml	10/19
42097032	0.06 ml	25 ml (*)	12/21
42097040	0.06 ml	50 ml	12/21
42097044	0.10 ml	50 ml (*)	14/23
42097048	0.010 ml	100 ml	12/21
42097052	0.010 ml	100 ml (*)	14/23
42097060	0.15 ml	200 ml	14/23
42097064	0.15 ml	250 ml	14/23
42097076	0.25 ml	500 ml	19/26
42097080	0.4 ml	1000 ml	24/29
42097084	0.6 ml	1000 ml (*)	29/32
42097088	0.6 ml	2000 ml	29/32
42097096	1.2 ml	5000 ml	34/35
42097099	2.0 ml	10000 ml (*)	45/40

* in addition to DIN

**Amber glass, with standard ground joint and stopper made of
polyethylene, conformity certified**

Fused white graduation "ASSISTENT-PERMANENT"
Available with individual certificate of performance, USP batch
certificate or DAkkS calibration certificate. Please indicate the
request in your order! (see chapter beginning)

	Tolerance	Joint size	Capacity
42102008	0.04 ml	10/19	5 ml
42102016	0.04 ml	10/19	10 ml
42102020	0.04 ml	10/19	20 ml
42102028	0.04 ml	10/19	25 ml
42102040	0.06 ml	12/21	50 ml
42102044	0.10 ml	14/23	50 ml
42102048	0.10 ml	12/21	100 ml
42102052	0.10 ml	14/23	100 ml
42102060	0.15 ml	14/23	200 ml
42102064	0.15 ml	14/23	250 ml
42102076	0.25 ml	19/26	500 ml
42102080	0.4 ml	24/29	1000 ml
42102088	0.6 ml	29/32	2000 ml

Volumetric flasks for sugar analyses
DURAN® borosilicate glass 3.3, standard type, fused blue graduation "ASSISTENT-PERMANENT", without stopper, with 2 marks

42109008	Capacity 50/55 ml
42109016	Capacity 100/110 ml

Volumetric flasks, trapezoidal, conformity certified, DURAN® borosilicate glass 3.3

with standard ground joint and interchangeable stopper made of polyethylene, fused blue graduation "ASSISTENT-PERMANENT"
The base is considerably larger than of standard volumetric flasks with same volume, thus improved stability.
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Tolerance	Capacity	Joint size
42110006	0.025 ml	1 ml	7/16
42110012	0.025 ml	2 ml	7/16
42110018	0.025 ml	5 ml	7/16
42110024	0.025 ml	10 ml	7/16
42110030	0.04 ml	20 ml	10/19
42110036	0.04 ml	25 ml	10/19
42110042	0.06 ml	50 ml	12/21

Overflow volumetric flasks, DURAN® borosilicate glass 3.3

for water analysis
These flasks are also available in other sizes.

	Capacity	Height approx.
42115006	22.7 ml	7 cm
42115012	43.5 ml	8 cm
42115018	95 ml	8 cm
42115024	97 ml	9.5 cm
42115030	157 ml	11 cm
42115036	160 ml	11 cm
42115042	164 ml	11 cm
42115048	250 ml	14 cm
42115054	355 ml	13 cm
42115060	365 ml	12.5 cm
42115066	420 ml	13 cm
42115072	428 ml	16.5 cm
42115078	432 ml	15 cm

Measuring Cylinders

The measuring cylinders tall form are manufactured in accordance with DIN EN ISO 4788.

Accuracy classes
- Conformity certified
in accordance with class A
Graduation with ring marks at main points.
Conformity mark and batch number are printed on each cylinder. A batch certificate is included in each original box.

- Standard type
corresponding to class B, however higher accuracy
Tolerance: 1.5 times of the official tolerance of class A
Short line graduation

Calibration
Measuring cylinders are calibrated to contain (marked "In")

Measuring cylinders, tall form

DURAN® borosilicate glass 3.3, hexagonal base

Standard type, fused blue graduation "ASSISTENT-PERMANENT"

	Division	Capacity
42170012	0.2 ml	10 ml
42170018	0.5 ml	25 ml
42170024	1 ml	50 ml
42170030	1 ml	100 ml
42170048	2 ml	250 ml
42170060	5 ml	500 ml
42170066	10 ml	1000 ml
42170072	20 ml	2000 ml

Measuring cylinders, tall form, DURAN® borosilicate glass 3.3, hexagonal base, conformity certified

Fused blue graduation "ASSISTENT-PERMANENT"
Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Capacity
42172012	0.2 ml	10 ml
42172018	0.5 ml	25 ml
42172024	1 ml	50 ml
42172030	1 ml	100 ml
42172048	2 ml	250 ml
42172060	5 ml	500 ml
42172066	10 ml	1000 ml
42172072	20 ml	2000 ml

DURAN® borosilicate glass 3.3, hexagonal base

Standard type, fused amber graduation "ASSISTENT-PERMANENT"

	Division	Capacity
42180006	0.1 ml	5 ml
42180012	0.2 ml	10 ml
42180018	0.5 ml	25 ml
42180024	1 ml	50 ml
42180030	1 ml	100 ml
42180048	2 ml	250 ml
42180060	5 ml	500 ml
42180066	10 ml	1000 ml
42180072	20 ml	2000 ml

Measuring cylinders, tall form, DURAN® borosilicate glass 3.3, hexagonal base, conformity certified

Fused amber graduation "ASSISTENT-PERMANENT"

Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Capacity
42182006	0.1 ml	5 ml
42182012	0.2 ml	10 ml
42182018	0.5 ml	25 ml
42182024	1 ml	50 ml
42182030	1 ml	100 ml
42182048	2 ml	250 ml
42182060	5 ml	500 ml
42182066	10 ml	1000 ml
42182072	20 ml	2000 ml
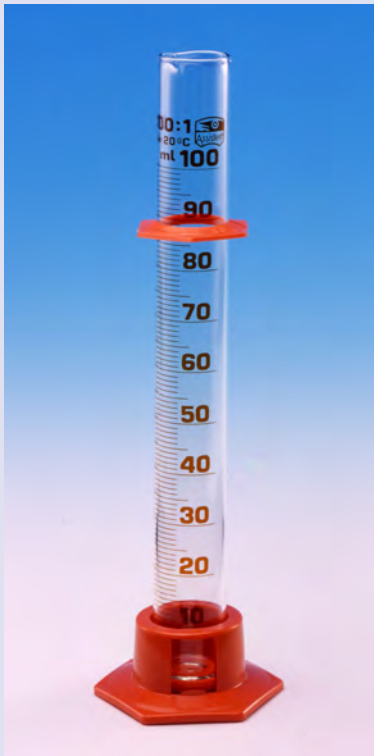
AR-Glas® (soda glass), with interchangeable hexagonal base and protecting ring made of polyethylene (HDPE)

Standard type, fused amber graduation "ASSISTENT-PERMANENT", base and protecting ring alkali- and acid-resistant, resistant to temperatures up to +120 °C/+248 °F

	Division	Capacity
42190012	0.2 ml	10 ml
42190018	0.5 ml	25 ml
42190024	1 ml	50 ml
42190030	1 ml	100 ml
42190048	2 ml	250 ml
42190060	5 ml	500 ml
42190066	10 ml	1000 ml

42190066 made of borosilicate glass 3.3

Measuring cylinders, tall form, AR-Glas® (soda glass), circular base

Standard type, fused amber graduation "ASSISTENT-PERMANENT".
Tolerance 1.5 times of the official tolerance of class A

	Division	Capacity
42200006	0.1 ml	5 ml
42200012	0.2 ml	10 ml
42200018	0.5 ml	25 ml
42200024	1 ml	50 ml
42200030	1 ml	100 ml
42200036	2 ml	150 ml
42200042	2 ml	200 ml
42200048	2 ml	250 ml
42200060	5 ml	500 ml (*)
42200066	10 ml	1000 ml (*)
42200072	20 ml	2000 ml (*)

* with hexagonal base

Tall form

for hydrometers, alcoholmeters etc.
for DIN EN ISO 4788 (except 15 ml, 60 ml, 150 ml, 200 ml)

	Height	Outside Ø	Capacity
44400006	approx. 115 mm	approx. 14 mm	approx. 5 ml
44400012	approx. 140 mm	approx. 14 mm	approx. 10 ml
44400015	approx. 110 mm	approx. 19 mm	approx. 15 ml
44400018	approx. 170 mm	approx. 19 mm	approx. 25 ml
44400024	approx. 200 mm	approx. 24 mm	approx. 50 ml
44400026	approx. 175 mm	approx. 28 mm	approx. 60 ml
44400030	approx. 260 mm	approx. 29 mm	approx. 100 ml
44400036	approx. 210 mm	approx. 39 mm	approx. 150 ml
44400042	approx. 265 mm	approx. 39 mm	approx. 200 ml
44400048	approx. 335 mm	approx. 39 mm	approx. 250 ml
44400060	approx. 390 mm	approx. 48 mm	approx. 500 ml (*)
44400066	approx. 440 mm	approx. 65 mm	approx. 1000 ml (*)
44400072	approx. 490 mm	approx. 85 mm	approx. 2000 ml (*)

* with hexagonal base

Low form
for DIN EN ISO 4788 (except 150 ml, 200 ml and 300 ml)

	Outside Ø	Capacity	Height
44401006	approx. 17 mm	approx. 5 ml	approx. 80 mm
44401012	approx. 20 mm	approx. 10 ml	approx. 100 mm
44401018	approx. 24 mm	approx. 25 ml	approx. 125 mm
44401024	approx. 29 mm	approx. 50 ml	approx. 150 mm
44401030	approx. 39 mm	approx. 100 ml	approx. 170 mm
44401036	approx. 48 mm	approx. 150 ml	approx. 170 mm
44401042	approx. 48 mm	approx. 200 ml	approx. 195 mm
44401048	approx. 48 mm	approx. 250 ml	approx. 225 mm (higher than DIN)
44401054	approx. 48 mm	approx. 300 ml	approx. 290 mm
44401060	approx. 65 mm	approx. 500 ml	approx. 255 mm
44401066	approx. 80 mm	approx. 1000 ml	approx. 295 mm
44401072	approx. 105 mm	approx. 2000 ml	approx. 345 mm

Measuring Cylinders

Measuring cylinders low form are manufactured in accordance with DIN EN ISO 4788.

Accuracy class
Standard type
Accuracy according to standard / class B
Short line graduation

Calibration
Measuring cylinders are calibrated to contain (marked "In")

Measuring cylinders, low form

with circular base
AR-Glas® (soda glass), standard type, fused amber graduation
"ASSISTENT-PERMANENT"

	Tolerance	Division	Capacity
42205006	0.1 ml	0.5 ml	5 ml
42205012	0.2 ml	1 ml	10 ml
42205018	0.5 ml	1 ml	25 ml
42205024	1 ml	2 ml	50 ml
42205030	1 ml	2 ml	100 ml
42205036	2 ml	5 ml	150 ml
42205042	2 ml	5 ml	200 ml
42205048	2 ml	5 ml	250 ml
42205060	5 ml	10 ml	500 ml
42205066	10 ml	20 ml	1000 ml
42205072	20 ml	50 ml	2000 ml

Measuring cylinders, low form, with interchangeable hexagonal plastic base and protecting ring made of polyethylene (HDPE)

AR-Glas® (soda glass), standard type, fused amber graduation "ASSISTENT-PERMANENT", base and protecting ring alkali-resistant and acid-proof, resistant to temperatures up to +120 °C / +248 °F

	Tolerance	Division	Capacity
42206012	0.2 ml	1 ml	10 ml
42206024	1 ml	2 ml	50 ml
42206030	1 ml	2 ml	100 ml
42206048	2 ml	5 ml	250 ml
42206060	5 ml	10 ml	500 ml

Mixing Cylinders

are manufactured in accordance with DIN EN ISO 4788.

Accuracy class
Standard type
Higher accuracy than standard / class B
Tolerance: 1.5 times of the official tolerance of class A
Short line graduation

Calibration
Mixing cylinders are calibrated to contain (marked "In")

Standard type

AR-Glas® (soda glass), circular base, with stopper made of polyethylene

Fused amber graduation "ASSISTENT-PERMANENT"

	Division	Capacity	Joint size
42210012	0.2 ml	10 ml	10/19
42210018	0.5 ml	25 ml	14/23
42210024	1 ml	50 ml	19/26
42210030	1 ml	100 ml	24/29
42210048	2 ml	250 ml	29/32

AR-Glas® (soda glass), with interchangeable hexagonal base and protecting ring made of polyethylene (HDPE), with stopper made of polyethylene

Fused amber graduation "ASSISTENT-PERMANENT", base and protecting ring acid-proof and alkali-resistant, temperature-resistant up to +120 °C/+248 °F

	Division	Joint size	Capacity
42211018	0.5 ml	14/23	25 ml
42211024	1 ml	19/26	50 ml
42211030	1 ml	24/29	100 ml
42211048	2 ml	29/32	250 ml
42211060	5 ml	34/35	500 ml

Sperm cylinders with funnel top, CE

Clear glass, with approximate scale, fused amber graduation
"ASSISTENT-PERMANENT"
Total height approx. 90 mm

42220010   Division 10 ml : 1 ml
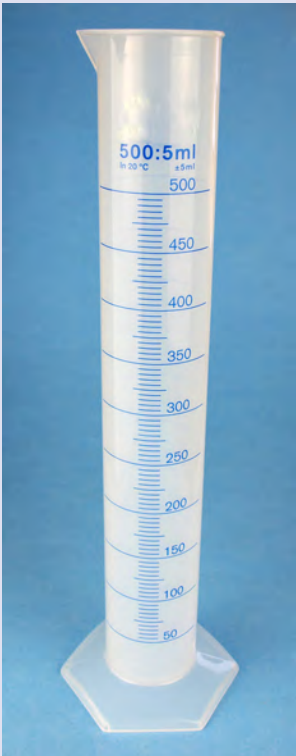
Measuring Cylinders made of Plastic

made of polypropylene, hexagonal base, tall form, blue graduation
DIN 12681 and ISO 6706, graduation resistant up to +60 °C/+140 °F

	Tolerance	Capacity
42194012	0.2 ml	10 ml
42194018	0.5 ml	25 ml
42194024	1 ml	50 ml
42194030	1 ml	100 ml
42194048	2 ml	250 ml
42194060	5 ml	500 ml
42194066	10 ml	1000 ml
42194072	20 ml	2000 ml

Measuring cylinders made of polypropylene, hexagonal base, tall form, embossed scale

DIN 12681 and ISO 6706, sterilisable at +121 °C/+249.8 °F

	Tolerance	Capacity
42195012	0.2 ml	10 ml
42195018	0.5 ml	25 ml
42195024	1 ml	50 ml
42195030	1 ml	100 ml
42195048	2 ml	250 ml
42195060	5 ml	500 ml
42195066	10 ml	1000 ml
42195072	20 ml	2000 ml

Measuring cylinders, plastic, made of polymethylpentene (PMP), hexagonal base, tall form, embossed scale

DIN 12681 and ISO 6706, clear, sterilisable at +121 °C/+249.8 °F

	Tolerance	Capacity
42196012	0.2 ml	10 ml
42196018	0.5 ml	25 ml
42196024	1 ml	50 ml
42196030	1 ml	100 ml
42196048	2 ml	250 ml
42196060	5 ml	500 ml
42196066	10 ml	1000 ml
42196072	20 ml	2000 ml
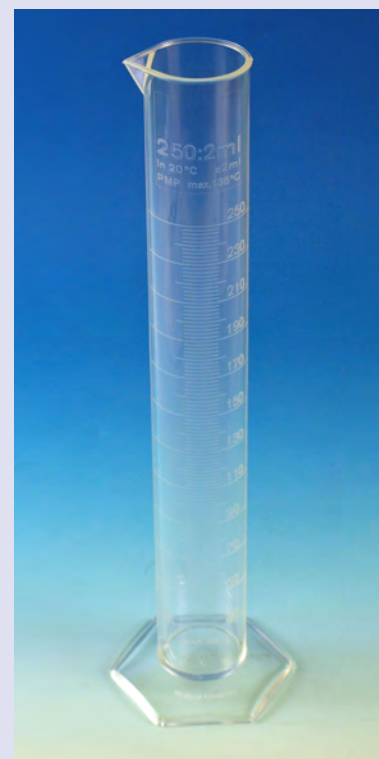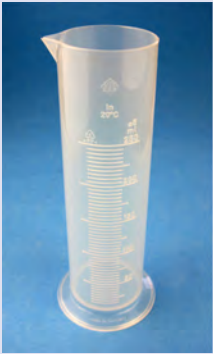
made of polypropylene, circular base, low form, embossed scale

Transparent, resistant up to +80 °C/+176 °F

	Tolerance	Capacity
42208018	0.5 ml	25 ml
42208024	1 ml	50 ml
42208030	2 ml	100 ml
42208048	5 ml	250 ml
42208060	10 ml	500 ml
42208066	20 ml	1000 ml

Measuring Jugs

with spout and handle

made of glass, with scale

Height approx. 230 mm

	Capacity	Outside Ø
42281066	approx. 1 litre	approx. 90 mm
42281072	approx. 2 litres	approx. 127 mm

made of polypropylene, with scale

Transparent (urine measuring jugs)

	Division	Capacity
42283024	2 ml	50 ml
42283030	2 ml	100 ml
42283048	5 ml	250 ml
42283060	10 ml	500 ml
42283066	20 ml	1000 ml
42283072	50 ml	2000 ml
42283078	50 ml	3000 ml
42283084	100 ml	5000 ml

Measuring jugs with spout and handle made of polypropylene, with scale

Embossed scale, high clarity, ergonomic handle for secure grip, functional spout to minimise spills, suitable for microwave
Autoclavable up to +121 °C/+249.8 °F (2 bar),
maximum temperature +125 °C/+257 °F

	Division	Max. Ø	Capacity	Height
42284024	2 ml	40 mm	50 ml	70 mm
42284030	2 ml	50 mm	100 ml	80 mm
42284048	5 ml	74 mm	250 ml	120 mm
42284060	10 ml	95 mm	500 ml	140 mm
42284066	20 ml	117 mm	1000 ml	181 mm
42284072	50 ml	152 mm	2000 ml	213 mm
42284078	50 ml	172 mm	3000 ml	242 mm
42284084	100 ml	204 mm	5000 ml	270 mm

Measuring Jugs

Conical, polypropylene
Transparent, embossed scale, round base, autoclavable

	Capacity	Division	Height
42255042	100 ml	2 ml	approx. 120 mm
42255048	250 ml	5 ml	approx. 160 mm
42255054	500 ml	10 ml	approx. 180 mm
42255060	1000 ml	20 ml	approx. 270 mm

Bell shape
Clear glass, graduated

	Division	Capacity
42260006	1 ml	5 ml
42260012	1 ml	10 ml
42260018	1 ml	15 ml
42260024	1 ml	25 ml
42260030	1 ml	30 ml
42260036	2 ml	50 ml

Pycnometers

according to Gay-Lussac with ground-in stopper, unadjusted

42570008	Capacity 5 cm³
42570016	Capacity 10 cm³
42570024	Capacity 25 cm³
42570032	Capacity 50 cm³
42570040	Capacity 100 cm³

according to Gay-Lussac with ground-in stopper, precisely adjusted

42571008	Capacity 5 cm³
42571016	Capacity 10 cm³
42571024	Capacity 25 cm³
42571032	Capacity 50 cm³
42571040	Capacity 100 cm³

according to Gay-Lussac with ground-in stopper, precisely adjusted up to three decimal places

42571308	Capacity 5 cm³
42571316	Capacity 10 cm³
42571324	Capacity 25 cm³
42571332	Capacity 50 cm³
42571340	Capacity 100 cm³

Pycnometers with ground-in thermometer, precisely adjusted

Side capillary with ground-on cap joint size 7.5
Flask of Erlenmeyer form, thermometer ground joint size 10/19,
blue filling, +10 °C + 35 °C/+50 °F +95 °F: 0.2

42572016   Capacity 10 cm³
42572024   Capacity 25 cm³
42572032   Capacity 50 cm³
42572040   Capacity 100 cm³

**with ground-in thermometer,
precisely adjusted up to three decimal places**

Side capillary with ground-on cap joint size 7.5
Flask of Erlenmeyer form, thermometer ground joint size 10/19,
blue filling, +10 °C +35 °C/+50 °F +95 °F : 0.2

42572308   Capacity 5 cm³
42572316   Capacity 10 cm³
42572324   Capacity 25 cm³
42572332   Capacity 50 cm³
42572340   Capacity 100 cm³

Demeter pipettes (Diluting pipettes)

DIN 12838 and DIN 12839, soda glass, with ring marks, fused amber
graduation "ASSISTENT-PERMANENT", calibrated for blowing out up
to 1 ml, other marks calibrated to deliver (Ex), length approx. 25 cm

	Tolerance	Marks at
42574001	0.05/0.005 ml	1.0/1.1 ml
42574002	0.05/0.05/0.005 ml	0.5/1.0/1.1 ml
42574004	0.05/0.05/0.005/0.005 ml	1.0/2.0/2.1/2.2 ml

Measuring Pipettes

are manufactured in accordance with DIN EN ISO 835.

Accuracy classes
- Conformity certified
in accordance with class AS, waiting time: 5 s, short delivery times
Graduation with ring marks at main points
Conformity mark and batch number are printed on each pipette. A
batch certificate is included in each original box.

- Standard type
Higher accuracy than standard / class B.
Tolerance: 1.5 times of the official tolerance of class AS
No waiting time is claimed for class B according to the standard.

Calibration
Calibrated to deliver (marked "Ex"): for volumes from 0.5 ml
Calibrated to contain (marked "In"): for volumes of 0.1 and 0.2 ml

Standard type

made of polypropylene

Calibrated to deliver "Ex", resistant to breakage. Exposure to
temperature up to +60 °C/+140 °F will not cause permanent
exceeding of error limits.
Cleaning temperature below +60 °C/+140 °F recommended to
preserve marks and inscriptions.
Suction tube outside max. 8 mm Ø

	Division	Capacity	Length	Error limit
42525020	0.1 ml	1 ml	300 mm ± 10 mm	± 0.02 ml
42525028	0.1 ml	2 ml	300 mm ± 10 mm	± 0.02 ml
42525040	0.01 ml	5 ml	330 mm ± 10 mm	± 0.05 ml
42525048	0.1 ml	10 ml	320 mm ± 10 mm	± 0.1 ml
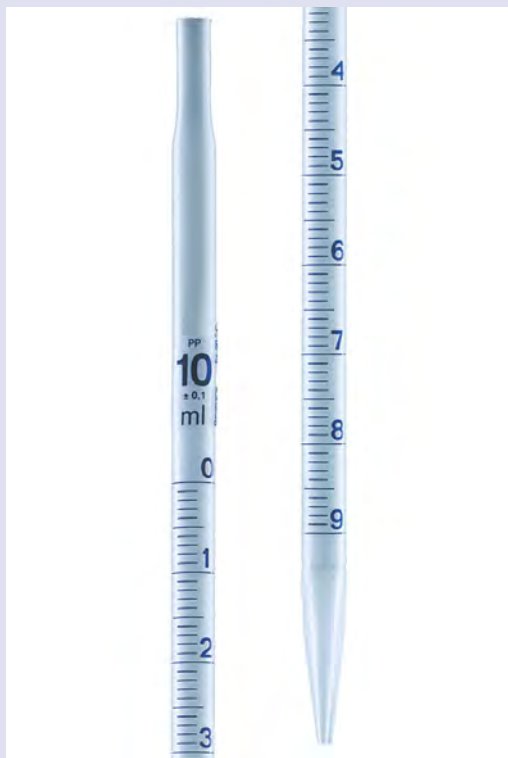
Measuring pipettes, standard type, clear glass, total delivery (calibrated up to the tip), serological pipettes

Short line graduation, standard type, tolerance 1.5 times of the official tolerance of
class AS, short delivery time, zero point at top, fused amber graduation "ASSISTENT-PERMANENT"
Packing: 10 pieces/box

	Tolerance	Division	Capacity
42539016	0.008 ml	0.01 ml	0.5 ml
42539020	0.010 ml	0.01 ml	1 ml
42539036	0.015 ml	0.02 ml	2 ml
42539040	0.045 ml	0.1 ml	5 ml
42539044	0.045 ml	0.05 ml	5 ml
42539048	0.075 ml	0.1 ml	10 ml
42539052	0.150 ml	0.1 ml	20 ml
42539056	0.150 ml	0.1 ml	25 ml
42539060	0.300 ml	0.2 ml	50 ml

Measuring pipettes, standard model, clear glass, total delivery (calibrated up to the tip)

Short line graduation, standard type, tolerance 1.5 times of the official tolerance of
class AS, short delivery time, zero point at top, fused blue graduation "ASSISTENT-PERMANENT"
Packing: 10 pieces/box

	Division	Tolerance	Capacity
42540004	0.001 ml	0.0015 ml	0.1 ml
42540008	0.001 ml	0.003 ml	0.2 ml
42540016	0.01 ml	0.008 ml	0.5 ml
42540020	0.01 ml	0.010 ml	1 ml
42540036	0.02 ml	0.015 ml	2 ml
42540040	0.1 ml	0.045 ml	5 ml
42540044	0.05 ml	0.045 ml	5 ml
42540048	0.1 ml	0.075 ml	10 ml
42540052	0.1 ml	0.150 ml	20 ml
42540056	0.1 ml	0.150 ml	25 ml
42540060	0.02 ml	0.300 ml	50 ml
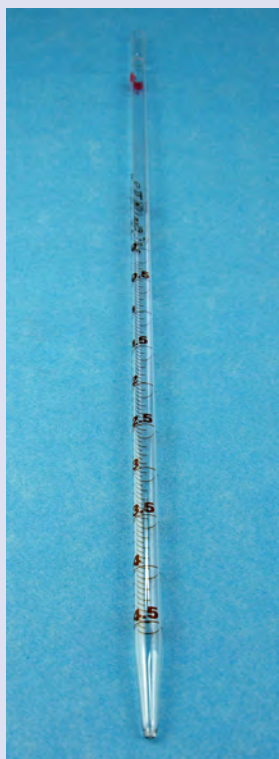
Measuring pipettes, conformity certified

Clear glass, total delivery (calibrated up to the tip)

Graduation with ring marks at main points, short delivery time, fused amber graduation "ASSISTENT-PERMANENT", zero point at top
Packing: 10 pieces/box

	Tolerance	Division	Capacity
42541016	0.005 ml	0.01 ml	0.5 ml
42541020	0.007 ml	0.01 ml	1 ml
42541036	0.01 ml	0.02 ml	2 ml
42541040	0.03 ml	0.1 ml	5 ml
42541044	0.03 ml	0.05 ml	5 ml
42541048	0.05 ml	0.1 ml	10 ml
42541052	0.1 ml	0.1 ml	20 ml
42541056	0.1 ml	0.1 ml	25 ml
42541060	0.1 ml	0.2 ml	50 ml

42541060 in addition to DIN
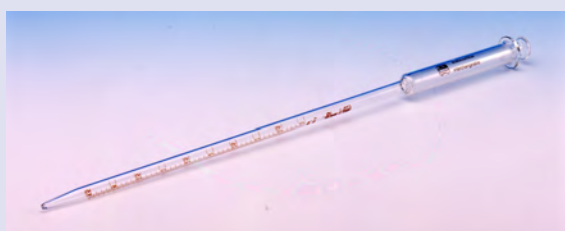
Safety pipettes

Safety measuring pipettes with interchangeable, ground-in piston

Standard type, tolerance 1.5 times of the official tolerance of class AS, fused amber graduation "ASSISTENT-PERMANENT", calibrated, fire-polished, solid tip, zero point at top
Packing: Each in a solid plastic tube

	Division	Capacity
42548020	0.01 ml	1 ml
42548036	0.02 ml	2 ml
42548044	0.05 ml	5 ml
42548048	0.1 ml	10 ml
42548052	0.1 ml	20 ml
42548056	0.1 ml	25 ml

Pipettes made of glass, ungraduated

Diameter approx. 7 mm

42569012	Length approx. 12 cm
42569015	Length approx. 15 cm
42569020	Length approx. 20 cm
42569025	Length approx. 25 cm

Equipment for pipettes

Pipette holders made of Plexiglas®
with field for inscription for 12 pipettes
42583010   Numbering 1-12
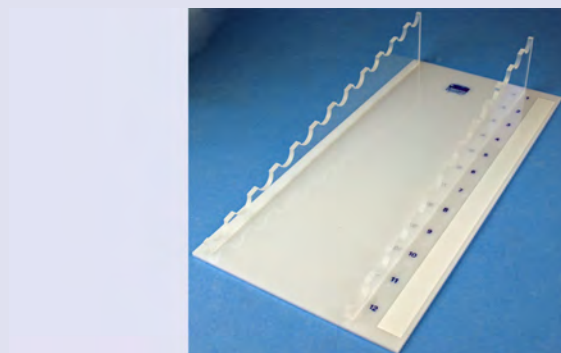
Pipette trays made of PVC
Stackable
42585010   Dimensions approx. 47 x 17 x 8 cm

Cover made of PVC
Transparent
42586010   for pipette tray no. 42585010

Pipette stands made of Plexiglas®
Sloping, for measuring pipettes and volumetric pipettes,
cavities approx. 17.5 mm, width approx. 123 mm

	for	Height	Length
42590006	6 pipettes	approx. 181 mm	approx. 188 mm
42590012	12 pipettes	approx. 190 mm	approx. 350 mm
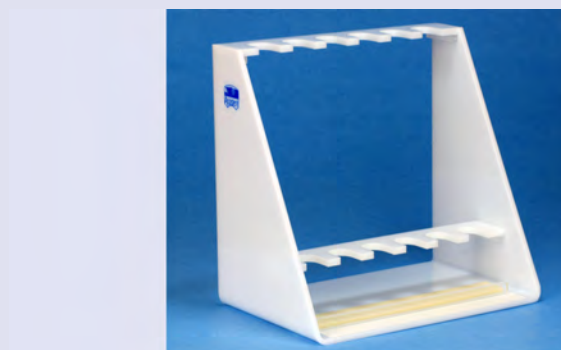
Racks for pipettes, Plexiglas®
Circular, base with foam pad to protect the pipette tips
42593010   for 20 pipettes

Volumetric Pipettes

are manufactured in accordance with DIN EN ISO 648.
On request the pipettes are available with safety bulb.

Accuracy classes
- Conformity certified
in accordance with class AS, waiting time: 5 s, short delivery times
Conformity mark and batch number are printed on each volumetric
pipette. A batch certificate is included in each original box.

- Standard type
Higher accuracy than standard / class B
Tolerance: 1.5 times of the official tolerance of class AS
No waiting time is claimed for class B according to the standard.

Calibration
Calibrated to deliver (marked Ex)

Standard type

with 1 mark

Fused amber graduation "ASSISTENT-PERMANENT"

	Tolerance	Capacity	Packing/box
42550004	0.0075 ml	0.5 ml	10 pieces
42550008	0.01 ml	1 ml	10 pieces
42550016	0.015 ml	2 ml	10 pieces
42550024	0.015 ml	3 ml	10 pieces
42550028	0.020 ml	4 ml	10 pieces
42550032	0.020 ml	5 ml	10 pieces
42550036	0.020 ml	6 ml	10 pieces
42550040	0.020 ml	7 ml	10 pieces
42550052	0.030 ml	10 ml	10 pieces
42550056	0.045 ml	11 ml	10 pieces
42550064	0.045 ml	20 ml	6 pieces
42550068	0.045 ml	25 ml	6 pieces
42550080	0.075 ml	50 ml	6 pieces
42550084	0.12 ml	100 ml	6 pieces

made of polypropylene, with 1 mark

Resistant to breakage, calibrated to deliver "Ex".
Exposure to temperatures up to +60 °C/+140 °F will not cause permanent exceeding of error limits, cleaning temperature below +60 °C/+140 °F recommended to preserve marks and inscriptions

	Capacity	Length	Pattern	Error limit
42560008	1 ml	300 mm ± 10 mm	Straight	± 0.02 ml
42560016	2 ml	300 mm ± 10 mm	Straight	± 0.02 ml
42560032	5 ml	300 mm ± 10 mm	with bulb	± 0.03 ml
42560056	10 ml	440 mm ± 10 mm	with bulb	± 0.04 ml
42560068	25 ml	450 mm ± 10 mm	with bulb	± 0.06 ml
42560080	50 ml	460 mm ± 10 mm	with bulb	± 0.1 ml

Volumetric pipettes, conformity certified

with 1 mark

Class AS within the official tolerance, fused amber graduation "ASSISTENT-PERMANENT"

Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Tolerance	Capacity	Packing/box
42556004	0.005 ml	0.5 ml	10 pieces
42556008	0.007 ml	1 ml	10 pieces
42556016	0.01 ml	2 ml	10 pieces
42556020	0.01 ml	2.5 ml	10 pieces
42556024	0.01 ml	3 ml	10 pieces
42556028	0.015 ml	4 ml	10 pieces
42556032	0.015 ml	5 ml	10 pieces
42556040	0.015 ml	7 ml	10 pieces
42556044	0.02 ml	8 ml	10 pieces
42556048	0.02 ml	9 ml	10 pieces
42556052	0.02 ml	10 ml	10 pieces
42556060	0.03 ml	20 ml	6 pieces
42556064	0.03 ml	20 ml	6 pieces
42556068	0.03 ml	25 ml	6 pieces
42556072	0.05 ml	40 ml	6 pieces
42556076	0.05 ml	50 ml	6 pieces
42556080	0.05 ml	50 ml	6 pieces
42556084	0.08 ml	100 ml	6 pieces

Volumetric pipettes, conformity certified, with 2 marks

Class AS within the official tolerance, fused amber graduation "ASSISTENT-PERMANENT"

	Tolerance	Packing/box	Capacity
42557004	0.005 ml	10 pieces	0.5 ml
42557008	0.007 ml	10 pieces	1 ml
42557016	0.01 ml	10 pieces	2 ml
42557024	0.01 ml	10 pieces	3 ml
42557028	0.015 ml	10 pieces	4 ml
42557032	0.015 ml	10 pieces	5 ml
42557064	0.03 ml	6 pieces	20 ml
42557080	0.05 ml	6 pieces	50 ml

Automatic Burettes and Accessories

Automatic burettes are manufactured in accordance with
DIN EN ISO 385.

Accuracy classes
- Conformity certified
in accordance with class AS, waiting time: 30 s, short delivery times
Graduation with ring marks at main points
Conformity mark and batch number are printed on each burette.
A batch certificate is included in each original box.

- Standard type
Higher accuracy than standard / class B
Tolerance: 1.5 times of the official tolerance of class AS
Short line graduation
No waiting time is claimed for class B according to the standard.

Calibration
Automatic burettes are calibrated to deliver (marked "Ex")

Stopcocks
straight and lateral - with interchangeable standard ground plugs and
reliable retaining devices;
strong quality, reinforced joints, calibrated faceted tips

Automatic burettes, standard type

DURAN® borosilicate glass 3.3, with stopcock between burette and bottle

Burette with Schellbach stripe, fused blue graduation "ASSISTENT-PERMANENT"
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41916054
- Rubber bulb no. 40850001

	Tolerance	Division	Capacity	Stopcock/Plug
48400022	0.045 ml	0.05 ml	25 ml	Both stopcocks with glass plug
48400025	0.075 ml	0.1 ml	25 ml	Both stopcocks with glass plug
48400050	0.075 ml	0.1 ml	50 ml	Both stopcocks with glass plug
48400122	0.045 ml	0.05 ml	25 ml	Both stopcocks with PTFE plug
48400125	0.075 ml	0.1 ml	25 ml	Both stopcocks with PTFE plug
48400150	0.075 ml	0.1 ml	50 ml	Both stopcocks with PTFE plug
48400322	0.045 ml	0.05 ml	25 ml	*
48400325	0.075 ml	0.1 ml	25 ml	*
48400350	0.075 ml	0.1 ml	50 ml	*

* Intermediate stopcock with PTFE plug, lateral safety needle valve stopcock and PTFE spindle

Automatic burettes, standard type, DURAN® borosilicate glass 3.3, without stopcock between burette and bottle
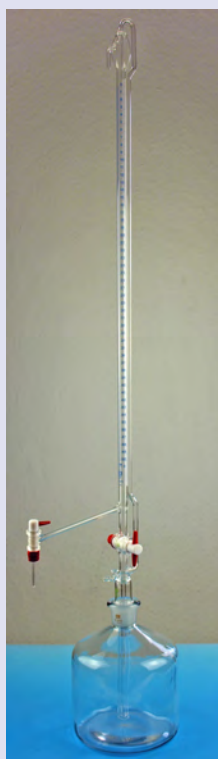
Burette with Schellbach stripe, fused blue graduation "ASSISTENT-PERMANENT"
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41916054
- Rubber bulb no. 40850001

	Tolerance	Division	Capacity	Stopcock/Plug
48410022	0.045 ml	0.05 ml	25 ml	Delivery stopcock with glass plug
48410025	0.075 ml	0.1 ml	25 ml	Delivery stopcock with glass plug
48410050	0.075 ml	0.1 ml	50 ml	Delivery stopcock with glass plug
48410122	0.045 ml	0.05 ml	25 ml	Delivery stopcock with PTFE plug
48410125	0.075 ml	0.1 ml	25 ml	Delivery stopcock with PTFE plug
48410150	0.075 ml	0.1 ml	50 ml	Delivery stopcock with PTFE plug
48410222	0.045 ml	0.05 ml	25 ml	Lateral safety needle valve stopcock+PTFE spindle
48410225	0.075 ml	0.1 ml	25 ml	Lateral safety needle valve stopcock+PTFE spindle
48410250	0.075 ml	0.1 ml	50 ml	Lateral safety needle valve stopcock+PTFE spindle

Rubber bulbs for automatic burettes

One bulb, with valve - made of flexible PVC (free of cadmium)

	Inside Ø of the tubing	Tube length	Outside Ø of the tubing
40850001	approx. 4 mm	approx. 400 mm	approx. 8-9 mm

Rubber bulbs for automatic burettes (double with net)

with valve - made of flexible PVC (free of cadmium), bulb in net made of latex

	Tube length	Inside Ø of the tubing	Outside Ø of the tubing
40850002	approx. 350 mm	approx. 4 mm	approx. 8-9 mm
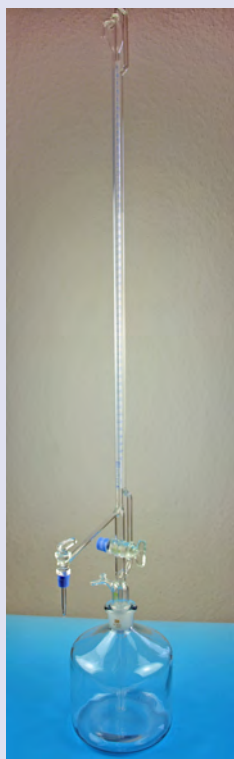
Automatic burettes, conformity certified

DURAN® borosilicate glass 3.3, with stopcock between burette and bottle

Class AS, with Schellbach stripe, fused blue graduation "ASSISTENT-PERMANENT",
delivery time 35-45 s
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41916054
- Rubber bulb no. 40850001

Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity	Stopcock/Plug
48415015	0.02 ml	0.020 ml	10 ml	Stopcocks with glass plug
48415022	0.05 ml	0.030 ml	25 ml	Stopcocks with glass plug
48415050	0.1 ml	0.050 ml	50 ml	Stopcocks with glass plug
48415315	0.02 ml	0.020 ml	10 ml	*
48415322	0.05 ml	0.030 ml	25 ml	*
48415350	0.1 ml	0.050 ml	50 ml	*

* Intermediate stopcock with PTFE plug, lateral safety needle valve stopcock and PTFE spindle

DURAN® borosilicate glass 3.3, without stopcock between burette and bottle

Class AS, with Schellbach stripe, fused blue graduation "ASSISTENT-PERMANENT", delivery time 35-45 s
Lateral safety needle valve stopcock with PTFE spindle
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41916054
- Rubber bulb no. 40850001

Available with individual certificate of performance, USP batch certificate or DAkkS calibration certificate. Please indicate the request in your order! (see chapter beginning)

	Division	Tolerance	Capacity
48416215	0.02 ml	0.020 ml	10 ml
48416222	0.05 ml	0.030 ml	25 ml
48416250	0.1 ml	0.050 ml	50 ml

Automatic burettes, conformity certified, DURAN® borosilicate glass 3.3 amber,
with stopcock between burette and bottle

Standard type, fused white "ASSISTENT-PERMANENT" graduation
Both stopcocks with glass plug
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41917054
- Rubber bulb no. 40850001

	Division	Tolerance	Capacity
48452015	0.02 ml	0.050 ml	10 ml
48452025	0.1 ml	0.075 ml	25 ml
48452050	0.1 ml	0.100 ml	50 ml
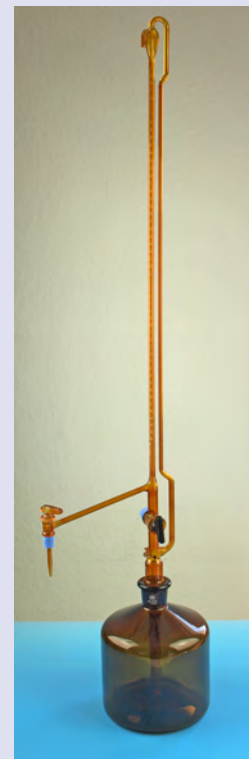
DURAN® borosilicate glass 3.3 amber,
without stopcock between burette and bottle

Standard type, burette with Schellbach stripe, fused white
"ASSISTENT-PERMANENT" graduation
Delivery stopcock with glass plug
consisting of:
- Automatic burette
- Bottle 2 l with standard ground 29/32 no. 41917054
- Rubber bulb no. 40850001

	Division	Tolerance	Capacity
48462015	0.02 ml	0.050 ml	10 ml
48462025	0.1 ml	0.075 ml	25 ml
48462050	0.1 ml	0.100 ml	50 ml
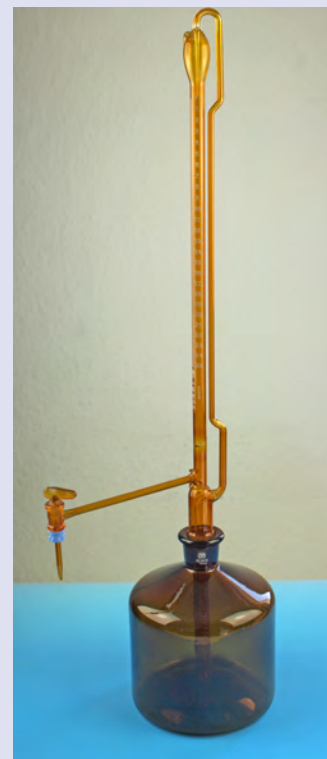
Bottles for automatic burettes

with standard ground, clear glass
Total height approx. 200 mm, joint size 29/32
41916048   Capacity 1000 ml
41916054   Capacity 2000 ml

with standard ground, amber glass
Total height approx. 200 mm, joint size 29/32
41917048   Capacity 1000 ml
41917054   Capacity 2000 ml

Laboratory Equipment

General Laboratory Equipment

Evaporating dishes made of glass

Watch glasses
DIN 12 341, fused rim

40010004	Ø approx. 4 cm
40010005	Ø approx. 5 cm
40010006	Ø approx. 6 cm
40010007	Ø approx. 7 cm
40010008	Ø approx. 8 cm
40010009	Ø approx. 9 cm
40010010	Ø approx. 10 cm
40010011	Ø approx. 11 cm
40010012	Ø approx. 12 cm
40010014	Ø approx. 14 cm
40010015	Ø approx. 15 cm
40010016	Ø approx. 16 cm
40010018	Ø approx. 18 cm
40010020	Ø approx. 20 cm
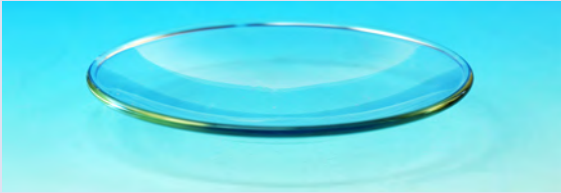
ground in pairs

40011005	Ø approx. 5 cm
40011006	Ø approx. 6 cm
40011007	Ø approx. 7 cm
40011008	Ø approx. 8 cm
40011009	Ø approx. 9 cm
40011010	Ø approx. 10 cm
40011011	Ø approx. 11 cm
40011012	Ø approx. 12 cm
40011014	Ø approx. 14 cm
40011015	Ø approx. 15 cm
40011016	Ø approx. 16 cm
40011018	Ø approx. 18 cm
40011020	Ø approx. 20 cm

Evaporating dishes made of glass with hole in centre

40012004	Ø approx. 4 cm
40012005	Ø approx. 5 cm
40012006	Ø approx. 6 cm
40012007	Ø approx. 7 cm
40012008	Ø approx. 8 cm
40012009	Ø approx. 9 cm
40012010	Ø approx. 10 cm
40012011	Ø approx. 11 cm
40012012	Ø approx. 12 cm
40012014	Ø approx. 14 cm
40012015	Ø approx. 15 cm
40012016	Ø approx. 16 cm
40012018	Ø approx. 18 cm
40012020	Ø approx. 20 cm
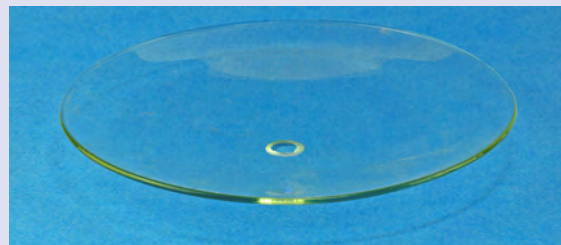
Crystallising dishes

with spout, borosilicate glass 3.3

Cylindrical, flat bottom

	Height	Outside Ø
41969040	approx. 25 mm	approx. 40 mm
41969050	approx. 30 mm	approx. 50 mm
41969060	approx. 35 mm	approx. 60 mm
41969070	approx. 40 mm	approx. 70 mm
41969080	approx. 45 mm	approx. 80 mm
41969095	approx. 55 mm	approx. 95 mm

Crystallising dishes without spout and other sizes are available as well.
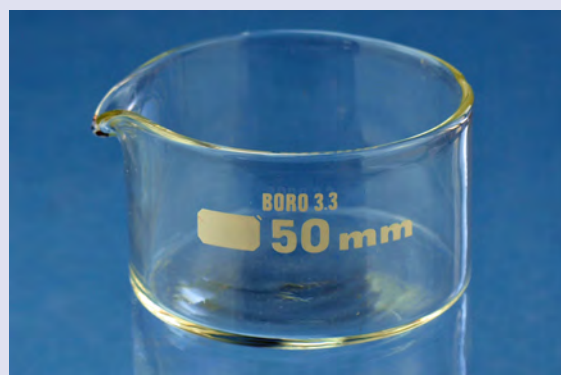
Weighing bottles

Tall form

Bottles made of borosilicate glass 3.3, with interchangeable ground joint cover, with frosted label

	Capacity	Outside Ø	Height
44250001	approx. 10 ml	approx. 25 mm	approx. 40 mm
44250002	approx. 20 ml	approx. 30 mm	approx. 50 mm
44250003	approx. 40 ml	approx. 40 mm	approx. 50 mm
44250004	approx. 45 ml	approx. 35 mm	approx. 70 mm
44250005	approx. 70 ml	approx. 40 mm	approx. 80 mm
44250006	approx. 110 ml	approx. 50 mm	approx. 80 mm

Weighing bottles, low form

Bottles made of borosilicate glass 3.3, with interchangeable ground joint cover, with frosted label, height approx. 30 mm

	Capacity	Outside Ø
44251010	approx. 10 ml	approx. 30 mm
44251011	approx. 15 ml	approx. 35 mm
44251012	approx. 20 ml	approx. 40 mm
44251013	approx. 30 ml	approx. 50 mm
44251014	approx. 45 ml	approx. 60 mm
44251016	approx. 80 ml	approx. 80 mm

Glass tanks

Fine ground rim
made of clear glass

	Width	Height	Length
40070001	approx. 10 cm	approx. 15 cm	approx. 15 cm
40070002	approx. 13 cm	approx. 18 cm	approx. 18 cm
40070003	approx. 15 cm	approx. 20 cm	approx. 20 cm
40070004	approx. 18 cm	approx. 22 cm	approx. 25 cm
40070005	approx. 22 cm	approx. 24 cm	approx. 30 cm
40070006	approx. 23 cm	approx. 26 cm	approx. 36 cm
40070011	approx. 22 cm	approx. 15 cm	approx. 30 cm

(Outside dimensions)

Specimen jars (Museum jars)
made of clear glass, with ground cover plate

	Height	Length	Width
42660002	approx. 100 mm	approx. 50 mm	approx. 50 mm
42660003	approx. 150 mm	approx. 80 mm	approx. 60 mm
42660004	approx. 150 mm	approx. 105 mm	approx. 50 mm
42660006	approx. 200 mm	approx. 120 mm	approx. 80 mm
42660007	approx. 200 mm	approx. 130 mm	approx. 130 mm
42660008	approx. 225 mm	approx. 200 mm	approx. 100 mm

Dimensions given are external.

Specimen jars (museum jars) made of clear glass, without cover plate

	Length	Height	Width
42661010	approx. 105 mm	approx. 120 mm	approx. 50 mm

Dimensions given are external.

Narrow neck bottles

Clear glass, with thread and screw cap

Screw caps are heat-resistant up to +110 °C / +230 °F.

	Capacity	Thread
41322012	30 ml	GL 18
41322018	50 ml	GL 18
41322030	100 ml	GL 22
41322054	250 ml	GL 22
41322066	500 ml	GL 25
41322072	1000 ml	GL 28

Amber glass, with thread and screw cap

Screw caps are heat-resistant up to +110 °C / +230 °F.

	Capacity	Thread
41323018	50 ml	GL 18
41323030	100 ml	GL 22
41323048	200 ml	GL 22
41323054	250 ml	GL 22
41323066	500 ml	GL 25
41323072	1000 ml	GL 28

Wide neck bottles

Clear glass, with thread and screw cap
Screw caps are heat-resistant up to +110 °C / +230 °F.

	Capacity	Thread
41324006	25 ml	GL 28
41324012	30 ml	GL 32
41324018	50 ml	GL 32
41324030	100 ml	GL 40
41324036	125 ml	GL 40
41324042	150 ml	GL 45
41324048	200 ml	GL 55
41324054	250 ml	GL 55
41324060	300 ml	GL 55
41324066	500 ml	GL 55
41324072	1000 ml	GL 68

Amber glass, with thread and screw cap
Screw caps are heat-resistant up to +110 °C / +230 °F.

	Capacity	Thread
41325006	25 ml	GL 28
41325012	30 ml	GL 32
41325018	50 ml	GL 32
41325024	75 ml	GL 40
41325030	100 ml	GL 40
41325036	125 ml	GL 40
41325042	150 ml	GL 45
41325048	200 ml	GL 55
41325054	250 ml	GL 55
41325060	300 ml	GL 55
41325066	500 ml	GL 55
41325072	1000 ml	GL 68

Screw caps

for narrow neck and wide neck bottles

made of urea resin molding compound, black, sealing of Lupolen®, heat-resistant up to +110 °C/+230 °F.

41326018	GL 18
41326022	GL 22
41326025	GL 25
41326028	GL 28
41326032	GL 32
41326040	GL 40
41326045	GL 45
41326055	GL 55
41326068	GL 68

Reagent bottles with scale

Clear glass, with blue screw cap and blue pouring ring made of polypropylene

	Capacity	Thread
41330106	50 ml	GL 32
41330112	100 ml	GL 45
41330118	250 ml	GL 45
41330124	500 ml	GL 45
41330130	1000 ml	GL 45
41330136	2000 ml	GL 45
41330142	5000 ml	GL 45
41330148	10000 ml	GL 45

Clear glass, without screw cap and pouring ring

DURAN® borosilicate glass 3.3, with thread ISO, autoclavable

	Capacity	Thread
41330006	50 ml	GL 32
41330012	100 ml	GL 45
41330018	250 ml	GL 45
41330024	500 ml	GL 45
41330030	1000 ml	GL 45
41330036	2000 ml	GL 45

Clear glass, with red screw cap and red pouring ring

Borosilicate glass 3.3, screw cap made of PBT, pouring ring made of ETFE, resistant up to max. +200 °C/+392 °F, thread GL 45

41331212	Capacity 100 ml
41331218	Capacity 250 ml
41331224	Capacity 500 ml
41331230	Capacity 1000 ml
41331236	Capacity 2000 ml
41331242	Capacity 5000 ml

Reagent bottles with scale, amber glass, with blue screw cap and blue pouring ring

Borosilicate glass 3.3, resistant up to max. +140 °C/+284 °F

	Capacity	Thread
41331106	50 ml	GL 32
41331112	100 ml	GL 45
41331118	250 ml	GL 45
41331124	500 ml	GL 45
41331130	1000 ml	GL 45
41331136	2000 ml	GL 45
41331142	5000 ml	GL 45

Square laboratory reagent bottles, clear glass, with blue screw cap and blue pouring ring

Borosilicate glass 3.3, resistant up to +140 °C/+284 °F, thread GL 80

41333124	Capacity 500 ml
41333130	Capacity 1000 ml
41333136	Capacity 2000 ml
41333142	Capacity 5000 ml

Square laboratory reagent bottles, amber glass, with blue screw cap and blue pouring ring

Borosilicate glass 3.3, resistant up to +140 °C/+284 °F, thread GL 80

41334124	Capacity 500 ml
41334130	Capacity 1000 ml
41334136	Capacity 2000 ml
41334142	Capacity 5000 ml

Pouring rings

made of polypropylene, blue, resistant up to +135 °C/+275 °F

	for	Thread
41335010	bottles from 100 ml	GL 45
41335032	bottles of 50 ml	GL 32

Screw caps

Polypropylene, transparent, with seal, resistant up to +135 °C/+275 °F,
also available in red or blue

	for	Thread
41336010	bottles from 100 ml	GL 45
41336032	bottles of 50 ml	GL 32

YOUTILITY Laboratory bottles, DURAN® borosilicate glass 3.3, clear glass

with retrace code, **complete with pouring ring and screw cap made of polypropylene**
The specially shaped gripping zones on both sides of the bottle permit easier and safer handling.
The slimmer YOUTILITY bottle shape allows a more optimal use, especially with smaller sized or gloved hands.
The screw cap features a secure grip, fast opening and quick closing.
with easy-to-read scale and labelling area.
All spare parts are autoclavable.
(without marking rings, without labels)

	Capacity	Height	Diameter	Thread
41340014	125 ml	approx. 124 mm	approx. 55 mm	GL 45
41340018	250 ml	approx. 158 mm	approx. 66 mm	GL 45
41340024	500 ml	approx. 193 mm	approx. 78 mm	GL 45
41340036	1000 ml	approx. 253 mm	approx. 93 mm	GL 45

YOUTILITY Laboratory bottles, DURAN® borosilicate glass 3.3, amber glass

with retrace code, **complete with pouring ring and screw cap made of polypropylene**
The specially shaped gripping zones on both sides of the bottle permit easier and safer handling.
The slimmer YOUTILITY bottle shape allows a more optimal use, especially with smaller sized or gloved hands.
The screw cap features a secure grip, fast opening and quick closing. with easy-to-read scale and labelling area.
All spare parts are autoclavable.
(without marking rings, without labels)

	Capacity	Height	Diameter	Thread
41341014	125 ml	approx. 124 mm	approx. 55 mm	GL 45
41341018	250 ml	approx. 158 mm	approx. 66 mm	GL 45
41341024	500 ml	approx. 193 mm	approx. 78 mm	GL 45
41341036	1000 ml	approx. 124 mm	approx. 55 mm	GL 45
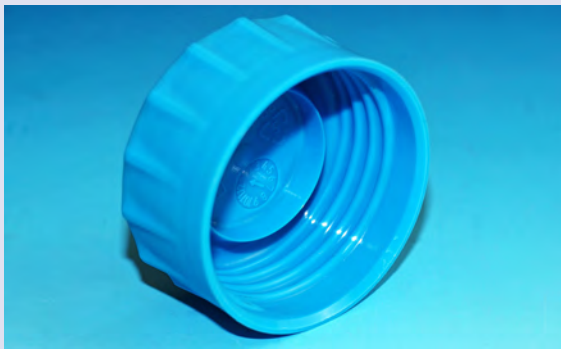
Screw caps for YOUTILITY laboratory bottles
made of polypropylene, colour cyan
41342010   Thread GL 45

Pouring rings for YOUTILITY laboratory bottles
made of polypropylene, colour cyan
41343010   Thread GL 45

Marking rings for YOUTILITY laboratory bottles
Single rings are not available!
41344010   made of silicone, available in sets of 16 rings(2 rings each of the following colours: red, orange, yellow, green, blue, violet, black, white)

Labels, self-adhesive, for YOUTILITY laboratory bottles

Temperature-resistant at -40 °C +150 °C/-40 °F +302 °F
The labels are made of polyester. Cleanly removable.
with indicator for autoclaving / steam sterilisation according to class 1.
Suitable for use in refrigerators and freezers, autoclaves, incubators and water baths.
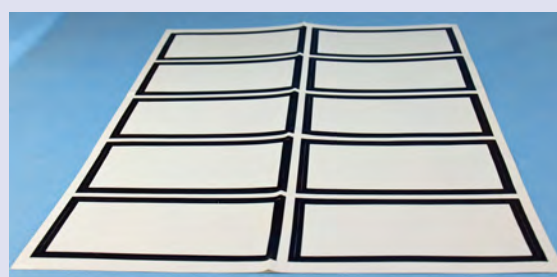in box of 200 labels each

41345010   Rectangular for bottles 36 x 70 mm, circular for screw caps 30 mm Ø

Self-adhesive labels for inscription

White, non-fade plastic foil, resistant to chemicals, with black border

	for bottles	Dimensions
41278001	up to approx. 250 ml	approx. 74 x 37 mm
41278002	from approx. 500 ml	approx. 105 x 52 mm

Protective coating for labels

	for article	for labels
41278091	41278001	approx. 74 x 37 mm
41278092	41278002	approx. 105 x 52 mm

Bottle brushes

for all types of laboratory bottles, with special head brush for cleaning
the bottle bottom

	Brush length	Total length	Brush Ø
41279010	approx. 100 mm	approx. 420 mm	approx. 55 mm

Bottles with conical shoulder, narrow neck, clear glass, with stopper made of polyethylene

with standard ground

	Joint size	Capacity
41280006	14.5	50 ml
41280012	14/23	100 ml
41280018	19/26	250 ml
41280024	24/29	500 ml
41280030	29/32	1000 ml
41280036	29/32	2000 ml

On request also available with label and fused inscription.

Narrow neck, clear glass, with glass stopper
with standard ground

	Joint size	Capacity
41281006	14.5	50 ml
41281012	14/23	100 ml
41281018	19/26	250 ml
41281024	24/29	500 ml
41281030	29/32	1000 ml
41281036	29/32	2000 ml

On request also available with label and fused inscription.

Bottles with conical shoulder, narrow neck, amber glass, with stopper made of polyethylene
with standard ground

	Joint size	Capacity
41282006	14.5	50 ml
41282012	14/23	100 ml
41282018	19/26	250 ml
41282024	24/29	500 ml
41282030	29/32	1000 ml
41282036	29/32	2000 ml

On request also available with label and fused inscription.

Narrow neck, amber glass, with glass stopper
with standard ground

	Joint size	Capacity
41283006	14.5	50 ml
41283012	14/23	100 ml
41283019	19/26	250 ml
41283024	24/29	500 ml
41283030	29/32	1000 ml
41283036	29/32	2000 ml

On request also available with label and fused inscription.

Wide neck, clear glass, with stopper made of polyethylene
with standard ground

	Joint size	Capacity
41284006	24/29	50 ml
41284012	29/32	100 ml
41284018	34/35	250 ml
41284024	45/40	500 ml
41284030	60/46	1000 ml

On request also available with label and fused inscription.

Bottles with conical shoulder, wide neck, clear glass, with glass stopper

with standard ground

	Joint size	Capacity
41285006	24/20	50 ml
41285012	29/22	100 ml
41285018	34/40	250 ml
41285024	45/27	500 ml
41285030	60/46	1000 ml

On request also available with label and fused inscription.

Wide neck, amber glass, with stopper made of polyethylene

with standard ground

	Joint size	Capacity
41286006	24/29	50 ml
41286012	29/32	100 ml
41286018	34/35	250 ml
41286024	45/40	500 ml
41286030	60/46	1000 ml

On request also available with label and fused inscription.

Wide neck, amber glass, with glass stopper

with standard ground

	Joint size	Capacity
41287006	24/20	50 ml
41287012	29/22	100 ml
41287018	34/40	250 ml
41287024	45/27	500 ml
41287030	60/46	1000 ml

On request also available with label and fused inscription.

Bottles with conical shoulder, narrow neck, clear glass

with stopper made of polyethylene (HDPE) and frosted label for inscriptions

41321010   Capacity 50 ml, joint size 14/23

Narrow neck bottles

Clear glass
with ground-in glass stopper

	Capacity	Ø	Height without stopper
41301006	50 ml	approx. 41.5 mm	approx. 77 mm
41301012	100 ml	approx. 51.5 mm	approx. 103 mm
41301018	250 ml	approx. 69 mm	approx. 131 mm
41301024	500 ml	approx. 85 mm	approx. 163 mm
41301030	1000 ml	approx. 106.5 mm	approx. 199 mm

Amber glass
with ground-in glass stopper

	Capacity	Ø	Height without stopper
41303006	50 ml	approx. 41.5 mm	approx. 77 mm
41303012	100 ml	approx. 51.5 mm	approx. 103 mm
41303018	250 ml	approx. 69 mm	approx. 131 mm
41303024	500 ml	approx. 85 mm	approx. 163 mm
41303030	1000 ml	approx. 106.5 mm	approx. 199 mm
41303036	2000 ml	approx. 132 mm	approx. 245 mm

Wide neck bottles

Clear glass
with ground-in glass stopper

	Capacity	Ø	Height without stopper
41311006	50 ml	approx. 41.5 mm	approx. 76 mm
41311012	100 ml	approx. 51.5 mm	approx. 95 mm
41311018	250 ml	approx. 69 mm	approx. 128 mm
41311024	500 ml	approx. 85 mm	approx. 162 mm
41311030	1000 ml	approx. 106.5 mm	approx. 187 mm

Amber glass
with ground-in glass stopper

	Capacity	Ø	Height without stopper
41313006	50 ml	approx. 41.5 mm	approx. 76 mm
41313012	100 ml	approx. 51.5 mm	approx. 95 mm
41313018	250 ml	approx. 69 mm	approx. 128 mm
41313024	500 ml	approx. 85 mm	approx. 162 mm
41313030	1000 ml	approx. 106.5 mm	approx. 187 mm
41313036	2000 ml	approx. 132 mm	approx. 238 mm

Dropping bottles made of amber glass

with thread DIN 18, without cap

41314005	Capacity 5 ml
41314010	Capacity 10 ml
41314015	Capacity 15 ml
41314020	Capacity 20 ml
41314030	Capacity 30 ml
41314050	Capacity 50 ml
41314060	Capacity 100 ml

Pipette kit for no. 41314...

consisting of: screw cap, suction bulb (blue or red) and glass pipette suitable, DIN 18

41315005	for 5 ml blue - 41315006 red
41315010	for 10 ml blue - 41315011 red
41315020	for 20 ml blue - 41315021 red
41315030	for 30 ml blue - 41315031 red
41315050	for 10 ml blue - 41315051 red
41315060	for 100 ml blue - 41315061 red

Dropping screw caps for no. 41314...

413161..	UNI 1, fast dropping, 4 holes, white or red
413162..	UNI 2, slow dropping, 2 holes, white or red
413163..	Tamper-evident, white, red, yellow, black
413164..	with child safety lock, white

Last two positions of article number stand for colour: 01=red, 02=white, 03=yellow, 04=black
Please indicate in your order!

Dropping bottles TK, clear glass

with flat glass stopper

	Capacity	Ø	Height
41318006	50 ml	approx. 44 mm	approx. 92 mm
41318012	100 ml	approx. 55 mm	approx. 106 mm

Amber glass
with flat glass stopper

	Capacity	Ø	Height
41319006	50 ml	approx. 44 mm	approx. 92 mm
41319012	100 ml	approx. 55 mm	approx. 106 mm

Bottles made of polyethylene, with screw cap
Narrow neck
LDPE, flexible

	Capacity	Thread
49100006	30 ml	GL 14
49100012	50 ml	GL 18
49100018	100 ml	GL 18
49100024	250 ml	GL 25
49100030	500 ml	GL 25
49100036	1000 ml	GL 28
49100042	2000 ml	GL 28
49100048	5000 ml	GL 40

49100048 with handle

Wide neck
LDPE, flexible

	Capacity	Thread
49101012	50 ml	GL 32
49101018	100 ml	GL 32
49101024	250 ml	GL 40
49101030	500 ml	GL 50
49101036	1000 ml	GL 65
49101042	2000 ml	GL 65

Washing bottles made of polyethylene

LDPE, flexible, with spray tube

	Capacity	Thread
49102018	100 ml	GL 18
49102024	250 ml	GL 25
49102030	500 ml	GL 25
49102036	1000 ml	GL 28

Bottles made of polypropylene, with conical shoulder

Narrow neck

with interchangeable stopper made of polyethylene

	Capacity	Joint size
49108018	100 ml	14/23
49108024	250 ml	19/26
49108030	500 ml	24/29
49108036	1000 ml	29/32

Dropping bottles made of polyethylene, with dropping tip

LDPE, with attached cap

	Capacity	Thread
49103004	10 ml	GL 14
49103008	20 ml	GL 14
49103012	30 ml	GL 14
49103016	50 ml	GL 18
49103020	100 ml	GL 18
49103024	250 ml	GL 25
49103028	500 ml	GL 25

Bottles made of polyethylene, high shoulder

LDPE, narrow neck, with screw cap

	Capacity	Thread
49105012	50 ml	GL 18
49105018	100 ml	GL 18
49105024	250 ml	GL 25
49105030	500 ml	GL 25
49105036	1000 ml	GL 28

Square bottles made of polyethylene, with screw cap, narrow neck
HDPE

	Capacity	Thread
49116012	50 ml	GL 18
49116018	100 ml	GL 25
49116024	250 ml	GL 25
49116030	500 ml	GL 25
49116036	1000 ml	GL 25

Square bottles made of polyethylene, with screw cap, wide neck
HDPE

	Capacity	Thread
49116924	250 ml	GL 50
49116930	500 ml	GL 65
49116936	1000 ml	GL 65

Bottles made of LDPE, narrow neck, brown
with screw cap, contents protected against UV radiation,
for light-sensitive liquids

	Capacity	Thread
49112018	100 ml	GL 18
49112024	250 ml	GL 25
49112030	500 ml	GL 25
49112036	1000 ml	GL 28
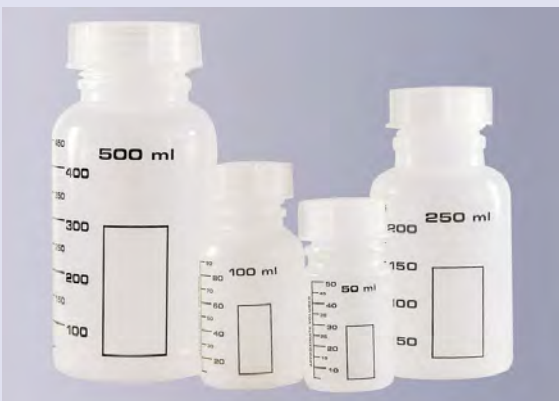
Bottles made of polypropylene, wide neck
with screw cap and scale, autoclavable up to max. +121 °C / +249.8 °F

	Capacity	Thread
49115012	50 ml	GL 32
49115018	100 ml	GL 32
49115024	250 ml	GL 40
49115030	500 ml	GL 50
49115036	1000 ml	GL 65

Spray bottles made of polyethylene
LDPE, with adjustable jet made of polypropylene
49119010   Capacity approx. 1000 ml

Bottles for analysis of drinking water according to DIN EN ISO 5667-3, with sodium thiosulphate
Sterile, disposable, made of polypropylene, wide neck,
quite transparent, square, with scale, individually labelled with lot number and note "sterile R" (=sterilised by irradiation)
According to the revision of the drinking water regulation effective since November 2011 (modified on 14.12.2012).
for sampling of possibly chlorinated water
(= pre-dispensed 20 mg/1 l)
Minimum order quantity 1 packing unit

	Capacity	Packing unit	Dimensions
49125020	125 ml	350 pieces	approx. 92 x 50 mm Ø
49125024	250 ml	216 pieces	approx. 115 x 50 mm Ø
49125030	500 ml	120 pieces	approx. 145 x 50 mm Ø
49125036	1000 ml	72 pieces	approx. 175 x 50 mm Ø

Bottles for analysis of drinking water according to DIN EN ISO 5667-3, without sodium thiosulphate
Sterile, disposable, made of polypropylene, wide neck,
quite transparent, square, with scale, individually labelled with lot number and note "sterile R" (=sterilised by irradiation)
According to the revision of the drinking water regulation effective since November 2011 (modified on 14.12.2012).
for sampling of open water, lakes, rivers etc.
Minimum order quantity 1 packing unit

	Capacity	Packing unit	Dimensions
49126020	125 ml	350 pieces	approx. 92 x 50 mm Ø
49126024	250 ml	216 pieces	approx. 115 x 50 mm Ø
49126030	500 ml	120 pieces	approx. 145 x 50 mm Ø
49126036	1000 ml	72 pieces	approx. 175 x 50 mm Ø

Square bottles and collecting containers

Urine collecting container, polypropylene
with handle, embossed scale, with white cover made of
polycarbonate, sterilisable

	Division	Capacity	Dimensions
44116010	20 ml	2000 ml	approx. 220 x 150 mm Ø

Urine collecting containers made of SAN, CE
Transparent, approximate scale on two sides, with cover

	Capacity	Temperature for use
49117020	2000 ml	max. +70 °C/+158 °F

Urine collecting bottles made of polyethylene
HDPE, with screw cap and approximate scale

	Scale up to	Capacity
49117010	2000 ml	2500 ml

Urine collecting containers, polyethylene, amber
Disposable, made of HDPE, with screw cap and embossed scale,
not autoclavable

	Capacity	Scale up to
49118010	2000 ml	2000 ml

Aspirator bottles

Aspirator bottles made of polyethylene, narrow neck

with stopcock, handle and screw cap

	Capacity	Ø	Height
49130005	5 litres	approx. 165 mm	approx. 335 mm
49130010	10 litres	approx. 210 mm	approx. 420 mm
49130025	25 litres	approx. 280 mm	approx. 525 mm
49130050	50 litres	approx. 365 mm	approx. 605 mm

49130025 and **49130050** with two handles

Spare stopcock

made of polypropylene

	Opening	Connection
49131010	10 mm	3/4"

Boiling flasks, beakers and accessories

Kjeldahl flasks, DURAN® borosilicate glass 3.3

DIN 12360, with rim, without standard ground

41870018   Capacity 250 ml
41870024   Capacity 500 ml

Beakers, tall form, DURAN® borosilicate glass 3.3
DIN 12331, with scale

	Capacity	Diameter	Height
41929024	50 ml	approx. 38 mm	approx. 70 mm
41929030	100 ml	approx. 48 mm	approx. 80 mm
41929036	150 ml	approx. 54 mm	approx. 95 mm
41929042	250 ml	approx. 60 mm	approx. 120 mm
41929048	400 ml	approx. 70 mm	approx. 130 mm
41929054	600 ml	approx. 80 mm	approx. 150 mm
41929060	800 ml	approx. 90 mm	approx. 175 mm
41929066	1000 ml	approx. 95 mm	approx. 180 mm
41929072	2000 ml	approx. 120 mm	approx. 240 mm

Beakers, borosilicate glass 3.3, tall form
DIN 12331, with scale

	Capacity	Diameter	Height
41929118	25 ml	approx. 28 mm	approx. 60 mm
41929124	50 ml	approx. 38 mm	approx. 70 mm
41929130	100 ml	approx. 48 mm	approx. 80 mm
41929136	150 ml	approx. 54 mm	approx. 95 mm
41929142	250 ml	approx. 60 mm	approx. 120 mm
41929148	400 ml	approx. 70 mm	approx. 130 mm
41929154	600 ml	approx. 80 mm	approx. 150 mm
41929160	800 ml	approx. 90 mm	approx. 175 mm
41929166	1000 ml	approx. 95 mm	approx. 180 mm
41929172	2000 ml	approx. 120 mm	approx. 240 mm

Beakers, DURAN® borosilicate glass 3.3, low form
DIN 12331, with scale

	Capacity	Diameter	Height
41930004	25 ml	approx. 34 mm	approx. 50 mm
41930008	50 ml	approx. 42 mm	approx. 60 mm
41930012	100 ml	approx. 50 mm	approx. 70 mm
41930016	150 ml	approx. 60 mm	approx. 80 mm
41930020	250 ml	approx. 70 mm	approx. 95 mm
41930024	400 ml	approx. 80 mm	approx. 110 mm
41930028	600 ml	approx. 90 mm	approx. 125 mm
41930032	800 ml	approx. 100 mm	approx. 135 mm
41930036	1000 ml	approx. 105 mm	approx. 145 mm
41930040	2000 ml	approx. 132 mm	approx. 185 mm
41930044	3000 ml	approx. 152 mm	approx. 210 mm
41930048	5000 ml	approx. 170 mm	approx. 270 mm

Beakers, borosilicate glass 3.3, low form
DIN 12331, with scale

	Capacity	Diameter	Height
41930104	25 ml	approx. 34 mm	approx. 50 mm
41930108	50 ml	approx. 42 mm	approx. 60 mm
41930112	100 ml	approx. 50 mm	approx. 70 mm
41930116	150 ml	approx. 60 mm	approx. 80 mm
41930120	250 ml	approx. 70 mm	approx. 95 mm
41930124	400 ml	approx. 80 mm	approx. 110 mm
41930128	600 ml	approx. 90 mm	approx. 125 mm
41930132	800 ml	approx. 100 mm	approx. 135 mm
41930136	1000 ml	approx. 105 mm	approx. 145 mm
41930140	2000 ml	approx. 132 mm	approx. 185 mm
41930144	3000 ml	approx. 152 mm	approx. 210 mm
41930148	5000 ml	approx. 170 mm	approx. 270 mm

Griffin beakers made of polymethylpentene (PMP)
Antistatic, transparent, with rim and spout, printed red scale
Autoclavable up to +121 °C/+249.8 °F (2 bar)
Max. temperature +150 °C/+302 °F

	Capacity	Division	Diameter	Height
41934006	10 ml	2 ml	approx. 25 mm	approx. 35 mm
41934012	25 ml	1 ml	approx. 31 mm	approx. 47 mm
41934018	50 ml	5 ml	approx. 40 mm	approx. 60 mm
41934024	100 ml	5 ml	approx. 49 mm	approx. 70 mm
41934030	150 ml	5 ml	approx. 56 mm	approx. 80 mm
41934036	250 ml	5 ml	approx. 68 mm	approx. 94 mm
41934042	400 ml	10 ml	approx. 77 mm	approx. 109 mm
41934048	600 ml	25 ml	approx. 91 mm	approx. 125 mm
41934060	1000 ml	50 ml	approx. 102 mm	approx. 149 mm
41934066	2000 ml	100 ml	approx. 133 mm	approx. 183 mm

Griffin beakers made of polypropylene
Low form, transparent, ISO 7056 and DIN 12331 (glass), antistatic,
with rim and spout, printed blue scale
Max. temperature +135 °C/+275 °F
Suitable for steam sterilisation at +121 °C/+249.8 °F

	Capacity	Division	Diameter	Height
41935006	10 ml	2 ml	approx. 25 mm	approx. 35 mm
41935012	25 ml	1 ml	approx. 31 mm	approx. 47 mm
41935018	50 ml	5 ml	approx. 40 mm	approx. 60 mm
41935024	100 ml	5 ml	approx. 49 mm	approx. 70 mm
41935030	150 ml	5 ml	approx. 56 mm	approx. 80 mm
41935036	250 ml	5 ml	approx. 68 mm	approx. 94 mm
41935042	400 ml	10 ml	approx. 77 mm	approx. 109 mm
41935048	600 ml	25 ml	approx. 91 mm	approx. 125 mm
41935060	1000 ml	50 ml	approx. 102 mm	approx. 149 mm
41935066	2000 ml	100 ml	approx. 133 mm	approx. 183 mm
41935072	3000 ml	200 ml	approx. 174 mm	approx. 217 mm
41935078	5000 ml	500 ml	approx. 185 mm	approx. 248 mm

Brushes with wooden handle

for beakers made of glass or plastic, measuring jugs etc.

	Brush length	Total length	Brush Ø
41936010	approx. 140 mm	approx. 430 mm	approx. 85/60 mm

Erlenmeyer flasks, DURAN® borosilicate glass 3.3, narrow neck

DIN ISO 1773, with scale

	Capacity	Neck diameter	Diameter	Height
41940012	25 ml	approx. 22 mm	approx. 42 mm	approx. 75 mm
41940018	50 ml	approx. 22 mm	approx. 51 mm	approx. 90 mm
41940024	100 ml	approx. 22 mm	approx. 64 mm	approx. 105 mm
41940030	200 ml	approx. 34 mm	approx. 79 mm	approx. 131 mm
41940036	250 ml	approx. 34 mm	approx. 85 mm	approx. 145 mm
41940042	300 ml	approx. 34 mm	approx. 87 mm	approx. 156 mm
41940048	500 ml	approx. 34 mm	approx. 105 mm	approx. 180 mm
41940054	1000 ml	approx. 42 mm	approx. 131 mm	approx. 220 mm
41940060	2000 ml	approx. 50 mm	approx. 166 mm	approx. 280 mm
41940066	3000 ml	approx. 51 mm	approx. 187 mm	approx. 310 mm
41940072	5000 ml	approx. 51 mm	approx. 220 mm	approx. 365 mm

Erlenmeyer flasks, borosilicate glass 3.3, narrow neck

DIN ISO 1773, with scale

	Capacity	Neck diameter	Diameter	Height
41940112	25 ml	approx. 22 mm	approx. 42 mm	approx. 75 mm
41940118	50 ml	approx. 22 mm	approx. 51 mm	approx. 90 mm
41940124	100 ml	approx. 22 mm	approx. 64 mm	approx. 105 mm
41940130	200 ml	approx. 34 mm	approx. 79 mm	approx. 131 mm
41940136	250 ml	approx. 34 mm	approx. 85 mm	approx. 145 mm
41940142	300 ml	approx. 34 mm	approx. 87 mm	approx. 156 mm
41940148	500 ml	approx. 34 mm	approx. 105 mm	approx. 180 mm
41940154	1000 ml	approx. 42 mm	approx. 131 mm	approx. 220 mm
41940166	3000 ml	approx. 51 mm	approx. 187 mm	approx. 310 mm
41940172	5000 ml	approx. 51 mm	approx. 220 mm	approx. 365 mm

Erlenmeyer flasks, DURAN® borosilicate glass 3.3, wide neck
DIN 12385, with scale

	Capacity	Neck diameter	Diameter	Height
41941012	25 ml	approx. 31 mm	approx. 43 mm	approx. 70 mm
41941018	50 ml	approx. 34 mm	approx. 51 mm	approx. 85 mm
41941024	100 ml	approx. 34 mm	approx. 64 mm	approx. 105 mm
41941030	200 ml	approx. 50 mm	approx. 79 mm	approx. 131 mm
41941036	250 ml	approx. 50 mm	approx. 85 mm	approx. 140 mm
41941042	300 ml	approx. 50 mm	approx. 87 mm	approx. 156 mm
41941048	500 ml	approx. 50 mm	approx. 105 mm	approx. 175 mm
41941054	1000 ml	approx. 50 mm	approx. 131 mm	approx. 220 mm
41941060	2000 ml	approx. 72 mm	approx. 153 mm	approx. 276 mm

Erlenmeyer flasks, borosilicate glass 3.3, wide neck
DIN 12385, with scale

	Capacity	Neck diameter	Diameter	Height
41941112	25 ml	approx. 31 mm	approx. 43 mm	approx. 70 mm
41941118	50 ml	approx. 34 mm	approx. 51 mm	approx. 85 mm
41941124	100 ml	approx. 34 mm	approx. 64 mm	approx. 105 mm
41941130	200 ml	approx. 50 mm	approx. 79 mm	approx. 131 mm
41941136	250 ml	approx. 50 mm	approx. 85 mm	approx. 140 mm
41941142	300 ml	approx. 50 mm	approx. 87 mm	approx. 156 mm
41941148	500 ml	approx. 50 mm	approx. 105 mm	approx. 175 mm
41941154	1000 ml	approx. 50 mm	approx. 131 mm	approx. 220 mm
41941160	2000 ml	approx. 72 mm	approx. 153 mm	approx. 276 mm
41941166	3000 ml	approx. 78 mm	approx. 190 mm	approx. 320 mm
41941172	5000 ml	approx. 78 mm	approx. 220 mm	approx. 373 mm
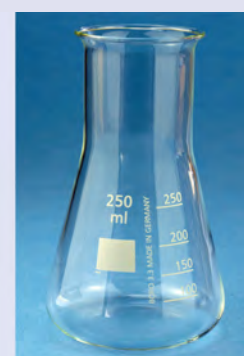
Erlenmeyer flasks, borosilicate glass 3.3, narrow neck, with blue screw cap
with scale, resistant up to max. +140 °C/+284 °F

	Capacity	Height	Diameter	Thread
41943124	100 ml	approx. 100 mm	approx. 64 mm	GL 25
41943136	250 ml	approx. 140 mm	approx. 85 mm	GL 32
41943148	500 ml	approx. 175 mm	approx. 105 mm	GL 32
41943154	1000 ml	approx. 215 mm	approx. 131 mm	GL 32

Erlenmeyer flasks, baffled bottom, DURAN® borosilicate glass 3.3, for suspension cultures, with thread

When cultivating microorganisms in Erlenmeyer flasks on an orbital shaker, the oxygen intake is frequently the limiting factor for cell growth. The Erlenmeyer flask with four bottom baffles disrupts the laminar flow to create a turbulent flow. The gas exchange surface of the liquid is increased, thereby increasing the oxygen intake.

The thread GL 45 allows the use of the following closures:
- screw caps with membrane GL 45 for autoclaving
- plugs of 30 mm, e.g. made of cotton, silicone foam or pulp for cultivation
- screw caps GL 45 for storage of media and reagents

41945036	Capacity 250 ml
41945048	Capacity 500 ml
41945054	Capacity 1000 ml

Erlenmeyer flasks, baffled bottom, DURAN® borosilicate glass 3.3, for suspension cultures, with membrane screw cap and pouring ring

Thread GL 45

41946036	Capacity 250 ml
41946048	Capacity 500 ml
41946054	Capacity 1000 ml

Screw caps with membrane, made of polypropylene, for baffled Erlenmeyer flasks

Blue, with welded-in PTFE membrane for pressure equalisation, suitable for flasks 250, 500 and 1000 ml

41947010	Thread GL 45

Lead rings

Closed (O-shape), vinyl-coated, lead core

42111001   for flasks 125-500 ml
42111002   for flasks 250-1000 ml
42111003   for flasks 500-2000 ml
42111004   for flasks 1000-4000 ml

Test tubes, centrifuge tubes and accessories

Test tubes with side tube

AR-Glas® (soda glass), with moulded socket, without ground,
wall thickness approx. 1.2 mm

42763010   Dimensions approx. 180 x 20 mm Ø

Test tubes, graduated

Standard type, AR-Glas® (soda glass), round bottom, with spout,
fused white graduation "ASSISTENT-PERMANENT", short line
graduation, precisely calibrated
Packing: 10 pieces in a plastic bag

	Graduation	Dimensions
42765005	5 ml : 0.1 ml	approx. 110 x 12 mm Ø
42765010	10 ml : 0.1 ml	approx. 160 x 13 mm Ø
42765020	20 ml : 0.1 ml	approx. 200 x 15 mm Ø
42765025	25 ml : 0.5 ml	approx. 180 x 18 mm Ø

Test tubes, graduated, with stopper

AR-Glas® (soda glass), with standard ground 12/21 and stopper made of polyethylene (HDPE),
packing: 5 pieces in a plastic bag

	Capacity	Wall thickness	Dimensions
42766010	10 ml : 0.1 ml	approx. 1.0 mm	approx. 180 x 13 mm Ø
42766020	20 ml : 0.1 ml	approx. 0.9 mm	approx. 220 x 15 mm Ø

Test tubes with stopper

Round bottom, with standard ground 12/21 and stopper made of polyethylene (HDPE), dimensions approx. 160 x 16 mm Ø, wall thickness approx. 1.2 mm

42767010   AR-Glas® (soda glass)
42767030   DURAN® borosilicate glass 3.3

Test tubes with stopper and ring marks

AR-Glas® (soda glass), with standard ground 12/21 and stopper made of polyethylene (HDPE)

	Ring marks	Wall thickness	Dimensions
42768002	at 5 and 10 ml	approx. 1.2 mm	approx. 160 x 16 mm Ø

Test tubes / Centrifuge tubes, disposable

AR-Glas® (soda glass), round bottom, rimless, wall thickness approx. 0.5 mm
Tests (with water) have proven the usability in centrifuges at 4000 rpm

	Packing/box	Dimensions
42769045	200 pieces	approx. 100 x 16 mm Ø
42769051	100 pieces	approx. 160 x 16 mm Ø

Test tubes "ELKA"
AR-Glas® (soda glass), round bottom, with rim

	Packing/box	Wall thickness	Outside Ø	Length
42770021	100 pieces	approx. 0.5 mm	approx. 10 mm	approx. 100 mm
42770027	100 pieces	approx. 0.5 mm	approx. 12 mm	approx. 100 mm
42770033	100 pieces	approx. 0.6 mm	approx. 14 mm	approx. 130 mm
42770045	100 pieces	approx. 0.5 mm	approx. 16 mm	approx. 100 mm
42770048	100 pieces	approx. 0.5 mm	approx. 16 mm	approx. 120 mm
42770051	100 pieces	approx. 0.5 mm	approx. 16 mm	approx. 160 mm
42770057	100 pieces	approx. 0.5 mm	approx. 18 mm	approx. 160 mm
42770060	100 pieces	approx. 0.5 mm	approx. 18 mm	approx. 180 mm
42770063	100 pieces	approx. 0.5 mm	approx. 20 mm	approx. 180 mm
42770069	50 pieces	approx. 0.8 mm	approx. 24 mm	approx. 160 mm
42770072	50 pieces	approx. 0.8 mm	approx. 24 mm	approx. 200 mm
42770078	50 pieces	approx. 0.8 mm	approx. 30 mm	approx. 200 mm
42770251	200 pieces	approx. 0.5 mm	approx. 16 mm	approx. 160 mm

Test tubes, FIOLAX® (borosilicate glass)
Round bottom, with rim

	Packing/box	Wall thickness	Length	Outside Ø
42771015	100 pieces	approx. 0.45 mm	approx. 70 mm	approx. 8 mm
42771021	100 pieces	approx. 0.45 mm	approx. 100 mm	approx. 10 mm
42771027	100 pieces	approx. 0.45 mm	approx. 100 mm	approx. 12 mm
42771033	100 pieces	approx. 0.45 mm	approx. 130 mm	approx. 14 mm
42771045	100 pieces	approx. 0.6 mm	approx. 100 mm	approx. 16 mm
42771051	100 pieces	approx. 0.6 mm	approx. 160 mm	approx. 16 mm
42771060	100 pieces	approx. 0.55 mm	approx. 180 mm	approx. 18 mm
42771063	100 pieces	approx. 0.55 mm	approx. 180 mm	approx. 20 mm
42771075	100 pieces	approx. 0.55 mm	approx. 120 mm	approx. 20 mm
42771251	200 pieces	approx. 0.6 mm	approx. 160 mm	approx. 16 mm

Test tubes, heavy wall

AR-Glas® (soda glass), round bottom, rimless

	Packing/box	Wall thickness	Length	Outside Ø
42775003	500 pieces	approx. 0.65 mm	approx. 50 mm	approx. 6-6.5 mm
42775006	2000 pieces	approx. 0.7 mm	approx. 27 mm	approx. 7 mm
42775009	100 pieces	approx. 0.65 mm	approx. 35 mm	approx. 6 mm
42775012	100 pieces	approx. 0.7 mm	approx. 40 mm	approx. 8 mm
42775015	200 pieces	approx. 0.9 mm	approx. 80 mm	approx. 10-11 mm
42775018	100 pieces	approx. 0.9 mm	approx. 70 mm	approx. 10-11 mm
42775021	100 pieces	approx. 0.9 mm	approx. 100 mm	approx. 10 mm
42775024	200 pieces	approx. 0.7 mm	approx. 75 mm	approx. 12 mm
42775027	100 pieces	approx. 0.7 mm	approx. 100 mm	approx. 12 mm
42775030	100 pieces	approx. 0.9 mm	approx. 100 mm	approx. 14 mm
42775033	100 pieces	approx. 0.9 mm	approx. 130 mm	approx. 14 mm
42775036	100 pieces	approx. 0.9 mm	approx. 75 mm	approx. 15 mm
42775039	100 pieces	approx. 0.9 mm	approx. 85 mm	approx. 15 mm
42775042	100 pieces	approx. 0.9 mm	approx. 135 mm	approx. 15 mm
42775045	100 pieces	approx. 0.8 mm	approx. 100 mm	approx. 16 mm
42775051	100 pieces	approx. 0.8 mm	approx. 160 mm	approx. 16 mm
42775054	100 pieces	approx. 1 mm	approx. 100 mm	approx. 18 mm
42775060	100 pieces	approx. 1 mm	approx. 180 mm	approx. 18 mm
42775251	200 pieces	approx. 0.8 mm	approx. 160 mm	approx. 16 mm

42775009 Durham tubes
42775024 Kahn tubes, Urastrat tubes, tubes for Combs test
42775027 Centrifuge tubes for examination of mastic and blood
typing

Kapsenberg caps

Test tube caps with handle, anodised aluminium, silver-coloured
42776051   for tubes of 16 mm Ø
42776057   for tubes of 18 mm Ø

Labocap caps

with handle, anodised aluminium, heat-resistant (max. +140 °C/
+284 °F), stainless
427771..   for tubes of 15-16 mm Ø
427772..   for tubes of 17-18 mm Ø

Last two positions of article number stand for colour: 04=blue,
08=yellow, 12=green, 16=red, 20=silver
Please indicate in your order!

Flat bottom tubes
Soda glass, rimless, heavy wall, wall thickness approx. 1 mm,
packing: 100 pieces/box

42779065   Dimensions approx. 65 x 15 mm Ø
42779070   Dimensions approx. 70 x 22 mm Ø

Test tubes, heavy wall, with rim
AR-Glas® (soda glass), round bottom, wall thickness approx. 1 mm,
packing: 100 pieces/box

42780010   Dimensions approx. 160 x 16 mm Ø

Test tubes with screw cap
Soda glass, round bottom, heavy wall, with thread GL 18,
sterilisable up to +121 °C/+249.8 °F, wall approx. 1 mm
packing: 100 pieces/box

42782045   Dimensions approx. 100 x 16 mm Ø
42782051   Dimensions approx. 160 x 16 mm Ø

Test tubes, DURAN® borosilicate glass 3.3, rimless
Round bottom, heavy wall

	Wall thickness	Dimensions
42787021	approx. 1.0 mm	approx. 100 x 10 mm Ø
42787024	approx. 1.0 mm	approx. 75 x 12 mm Ø
42787027	approx. 1.0 mm	approx. 100 x 12 mm Ø
42787033	approx. 1.0 mm	approx. 130 x 14 mm Ø
42787048	approx. 1.2 mm	approx. 150 x 16 mm Ø
42787051	approx. 1.2 mm	approx. 160 x 16 mm Ø
42787054	approx. 1.2 mm	approx. 150 x 19 mm Ø
42787060	approx. 1.2 mm	approx. 180 x 18 mm Ø
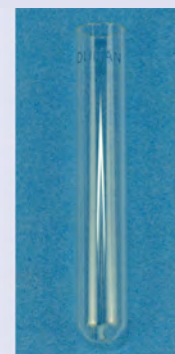
Test tubes, DURAN® borosilicate glass 3.3, with rim

Round bottom, heavy wall

	Wall thickness	Dimensions
42788021	approx. 1.0 mm	approx. 100 x 10 mm Ø
42788024	approx. 1.0 mm	approx. 75 x 12 mm Ø
42788027	approx. 1.0 mm	approx. 100 x 12 mm Ø
42788033	approx. 1.2 mm	approx. 130 x 14 mm Ø
42788048	approx. 1.2 mm	approx. 150 x 16 mm Ø
42788051	approx. 1.2 mm	approx. 160 x 16 mm Ø
42788054	approx. 1.2 mm	approx. 150 x 19 mm Ø
42788060	approx. 1.2 mm	approx. 180 x 18 mm Ø
42788063	approx. 1.2 mm	approx. 180 x 20 mm Ø
42788066	approx. 1.2 mm	approx. 200 x 24 mm Ø
42788078	approx. 1.4 mm	approx. 200 x 30 mm Ø
42788081	approx. 1.4 mm	approx. 200 x 38 mm Ø
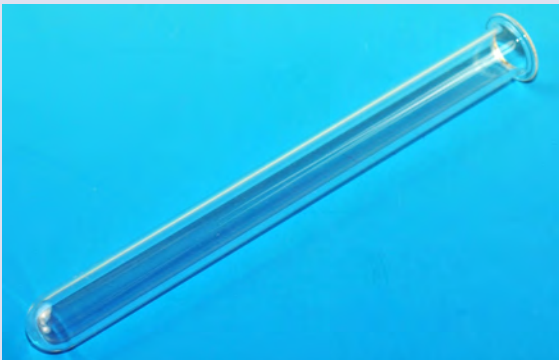
Test tubes according to Uhlenhut

AR-Glas ® (soda glass), round bottom, with broad rim,
for bacteriological and serological purposes,
wall thickness approx. 1 mm, packing: 100 pieces/box

42793050   Dimensions approx. 100 x 10 mm Ø

Test tube brushes with cotton end

	Galvanised wire	for tubes	Total length	Bristle with cotton
42760010	1.6 mm	16-20 mm Ø	approx. 300 mm	approx. 80 x 20 mm Ø
42760020	1.0 mm	10-12 mm Ø	approx. 160 mm	approx. 50 x 10 mm Ø
42760030	1.6 mm	approx. 25 mm Ø	approx. 330 mm	approx. 110 x 26 mm Ø

Glass vials, rolled rim, with plastic snap-cap

	Packing/box	Capacity	Dimensions
42783004	690 pieces	approx. 2 ml	approx. 36 x 11.5 mm Ø
42783008	154 pieces	approx. 5 ml	approx. 24 x 24 mm Ø
42783012	154 pieces	approx. 8 ml	approx. 34 x 24 mm Ø
42783016	154 pieces	approx. 10 ml	approx. 41 x 24 mm Ø
42783020	130 pieces	approx. 15 ml	approx. 48 x 26 mm Ø
42783024	130 pieces	approx. 20 ml	approx. 60 x 26 mm Ø
42783028	108 pieces	approx. 30 ml	approx. 72 x 28 mm Ø
42783032	84 pieces	approx. 60 ml	approx. 106 x 32 mm Ø

Minimum order quantity: 1 box

Test tubes, flat bottom, for globules
Clear glass, rimless, with transparent lamellar plug,
packing: 300 pieces/box
42784010 Dimensions approx. 52.5 x 8 mm Ø

Minimum order quantity: 1 box

Glass vials, rolled rim, with plastic snap-cap

	Packing/box	Capacity	Dimensions
42785004	200 pieces	approx. 3 ml	approx. 30 x 19 mm Ø
42785008	200 pieces	approx. 5 ml	approx. 40 x 19 mm Ø
42785012	200 pieces	approx. 10 ml	approx. 45 x 22 mm Ø
42785016	200 pieces	approx. 25 ml	approx. 50 x 30 mm Ø
42785020	200 pieces	approx. 30 ml	approx. 75 x 28 mm Ø
42785024	200 pieces	approx. 40 ml	approx. 80 x 30 mm Ø
42785028	200 pieces	approx. 50 ml	approx. 100 x 30 mm Ø
42785032	100 pieces	approx. 100 ml	approx. 145 x 34 mm Ø

Minimum order quantity: 1 box

Wooden test tube holders
Packing: 10 pieces
with spring
42810010 for tubes up to approx. 20 mm Ø

Packing: 10 pieces
with spring
42811010 for tubes up to approx. 30 mm Ø

Brushes for conical centrifuge tubes

	Brush Ø	Total length	Brush
40937010	14 mm top - 30 mm below	approx. 270 mm	approx. 80 mm long

Centrifuge tubes, conical, rimless, ungraduated
Packing: 100 pieces/box

	Capacity	Dimensions	Material
40938007	15 ml	approx. 112 x 17 mm	DURAN® borosilicate glass 3.3
40938010	15 ml	approx. 112 x 17 mm	AR-Glas® (soda glass)
40938014	14.5 ml	approx. 100 x 17 mm	AR-Glas® (soda glass)
40938021	15.5 ml	approx. 105 x 17 mm	AR-Glas® (soda glass)
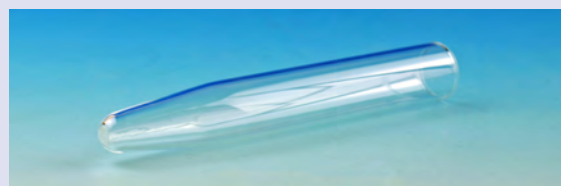
Centrifuge tubes, conical, rimless, graduated

Fused white graduation "ASSISTENT-PERMANENT", with mark at 15 ml.
Capacity 10-15 ml, dimensions approx. 112 x 17 mm
Available with blue or amber graduation on request.
Packing unit 10 pieces, 100 pieces/box.

	Graduation	Material
40939001	10 ml: 0.1	AR-Glas® (soda glass)
40939002	15 ml: 0.1	AR-Glas® (soda glass)
40939301	10 ml: 0.1	DURAN® borosilicate glass 3.3
40939302	15 ml: 0.1	DURAN® borosilicate glass 3.3

Centrifuge tubes, conical, with rim, ungraduated

Packing: 100 pieces/box

	Capacity	Material	Dimensions
40940010	15 ml	AR-Glas® (soda glass)	approx. 112 x 17 mm
40940014	14.5 ml	AR-Glas® (soda glass)	approx. 100 x 17 mm
40940310	15 ml	DURAN® borosilicate glass 3.3	approx. 112 x 17 mm

Centrifuge tubes, conical, with rim, graduated

Fused white graduation "ASSISTENT-PERMANENT",
with mark at 15 ml.
Available with blue or amber graduation on request.
Dimensions approx. 112 x 17 mm
Packing unit 10 pieces, 100 pieces/box

	Graduation	Material
40942001	10 ml : 0.1	AR-Glas® (soda glass)
40942002	15 ml : 0.1	AR-Glas® (soda glass)
40942301	10 ml : 0.1	DURAN® borosilicate glass 3.3
40942302	15 ml : 0.1	DURAN® borosilicate glass 3.3

Centrifuge tubes, conical, with stopper of polyethylene, ungraduated

with interchangeable standard ground
Capacity 10-15 ml, joint size 12/21
Dimensions approx. 115 x 17 mm
Packing: 5 pieces

40943010   AR-Glas® (soda glass)
40943310   DURAN® borosilicate glass 3.3

Centrifuge tubes, conical, with stopper of polyethylene, graduated

with interchangeable standard ground
AR-Glas® (soda glass), fused white graduation "ASSISTENT-PERMANENT"

	Graduation	Joint size	Packing/box	Dimensions
40944010	10 ml : 0.1	12/21	5 pieces	approx. 115 x 17 mm

Centrifuge tubes, short conical bottom, ungraduated, AR-Glas® (soda glass)

Cylindrical, rimless, packing: 100 pieces/box

	Capacity	Dimensions
40946001	10-15 ml	approx. 98 x 17 mm
40946002	10-15 ml	approx. 107 x 17 mm
40946003	25-30 ml	approx. 100 x 24/25 mm

Centrifuge tubes, short conical bottom, graduated, AR-Glas® (soda glass)

Rimless, fused white graduation "ASSISTENT-PERMANENT"

	Packing/box	Graduation	Dimensions
40947001	10 pieces	10-15 ml : 0.2	approx. 98 x 17 mm

Centrifuge tubes, short conical bottom, ungraduated, DURAN® borosilicate glass 3.3

Cylindrical, rimless, capacity 10-15 ml, packing: 100 pieces/box

40948001   Dimensions approx. 98 x 17 mm
40948002   Dimensions approx. 107 x 17 mm

Centrifuge tubes, short conical bottom, graduated, DURAN® borosilicate glass 3.3

Cylindrical, rimless, fused white graduation "ASSISTENT-PERMANENT"
Packing: 10 pieces

	Graduation	Dimensions
40949001	10-15 ml : 0.2	approx. 98 x 17 mm
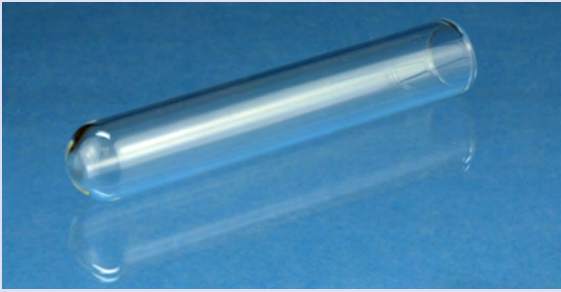
Centrifuge tubes, round bottom, ungraduated, AR-Glas® (soda glass)

Cylindrical, rimless, thick wall

	Capacity	Packing/box	Dimensions
40950001	10-15 ml	100 pieces	approx. 98 x 17 mm
40950002	10-15 ml	100 pieces	approx. 107 x 17 mm
40950003	25-30 ml	100 pieces	approx. 100 x 24-25 mm
40950004	50-55 ml	50 pieces	approx. 98 x 33-35 mm
40950005	70-100 ml	40 pieces	approx. 115 x 40 mm
40950016	10-12 ml	100 pieces	approx. 100 x 16 mm

Centrifuge tubes, round bottom, graduated, AR-Glas® (soda glass)

Rimless, fused white graduation "ASSISTENT-PERMANENT"

	Division	Packing/box	Capacity	Dimensions
40951001	-	10 pieces	10-15 ml	approx. 98 x 17 mm
40951002	-	10 pieces	10-15 ml	approx. 107 x 17 mm
40951003	-	10 pieces	25 ml	approx. 100 x 24/25 mm
40951004	-	5 pieces	50 ml	approx. 98 x 33-35 mm

Rubber stoppers for centrifuge tubes

40955010 suitable for 17 mm Ø (10-15 ml)

Cellulose stoppers for centrifuge tubes and test tubes

40956010 suitable for 16/17 mm Ø

**Centrifuge tubes, round bottom, ungraduated,
DURAN® borosilicate glass 3.3**

Cylindrical, rimless, thick wall

	Capacity	Packing/box	Dimensions
40958001	10-15 ml	100 pieces	approx. 98 x 17 mm
40958002	10-15 ml	100 pieces	approx. 107 x 17 mm
40958003	25-30 ml	100 pieces	approx. 100 x 24/25 mm
40958004	50-55 ml	50 pieces	approx. 98 x 33-35 mm
40958016	10-12 ml	100 pieces	approx. 100 x 16 mm
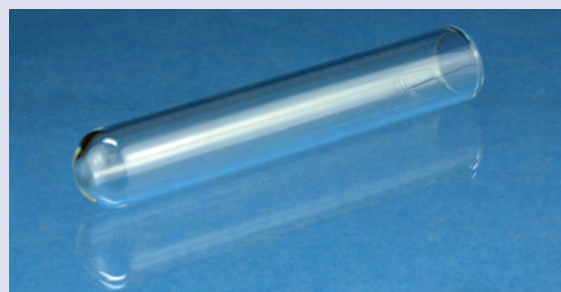
**Centrifuge tubes, round bottom, graduated,
DURAN ® borosilicate glass 3.3**

Cylindrical, rimless, fused white graduation "ASSISTENT-
PERMANENT"

	Division	Packing/box	Capacity	Dimensions
40959001	0.2 ml	10 pieces	10-15 ml	approx. 98 x 17 mm
40959002	0.2 ml	10 pieces	10-15 ml	approx. 107 x 17 mm
40959003	0.5 ml	10 pieces	25 ml	approx. 100 x 24/25 mm
40959004	2 ml	5 pieces	50 ml	approx. 98 x 33-35 mm

Centrifuge tubes with screw cap, conical, AR-Glas® (soda glass)

Ungraduated, with thread GL 14

The screw caps are gas-sterilisable up to +121 °C/+249.8 °F
using ethylene oxide.

	Capacity	Packing/box	Dimensions
40970010	10-15 ml	100 pieces	approx. 112 x 17 mm

**Centrifuge tubes with screw cap, round bottom, AR-Glas® (soda
glass)**

Cylindrical, ungraduated, with thread GL 14

The screw caps are gas-sterilisable up to +121 °C/+249.8 °F
using ethylene oxide.

	Capacity	Packing/box	Dimensions
40976010	10-15 ml	100 pieces	approx. 98 x 17 mm
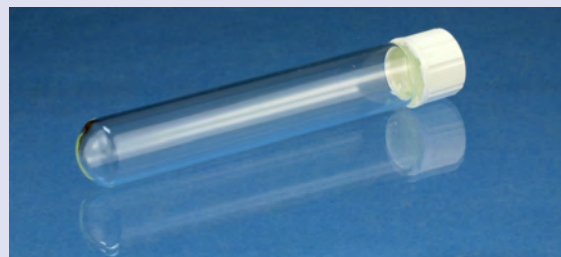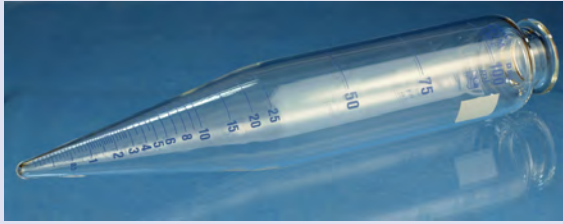
Centrifuge tubes ASTM, DURAN® borosilicate glass 3.3

Cylindrical

DIN 51793, fused blue graduation "ASSISTENT-PERMANENT",
ASTM D 96, with conical bottom

	40930010
Graduation 0 - 0.5 ml	0.05 ml
Graduation 0.5 - 2 ml	0.1 ml
Graduation 2 - 3 ml	0.2 ml
Graduation 3 - 5 ml	0.5 ml
Graduation 5 - 10 ml	1 ml
Graduation 25 - 100 ml	25 ml
Graduation 10 - 25 ml	5 ml

Pear shape

DIN 51793, fused blue graduation "ASSISTENT-PERMANENT",
ASTM D 96, with cylindrical bottom

	40931010
Graduation 0 - 1.5 ml	0.1 ml
Graduation 3 - 5 ml	0.5 ml
Graduation 1.5 - 3 ml	0.5 ml
Graduation 5 - 10 ml	1 ml
Graduation 25 - 100 ml	25 ml
Graduation 10 - 25 ml	5 ml

Calcium chloride tubes

U-shape

Clear glass, with two side arms

	Length	Outside Ø
40895010	approx. 100 mm	approx. 16 mm
40895012	approx. 125 mm	approx. 15 mm
40895015	approx. 150 mm	approx. 20 mm

with 2 stopcock stoppers

Clear glass, with two side arms

	Joint size	Length	Outside Ø
40896010	12/21	approx. 100 mm	approx. 16 mm
40896012	12/21	approx. 125 mm	approx. 16 mm
40896015	14/23	approx. 150 mm	approx. 20 mm

Extraction apparatus according to Soxhlet, DURAN® borosilicate glass 3.3

with Allihn condenser

with standard grounds, flask joint size 29/32
Joint sizes and capacity of extractors are durably marked.

consisting of:
Extractor no. 41155...
Allihn condenser no. 41153...
Round bottom flask no. 41913...

	Capacity of flask	Extraction capacity	Condenser
41150006	100 ml	30 ml	Joint size 29/32
41150012	100 ml	70 ml	Joint size 34/35
41150018	250 ml	100 ml	Joint size 45/40
41150024	500 ml	150 ml	Joint size 45/40
41150030	500 ml	200 ml	Joint size 45/40
41150036	500 ml	250 ml	Joint size 45/40

with Dimroth condenser

with standard grounds, flask joint size 29/32
Joint sizes and capacity of extractors are durably marked.

consisting of:
Extractor no. 41155...
Dimroth condenser no. 41154...
Round bottom flask no. 41913...

	Capacity of flask	Extraction capacity	Condenser
41151006	100 ml	30 ml	Joint size 29/32
41151012	100 ml	70 ml	Joint size 34/35
41151018	250 ml	100 ml	Joint size 45/40
41151024	500 ml	150 ml	Joint size 45/40
41151030	500 ml	200 ml	Joint size 45/40
41151036	500 ml	250 ml	Joint size 45/40
41151042	500 ml	300 ml	Joint size 60/46
41151048	1000 ml	500 ml	Joint size 60/46
41151054	2000 ml	1000 ml	Joint size 71/51
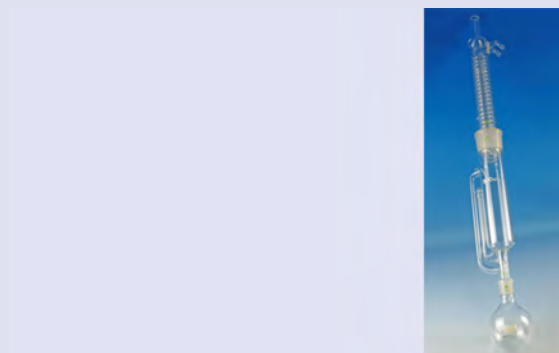
Spare parts for extraction apparatus

Allihn condensers

DURAN® borosilicate glass 3.3

	suitable for	Condenser
41153029	capacity 30 ml	Joint size 29/32
41153034	capacity 70 ml	Joint size 34/35
41153045	capacity 100 ml	Joint size 45/40
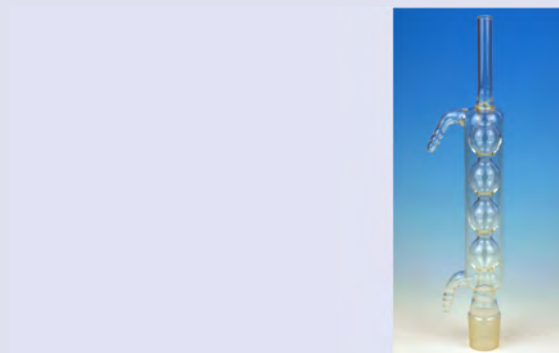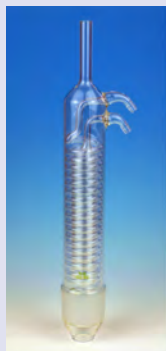
Dimroth condensers
DURAN® borosilicate glass 3.3

	suitable for	Condenser
41154029	capacity 30 ml	Joint size 29/32
41154034	capacity 70 ml	Joint size 34/35
41154045	capacity 100 ml	Joint size 45/40
41154060	capacity 500 ml	Joint size 60/46
41154071	capacity 1000 ml	Joint size 71/51
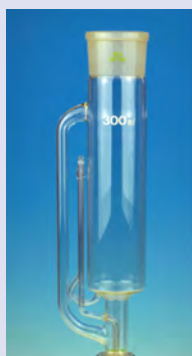
Extractors
DURAN® borosilicate glass 3.3, with cone joint size 29/32

	Extraction capacity	Socket
41155006	30 ml	Joint size 29/32
41155012	70 ml	Joint size 34/35
41155018	100 ml	Joint size 45/40
41155024	150 ml	Joint size 45/40
41155030	200 ml	Joint size 45/40
41155036	250 ml	Joint size 45/40
41155042	300 ml	Joint size 60/46
41155048	500 ml	Joint size 60/46
41155054	1000 ml	Joint size 71/51

Round bottom flasks
DURAN® borosilicate glass 3.3, with standard ground, reinforced neck with joint size durably marked
without stopper

	Joint size	Capacity
41913006	29/32	50 ml
41913008	14/23	50 ml
41913010	19/26	50 ml
41913012	29/32	100 ml
41913014	14/23	100 ml
41913015	19/26	100 ml
41913018	29/32	250 ml
41913024	29/32	500 ml
41913030	29/32	1000 ml
41913036	29/32	2000 ml

Condensers

Liebig condensers, DURAN® borosilicate glass 3.3, without ground

with tube fused-in

41981020   Length of jacket approx. 20 cm
41981030   Length of jacket approx. 30 cm
41981040   Length of jacket approx. 40 cm

Liebig condensers, DURAN® borosilicate glass 3.3, with 2 standard grounds

DIN 12576

	Length	Cone and socket
41982008	approx. 16 cm	Joint size 14/23
41982016	approx. 16 cm	Joint size 19/26
41982024	approx. 25 cm	Joint size 19/26
41982032	approx. 25 cm	Joint size 24/29
41982040	approx. 25 cm	Joint size 29/32
41982048	approx. 40 cm	Joint size 24/29
41982056	approx. 40 cm	Joint size 29/32

Allihn bulb condensers, DURAN® borosilicate glass 3.3, with 2 standard grounds

DIN 12581

	Length	Cone and socket
41987008	approx. 16 cm	Joint size 14/23
41987016	approx. 16 cm	Joint size 19/26
41987024	approx. 25 cm	Joint size 19/26
41987032	approx. 25 cm	Joint size 24/29
41987040	approx. 25 cm	Joint size 29/32
41987048	approx. 40 cm	Joint size 24/29
41987056	approx. 40 cm	Joint size 29/32

Coil condensers, DURAN® borosilicate glass 3.3, without standard ground

with tubing connection at top and at bottom

41990064   Length of jacket approx. 20 cm
41990072   Length of jacket approx. 30 cm
41990080   Length of jacket approx. 40 cm

Coil condensers, DURAN® borosilicate glass 3.3, with 2 standard grounds

with tubing connection at top and at bottom

	Length	Cone and socket
41990008	approx. 16 cm	Joint size 14/23
41990016	approx. 16 cm	Joint size 19/26
41990024	approx. 25 cm	Joint size 19/26
41990032	approx. 25 cm	Joint size 24/29
41990040	approx. 25 cm	Joint size 29/32
41990048	approx. 40 cm	Joint size 24/29
41990056	approx. 40 cm	Joint size 29/32

Coil condensers according to Dimroth, DURAN® borosilicate glass 3.3, with 2 standard grounds

DIN 12591
with tubing connection at top

	Length	Cone and socket
41996008	approx. 16 cm	Joint size 14/23
41996016	approx. 16 cm	Joint size 19/26
41996024	approx. 25 cm	Joint size 19/26
41996032	approx. 25 cm	Joint size 24/29
41996040	approx. 25 cm	Joint size 29/32
41996048	approx. 40 cm	Joint size 24/29
41996056	approx. 40 cm	Joint size 29/32
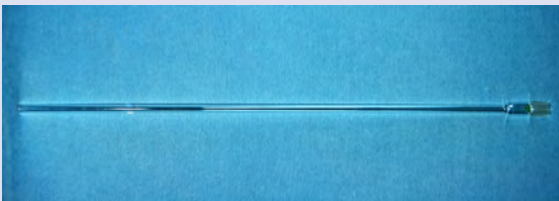
Condenser tube, DURAN® borosilicate glass 3.3, with standard ground

	Length	Cone
41998010	100 cm	Joint size 29/32

Tubing connectors

made of glass, straight
both sides with olive

44160008	Dimensions approx. 80 x 8 mm
44160010	Dimensions approx. 100 x 10 mm
44160012	Dimensions approx. 120 x 12 mm

Tubing connectors made of glass, T-shape
with olives

	Side length	Outside Ø
44161006	approx. 55 mm	approx. 6 mm
44161008	approx. 45 mm	approx. 8 mm
44161010	approx. 50 mm	approx. 10 mm

made of polypropylene
for tubing of different diameters
44171010   for tubing of approx. 5-17 mm inside Ø

made of polypropylene, T-shape

	Total height	Length of tube	for inside Ø of the tubing
44173004	approx. 15 mm	approx. 20 mm	approx. 3-4 mm
44173006	approx. 23 mm	approx. 30 mm	approx. 4-5 mm
44173008	approx. 31 mm	approx. 40 mm	approx. 6-7 mm
44173010	approx. 39 mm	approx. 55 mm	approx. 8-9 mm
44173012	approx. 47 mm	approx. 69 mm	approx. 10-11 mm
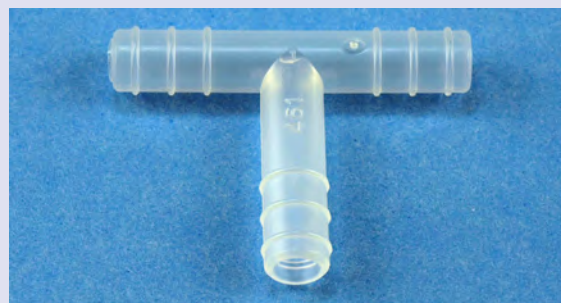
made of polypropylene, Y-shape

	Distance both legs (outside to outside)	Total height	for inside Ø of the tubing
44174004	approx. 14 mm	approx. 24 mm	approx. 3 mm
44174006	approx. 21 mm	approx. 35 mm	approx. 4-5 mm
44174008	approx. 34 mm	approx. 54 mm	approx. 6-7 mm
44174010	approx. 40 mm	approx. 64 mm	approx. 8-9 mm
44174012	approx. 47 mm	approx. 74 mm	approx. 10-11 mm

Safety valves
made of DURAN® borosilicate glass 3.3
42856010   for tubing of approx. 8-9 mm inside Ø
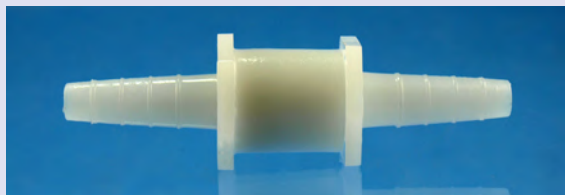
made of polyethylene (HDPE)

42860010   for tubing of approx. 6-9 mm inside Ø

Washing bottles

with interchangeable standard ground and spray tubes
made of DURAN® borosilicate glass 3.3, joint size 29/32
43091048   Capacity 250 ml
43091060   Capacity 500 ml
43091066   Capacity 1000 ml

Spare spray tubes
DURAN® borosilicate glass 3.3, with standard ground,
joint size 29/32
for washing bottles
43092048   for capacity 250 ml
43092060   for capacity 500 ml
43092066   for capacity 1000 ml

Automatic tilting pipettes, flasks and accessories

Automatic tilting pipettes with standard ground and bottle, clear glass
Bottle 1000 ml, joint size 29/32
Spare bottle no. 41916048

41875003   Capacity 5 ml
41875006   Capacity 10 ml
41875009   Capacity 20 ml
41875012   Capacity 25 ml
41875015   Capacity 50 ml
41875018   Capacity 100 ml

Automatic tilting pipettes, DURAN® borosilicate glass 3.3, without bottle

with standard ground, joint size 29/32

41877003   Capacity 5 ml
41877006   Capacity 10 ml
41877009   Capacity 20 ml
41877012   Capacity 25 ml
41877015   Capacity 50 ml
41877018   Capacity 100 ml

Vacuum Desiccators

with interchangeable cover with knob

DIN 12491, borosilicate glass 3.3,
tested for tension, vacuum tightness and pressure

	Capacity	Inside Ø
41160010	approx. 0.7 l	approx. 10 cm
41160015	approx. 2.4 l	approx. 15 cm
41160020	approx. 5.8 l	approx. 20 cm
41160025	approx. 10.5 l	approx. 25 cm
41160030	approx. 18.5 l	approx. 30 cm

with interchangeable cover with socket

DIN 12491, borosilicate glass 3.3, socket joint size 24/29

41161015   Inside Ø approx. 15 cm
41161020   Inside Ø approx. 20 cm
41161025   Inside Ø approx. 25 cm

with interchangeable cover with socket and stopcock

DIN 12491, borosilicate glass 3.3, socket joint size 24/29

	Inside Ø	Capacity
41162015	approx. 15 cm	approx. 2.4 l
41162020	approx. 20 cm	approx. 5.8 l
41162025	approx. 25 cm	approx. 10.5 l

Desiccators Novus with interchangeable cover with knob and side tube

DIN 12491, DURAN® borosilicate glass 3.3, side tube joint size 24/29

	Inside Ø	Capacity
41163015	approx. 15 cm	approx. 2.4 l
41163020	approx. 20 cm	approx. 5.8 l
41163025	approx. 25 cm	approx. 10.5 l
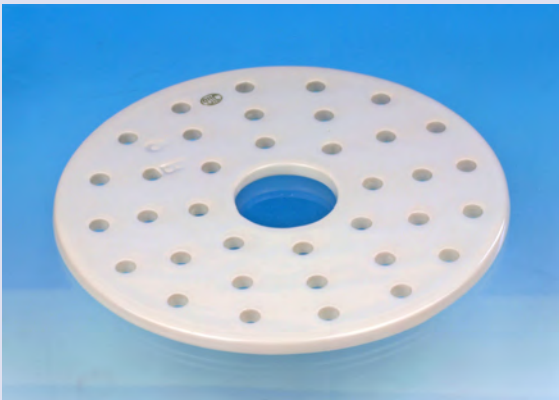
Porcelain plates for desiccators

with many small holes, without base

	suitable for upper inside Ø	Outside Ø
41175010	10 cm	approx. 90 mm
41175015	15 cm	approx. 140 mm
41175020	20 cm	approx. 189 mm
41175025	25 cm	approx. 241 mm
41175030	30 cm	approx. 290 mm

Spare stopcock for desiccator cover with socket

41177024   with standard ground 24/29

Spare stopcock for desiccator with side tube

41178024   with standard ground 24/29

Litmus paper

Blue
Colour changes from blue to red when the nature of the solution
changes from alkaline to acidic

	Booklet	Test strips	Range
42005010	100 test strips	approx. 75 x 10 mm	pH 8.0 - 5.0

Red
Colour changes from red to blue when the nature of the solution
changes from acidic to alkaline

	Booklet	Test strips	Range
42006010	100 test strips	approx. 75 x 10 mm	pH 5.0 - 8.0
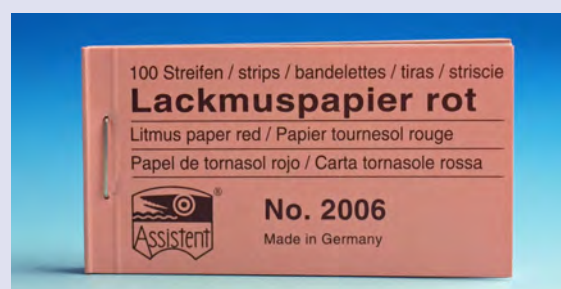
Universal indicator paper

Graduation pH 1 - 2 - 3 - 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14
Reel in plastic rotary box

	pH range	Reel
42007010	1 - 14	5 m x 7 mm

Refill pack of 3 reels
without graduation, without plastic box
42008010   Spare reels for no. 42007010

Indicator sticks

pH 4-7 not bleeding, packs of 100 test sticks

42009020   Merck no. 109542.0001

pH 0-14 not bleeding

for rapid determination of pH value of water.
Colours do not fade or fuse even in alkaline solutions.
Distinct colour change facilitates comparison with colour chart.

42009010   Packs of 100 test sticks

Filter media

Filter paper sheets

Smooth, medium fast according to DIN 53137, thickness 0.15 mm, paper weight 70 g/m², rate of filtration 20 s
Packing: 100 pieces

41250045   Dimensions approx. 45 x 45 cm
41250058   Dimensions approx. 58 x 58 cm

Filter paper circles

Grained, fast filtration according to DIN 53137, thickness 0.20 mm, paper weight 75 g/m², rate of filtration 10-12 s
Packing: 100 pieces

41255007   Diameter approx. 70 mm
41255009   Diameter approx. 90 mm
41255011   Diameter approx. 110 mm
41255012   Diameter approx. 125 mm
41255015   Diameter approx. 150 mm
41255018   Diameter approx. 185 mm
41255055   Diameter approx. 55 mm

Filter paper folded

Smooth, medium fast according to DIN 53137, suitable for the analysis of fats (due to low ether-soluble residue),
thickness 0.16 mm, paper weight 70 g/m², rate of filtration 22 s
Packing: 100 pieces

41260011 Diameter approx. 110 mm
41260012 Diameter approx. 125 mm
41260015 Diameter approx. 150 mm
41260018 Diameter approx. 185 mm
41260024 Diameter approx. 240 mm
41260027 Diameter approx. 270 mm
41260032 Diameter approx. 320 mm
41260038 Diameter approx. 385 mm
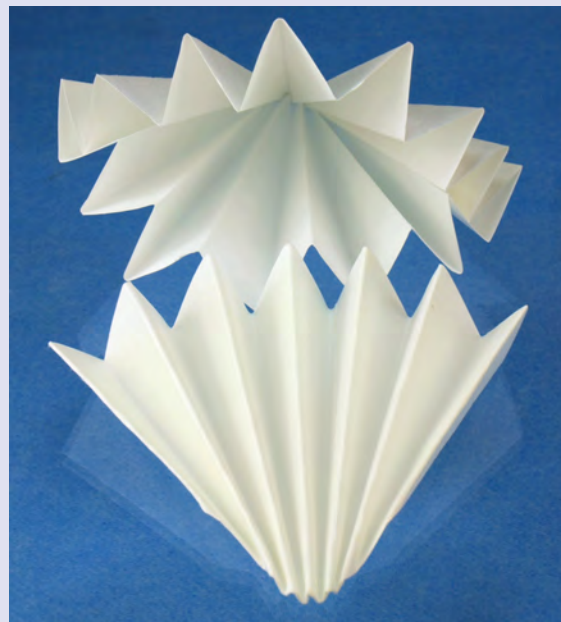
Filtering flasks, Erlenmeyer shape, DURAN® borosilicate glass 3.3

with plastic hose connection
These filtering flasks with plastic hose connection comply with the regulations of the German Product Safety Act.

41265036 Capacity 250 ml
41265042 Capacity 500 ml
41265048 Capacity 1000 ml
41265054 Capacity 2000 ml

Assembly set for no. 41265...

with removable plastic hose connection, short and long screw and seals

41266010 Hose connection Ø approx. 9 mm

Filtering flasks, Erlenmeyer shape, borosilicate glass 3.3

DIN EN ISO 6556, with glass hose connection
We recommend the use of filtering flasks with plastic hose connection no. 41265... as these comply with the regulations of the German Product Safety Act.

	Capacity	Height
41270036	250 ml	approx. 145 mm
41270042	500 ml	approx. 175 mm
41270048	1000 ml	approx. 230 mm
41270054	2000 ml	approx. 255 mm

Filtering jars

Clear glass, cylindrical, with spout

41271006	Capacity 50 ml
41271012	Capacity 100 ml
41271018	Capacity 250 ml

Filter funnels

DURAN® borosilicate glass 3.3, porosity 4
Filter funnels in other sizes and porosities are also available.

	Capacity	Stem Ø	Disc Ø
41272006	50 ml	approx. 10 mm	approx. 35 mm
41272012	75 ml	approx. 10 mm	approx. 45 mm
41272030	500 ml	approx. 22 mm	approx. 95 mm

Filter heads, DURAN® borosilicate glass 3.3, without filter disc

with funnel made of polypropylene and 2 seals
Suitable filter disc: see no. 41273...

	for disc Ø	Thread size	Capacity
41273024	24 mm	28 mm	30 ml
41273050	50 mm	54 mm	250 ml
41273090	90 mm	95 mm	1000 ml

Filter discs, DURAN® borosilicate glass 3.3
with glass rim, porosity 4, suitable for filter heads no. 41273...
41273924   Disc 24 mm Ø
41273950   Disc 50 mm Ø
41273990   Disc 90 mm Ø

Other porosities are also available.

Glass rings

Raschig rings
Packing: 1 kg
41400003   Dimensions approx. 3 x 3 mm
41400004   Dimensions approx. 4 x 4 mm
41400005   Dimensions approx. 5 x 5 mm
41400006   Dimensions approx. 6 x 6 mm
41400007   Dimensions approx. 7 x 7 mm
41400008   Dimensions approx. 8 x 8 mm
41400010   Dimensions approx. 10 x 10 mm
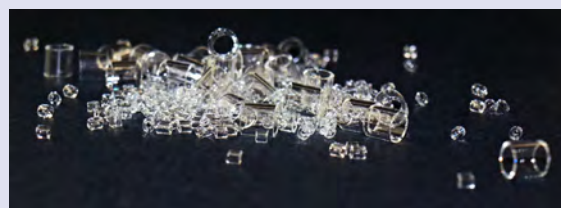
Glass beads

made of clear glass, spherical, solid, polished
Packing: 1 kg
41401001   Diameter approx. 1 mm
41401002   Diameter approx. 2 mm
41401003   Diameter approx. 3 mm
41401004   Diameter approx. 4 mm
41401005   Diameter approx. 5 mm
41401006   Diameter approx. 6 mm
41401007   Diameter approx. 7 mm
41401008   Diameter approx. 8 mm
41401010   Diameter approx. 10 mm

Boiling stones

Grade A
Anti-bumping granules, for preparative applications
The effect of these granules remains even with several interruptions
of the boiling process in vacuum distillation. Long durability.
41402010   Packing: 250 g

Glass wool (Filter cotton)

Superfine

41408002   Box of approx. 30 g
41408003   Packing of 1 kg

Mortars

made of borosilicate glass 3.3

Rough inside, with spout

	Capacity	Height	Outside Ø
47028008	approx. 125 ml	approx. 60 mm	approx. 80 mm
47028010	approx. 225 ml	approx. 75 mm	approx. 100 mm
47028012	approx. 400 ml	approx. 90 mm	approx. 120 mm
47028015	approx. 700 ml	approx. 110 mm	approx. 150 mm
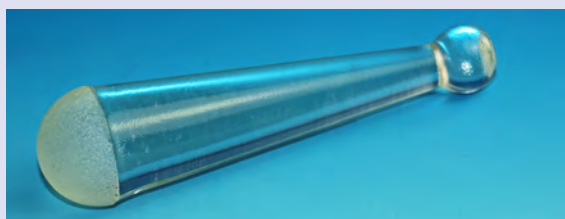
Pestles

made of borosilicate glass 3.3

with rough grinding surface

	Length	Head Ø	for mortars Ø
47029008	110 mm	28 mm	80 mm
47029010	130 mm	31 mm	100 mm
47029012	150 mm	36 mm	120 mm
47029015	180 mm	40 mm	150 mm

Mortars and pestles

Mortars made of melamine

	Diameter	Capacity	Height
47032001	approx. 12 cm	approx. 400 ml	approx. 8 cm
47032002	approx. 15 cm	approx. 700 ml	approx. 9 cm

Pestles made of melamine

	Length	Head
47033001	approx. 13 cm	approx. 4 cm Ø
47033002	approx. 15 cm	approx. 4 cm Ø

Phosphorus spoons
made of iron

	Bowl	Length
42515010	approx. 20 mm Ø	approx. 45 cm
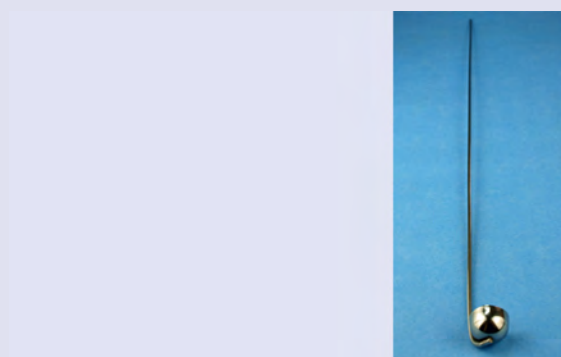
Spoons and spatulas
Sampling spoons with groove and spatula
made of stainless steel, spoon approx. 18 x 32 mm
42516010 Length approx. 190 mm

Chemical spoons, double
made of stainless steel
42517001 Length approx. 150 mm
Spoon end approx. 17x23 mm and 22x30 mm
42517002 Length approx. 180 mm
Spoon end approx. 22x30 mm and 29x40 mm
42517003 Length approx. 210 mm
Spoon end approx. 22x30 mm and 29x40 mm

Pharmacist spoons
made of stainless steel, spoon approx. 16 x 32 mm
42518010   Length approx. 150 mm

Pharmacist spoons, double
made of stainless steel, spoon end approx. 18 x 36 mm and 10 x 30 mm
42519010   Length approx. 170 mm

Spoon spatulas
made of stainless steel
42520001   Length approx. 150 mm, spoon approx. 36x26 mm, spatula approx. 32x22 mm
42520002   Length approx. 180 mm, spoon approx. 40x28 mm, spatula approx. 36x26 mm
42520003   Length approx. 210 mm, spoon approx. 40x28 mm, spatula approx. 36x26 mm

Pharmacist spatulas
made of stainless steel, with wooden handle
42521001   Total length approx. 190 mm, spatula approx. 100x18 mm
42521002   Total length approx. 230 mm, spatula approx. 130x20 mm
42521003   Total length approx. 250 mm, spatula approx. 150x22 mm

Weighing boats and weighing scoops

Measuring scoops made of polypropylene

White, also suitable as weighing scoop

	Capacity	Length
44240006	2 ml	approx. 60 mm
44240012	5 ml	approx. 82 mm
44240018	10 ml	approx. 100 mm
44240024	25 ml	approx. 135 mm
44240030	50 ml	approx. 160 mm
44240036	100 ml	approx. 200 mm
44240042	250 ml	approx. 260 mm
44240048	500 ml	approx. 315 mm
44240054	1000 ml	approx. 385 mm

Weighing scoops
made of stainless steel
44245010   Length approx. 170 mm

Weighing boats made of DURAN® borosilicate glass 3.3

	Capacity	Total length
44248003	approx. 3 ml	approx. 70 mm
44248006	approx. 6 ml	approx. 80 mm
44248010	approx. 10 ml	approx. 105 mm

Communicating vessels

Clear glass, with wooden base
for educational purposes
41954010   with 4 different tubes
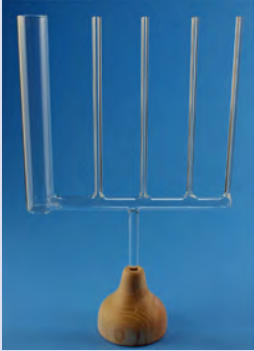
Clear glass, with wooden base
for educational purposes
41955010   with 1 large tube and 4 different capillary tubes

Radiometers (Light mills, Crooke's radiometers)
Clear glass, with base

	Height	Ø
42757002	approx. 13 cm	approx. 8 cm
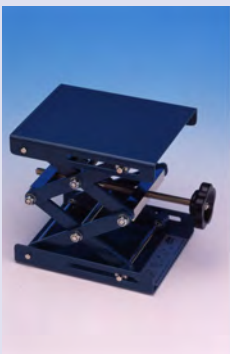
Laboratory lifter
made of aluminium alloy, powder-coated
The lab jack is characterised by a high-quality workmanship and high stability.
Height manually adjustable.

	Platform	Height	Static load
42011010	approx. 160 x 130 mm	approx. 6 - 25 cm	max. 7 kg (DIN 12897)

Cork borer set
made of brass tubing
Nickel-plated, with handles

	for holes of	Set of
41593006	5-11 mm Ø	6 pieces
41593012	5-19 mm Ø	12 pieces

Cork stoppers
First-class quality, low-porous

	Height	Bottom Ø	Outside Ø
41594009	17 mm	6 mm	9 mm
41594013	22 mm	10 mm	13 mm
41594014	22 mm	11 mm	14 mm
41594015	22 mm	12 mm	15 mm
41594016	22 mm	13 mm	16 mm
41594018	22 mm	15 mm	18 mm
41594019	23 mm	16 mm	19 mm
41594020	26 mm	17 mm	20 mm
41594022	26 mm	18 mm	22 mm
41594023	26 mm	19 mm	23 mm
41594026	27 mm	22 mm	26 mm
41594030	27 mm	26 mm	30 mm
41594036	27 mm	32 mm	36 mm
41594040	27 mm	36 mm	40 mm

Dimensions are approximate.

Stoppers

Octagonal top stoppers with standard joint made of polyethylene (HDPE)
resistant to acid and alkali

42990007	Joint size 7/16
42990010	Joint size 10/19
42990012	Joint size 12/21
42990014	Joint size 14/23
42990019	Joint size 19/26
42990024	Joint size 24/29
42990029	Joint size 29/32
42990034	Joint size 34/35
42990045	Joint size 45/40

Glass stoppers with standard ground
Hexagonal top, made of DURAN® borosilicate glass 3.3

42992007	Joint size 7/16
42992010	Joint size 10/19
42992012	Joint size 12/21
42992014	Joint size 14/23
42992019	Joint size 19/26
42992024	Joint size 24/29
42992029	Joint size 29/32
42992034	Joint size 34/35
42992045	Joint size 45/40

Melting point determination

Melting point determination device according to Thiele
DURAN® borosilicate glass 3.3
43004010   Dimensions approx. 120 x 20 mm

Melting point determination tubes, open ends
100 pieces packed in a glass tube
43005010   Dimensions approx. 90 x 1.5 mm Ø outside

Melting point determination tubes, one end closed
100 pieces packed in a glass tube
43006010   Dimensions approx. 90 x 1.5 mm Ø outside

Crucible tongs
Nickel-chromium steel, stainless, double bent
43010010   Length approx. 22 cm

Magnesia grooves

DIN 40680, thermal resistance approx. 560 K

for laboratory test samples and the incineration of small quantities
of substances
Packing 25 pieces

42065010   Dimensions approx. 100 x 9 mm

Magnesia rods

DIN 40680, thermal resistance approx. 560 K

Packing 25 pieces

	Ø	Length
42066010	approx. 1.8 mm	approx. 140 mm
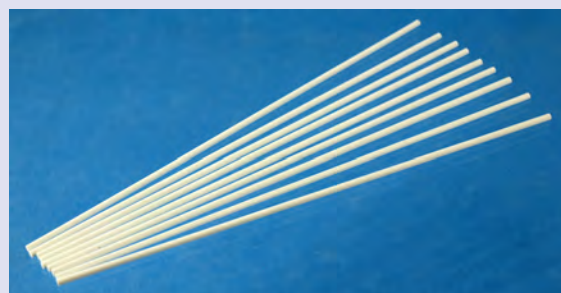
Blue glass plates

Thickness 2.5 - 3.0 mm

41910004   Dimensions approx. 5 x 5 cm
41910008   Dimensions approx. 5 x 10 cm
41910012   Dimensions approx. 10 x 10 cm
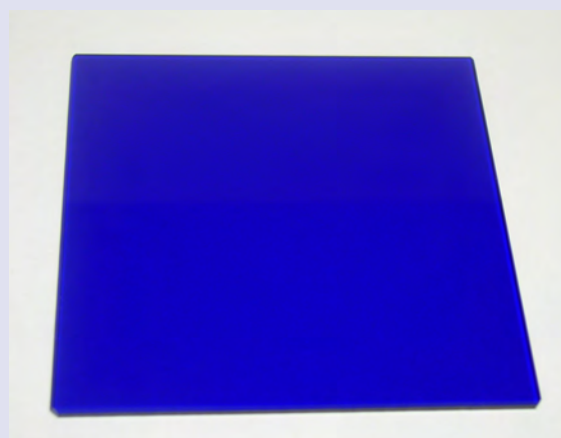
Laboratory Film

PARAFILM® M

Physical properties:

Toxicity: non-toxic
Melting point: +60 °C/+140 °F
Flash point: +301 °C/+573.8 °F
Temperature range (continuous use): -45 °C bis +50 °C/-49 °F up to +122 °F
Stretching ability: 200 %   **Ultimate elongation:** 300 %

Gas permeability in 24 hours at +23 °C/+73.4 °F with 50 % relative humidity:
Oxygen: ≤ 350 cm³/m²
Nitrogen: ≤ 105 cm³/m²
Carbon dioxide: ≤ 1100 cm³/m²

Water vapour permeability in 24 hours at +37 °C/+98.6 °F and 90 % relative humidity: 0.8 g/m²

Double roll

Flexible, moisture-resistant, gas-permeable sealing film for the laboratory.
Test tubes, cylinders, flasks, cultures etc. are being sealed safely due to the soft and smooth film.
Also suitable for damp bandages as wrapping.
Free of plasticisers.

	Length	Width
42510020	approx. 15 m / 50'	approx. 50 cm / 20"

Roll in dispenser carton

Width approx. 10 cm / 4"

42511010   Length approx. 38 m / 125'
42511020   Length approx. 75 m / 250'

Laboratory film PARAFILM® M, roll in dispenser carton, small

	Width	Length
42512010	approx. 5 cm / 2"	approx. 75 m / 250'

Ground Joint Flasks and Bottles

Erlenmeyer flasks

DURAN® borosilicate glass 3.3, without stopper, with standard ground

Reinforced standard ground neck with joint size
with label

	Joint size	Capacity
41915006	14/23	25 ml
41915012	29/32	50 ml
41915014	19/26	50 ml
41915018	29/32	100 ml
41915020	19/26	100 ml
41915024	29/32	200 ml
41915030	29/32	250 ml
41915034	45/40	250 ml
41915036	29/32	300 ml
41915042	29/32	500 ml
41915046	45/40	500 ml
41915048	29/32	1000 ml
41915052	45/40	1000 ml
41915056	29/32	2000 ml
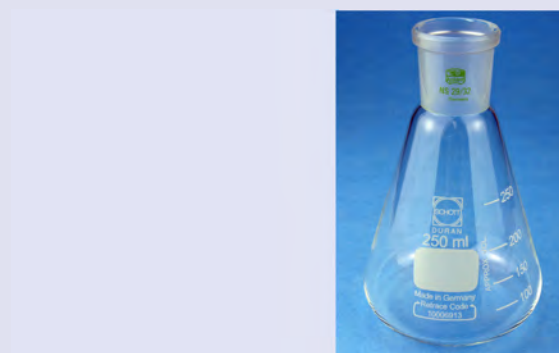
DURAN® borosilicate glass 3.3, with hollow glass stopper

Iodine determination flasks - reinforced standard ground neck with joint size, with label

	Joint size	Capacity
41918006	14/23	25 ml
41918012	29/32	50 ml
41918018	29/32	100 ml
41918020	19/26	100 ml
41918024	29/32	200 ml
41918030	29/32	250 ml
41918036	29/32	300 ml
41918042	29/32	500 ml
41918048	29/32	1000 ml

Flasks, pear shape

Borosilicate glass 3.3, round bottom
with standard ground, volume indicated with label

	Joint size	Capacity
41920004	14/23	5 ml
41920008	14/23	10 ml
41920012	19/26	10 ml
41920020	14/23	25 ml
41920024	19/26	25 ml
41920040	29/32	50 ml
41920044	14/23	50 ml
41920048	19/26	50 ml
41920060	29/32	100 ml
41920064	19/26	100 ml
41920072	29/32	250 ml
41920076	29/32	500 ml
41920080	29/32	1000 ml
41920084	29/32	2000 ml

Other flasks and accessories

Flasks, pointed shape, made of borosilicate glass 3.3
with standard ground, joint size 14/23, volume indicated, with label

41921006	Capacity 5 ml
41921012	Capacity 10 ml
41921018	Capacity 25 ml
41921024	Capacity 50 ml

Flat bottom flasks, narrow neck, DURAN® borosilicate glass 3.3
DIN ISO 1773, with rim, without standard ground, medium length

41924024	Capacity 50 ml
41924030	Capacity 100 ml
41924036	Capacity 250 ml
41924042	Capacity 500 ml
41924048	Capacity 1000 ml
41924054	Capacity 2000 ml

Flat bottom flasks

DURAN® borosilicate glass 3.3, with standard ground, medium-length, reinforced ground neck durably marked with standard ground size, without stopper

	Joint size	Capacity
41911006	29/32	50 ml
41911012	29/32	100 ml
41911015	19/26	100 ml
41911018	29/32	250 ml
41911024	29/32	500 ml
41911030	29/32	1000 ml
41911036	29/32	2000 ml

Round bottom flasks, narrow neck, DURAN® borosilicate glass 3.3

DIN ISO 1773, with rim, without standard ground, medium length

41925024   Capacity 50 ml
41925030   Capacity 100 ml
41925036   Capacity 250 ml
41925042   Capacity 500 ml
41925048   Capacity 1000 ml
41925054   Capacity 2000 ml

Round bottom flasks

DURAN® borosilicate glass 3.3, with standard ground, reinforced neck with joint size durably marked
without stopper

	Joint size	Capacity
41913006	29/32	50 ml
41913008	14/23	50 ml
41913010	19/26	50 ml
41913012	29/32	100 ml
41913014	14/23	100 ml
41913015	19/26	100 ml
41913018	29/32	250 ml
41913024	29/32	500 ml
41913030	29/32	1000 ml
41913036	29/32	2000 ml

Cork rings for flasks

41914001   for round bottom flasks 10-100 ml
41914002   for round bottom flasks 250-1000 ml
41914003   for round bottom flasks 2000 ml

Brushes

with wooden handle and flexible brush
Total length approx. 44 cm
Length of handle approx. 37 cm
Bristle approx. 45 x 20 mm
41912010   suitable for flasks with joint size from 29/32 on

Ground Glass Joints

Cones with standard ground

DIN 12242, DURAN® borosilicate glass 3.3, reinforced ground joint,
solid rim, joint size permanently marked, form B

42382014   Joint size 14/23
42382019   Joint size 19/26
42382024   Joint size 24/29
42382029   Joint size 29/32
42382034   Joint size 34/35
42382045   Joint size 45/40

Sockets with standard ground

DIN 12242, DURAN® borosilicate glass 3.3, reinforced ground joint,
solid rim, joint size permanently marked, form E

42383014   Joint size 14/23
42383019   Joint size 19/26
42383024   Joint size 24/29
42383029   Joint size 29/32
42383034   Joint size 34/35
42383045   Joint size 45/40

Cones with standard ground and extension at bottom

DIN 12242, DURAN® borosilicate glass 3.3, reinforced ground joint, solid rim, joint size permanently marked, form G

42384014   Joint size 14/23
42384024   Joint size 24/29
42384029   Joint size 29/32

Clips made of polyoxymethylene (POM)

for conical ground joints, heat-resistant up to approx.
+150 °C/+302 °F

	Colour	for
42386010	green	joint size 10/19
42386012	purple	joint size 12/21
42386014	yellow	joint size 14/23
42386019	blue	joint size 19/26
42386024	green	joint size 24/29
42386029	red	joint size 29/32
42386034	orange	joint size 34/35
42386040	yellow	joint size 40/38
42386045	brown	joint size 45/40

Reduction and expansion adapters

DIN 12257, DURAN® borosilicate glass 3.3, reinforced ground joint, solid rim

	Socket	Cone
42387001	Joint size 14/23	Joint size 19/26
42387002	Joint size 14/23	Joint size 24/29
42387003	Joint size 14/23	Joint size 29/32
42387004	Joint size 19/26	Joint size 24/29
42387005	Joint size 19/26	Joint size 29/32
42387006	Joint size 29/32	Joint size 45/40
42387007	Joint size 24/29	Joint size 34/35
42387008	Joint size 19/26	Joint size 14/23
42387009	Joint size 24/29	Joint size 14/23
42387010	Joint size 29/32	Joint size 14/23
42387011	Joint size 24/29	Joint size 19/26
42387012	Joint size 29/32	Joint size 19/26
42387013	Joint size 29/32	Joint size 24/29
42387014	Joint size 45/40	Joint size 29/32

Sleeves for ground joints and stoppers, disposable

made of PTFE, self-lubricating
The sleeves prevent the ground joints from sticking together.
Outstanding chemical resistance at temperatures
from −200 °C to +260 °C (from −328 °F to +500 °F),
thickness approx. 0.05 mm
Packing: 10 pieces

42388010	for joint size 14/23
42388019	for joint size 19/26
42388024	for joint size 24/29
42388029	for joint size 29/32
42388045	for joint size 45/40
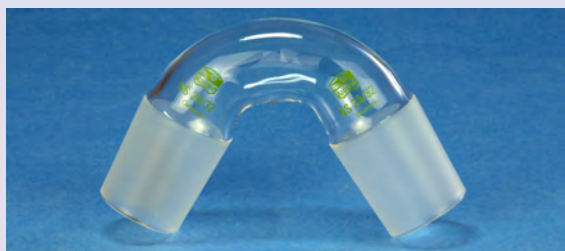
Distilling adapters, still heads and distilling flasks

Bends with 2 cones ground joint size 29/32
DURAN® borosilicate glass 3.3
41026010   Bent at 75°

Still heads
DURAN® borosilicate glass 3.3, with 2 cones and 1 socket

	Socket	Cones
41029010	Joint size 14/23	Joint size 29/32

Claisen still heads
DURAN® borosilicate glass 3.3, with 2 cones, thermometer socket and extra socket (boiling capillary)

	Sockets	Cones
41033010	Joint size 14/23	Joint size 29/32

Receiver adapters
DURAN® borosilicate glass 3.3, bent

41036010   Socket joint size 29/32

Distilling flasks
made of borosilicate glass 3.3, with side tube

	Capacity	Length of side tube
41037008	100 ml	approx. 200 mm
41037016	250 ml	approx. 200 mm
41037024	500 ml	approx. 200 mm
41037032	1000 ml	approx. 250 mm

Water Analysis

Equipment for water analysis

Gas washing bottles according to Drechsel

Clear glass, **with head** DIN 12596 with standard ground,
joint size and size of bottle indicated, joint size 29/32

41469012	Capacity 100 ml
41469018	Capacity 250 ml
41469024	Capacity 500 ml
41469030	Capacity 1000 ml

Spare washing bottle heads

DURAN® borosilicate glass 3.3, ground joint size 29/32

41469001	without filter disc

Gas washing bottles according to Drechsel with filter disc

Clear glass, **with head** DIN 12596 with standard ground,
joint size and size of bottle indicated, joint size 29/32, filter disc 22
mm Ø, porosity 1

41470012	Capacity 100 ml
41470018	Capacity 250 ml
41470024	Capacity 500 ml
41470030	Capacity 1000 ml

Spare washing bottle heads

DURAN® borosilicate glass 3.3, ground joint size 29/32

41470001	with filter disc

Dean-Stark apparatus

Xylene method, DURAN® borosilicate glass 3.3

consisting of
Round bottom flask, 500 ml, no. 41913024
Liebig condenser, 40 cm, joint size 29/32 no. 41982056
Measuring tube no. 44265020

44265010   Complete
44265020   Spare measuring tube DURAN® borosilicate glass 3.3,
with stopcock, fused blue graduation "ASSISTENT-
PERMANENT" 10 ml : 0.1, socket at top joint size
29/32, lateral cone joint size 29/32

Oxygen bottles according to Winkler

for the determination of the oxygen dissolved in the water
Clear glass, with interchangeable stopper made of HDPE, frosted
label and precisely adjusted capacity

	Capacity	Joint size
44267010	100-150 ml	14/23
44267020	250-300 ml	19/26
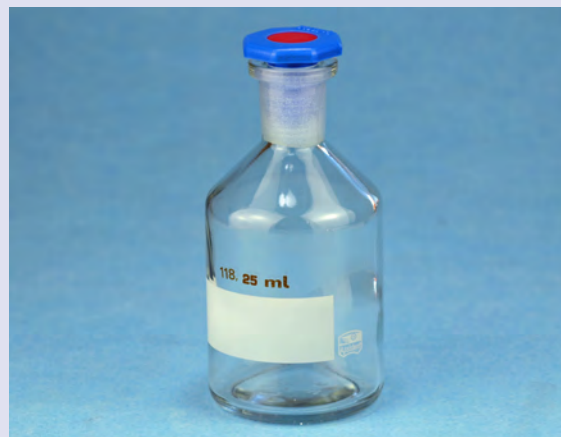
Stopper holders for Winkler bottles

made of metal
44268010   for no. 44267010 and 44267020
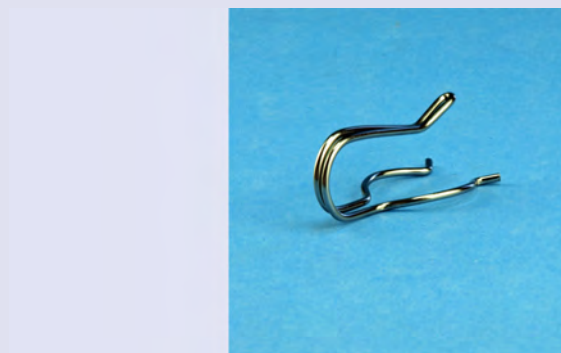
Shaking bottles
Clear glass, with stopper made of polyethylene, joint size 19/26
44272010   with 4 marks at 10, 20, 30 and 40 ml

Sediment cones according to Imhoff, made of plastic (SAN)
DIN 12672, transparent, with scale, with screw cap at outlet

0 - 2 ml : 0.1 ml
2 - 10 ml : 0.5 ml
10 - 40 ml : 1 ml
40 - 100 ml : 2 ml
100 - 1000 ml : 50 ml
44274010   Capacity 1000 ml
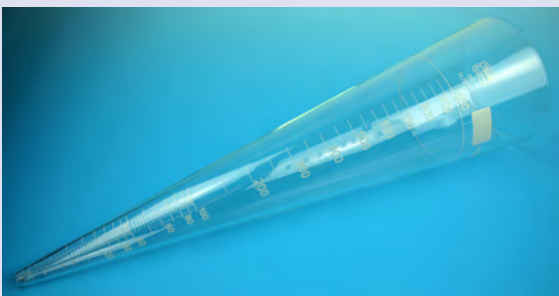
Sediment cones according to Imhoff, made of borosilicate glass 3.3
DIN 12672, without stopcock, with frosted label
White graduation

0 - 2 ml : 0.1 ml
2 - 10 ml : 0.5 ml
10 - 40 ml : 1 ml
40 - 100 ml : 2 ml
100 - 1000 ml : 50 ml
44275010   Capacity 1000 ml

Sediment cones according to Imhoff, made of borosilicate glass 3.3
DIN 12672, with frosted label
White graduation

0 -   2 ml : 0.1 ml
2 - 10 ml : 0.5 ml
10 - 40 ml : 1 ml
40 - 100 ml : 2 ml

Ring mark at 1000 ml
44276010   without stopcock
44276020   with stopcock

Wooden racks

Holes at base 24 mm Ø, holes at top 86 mm Ø

44277010   for 4 sediment cones
44277020   for 2 sediment cones
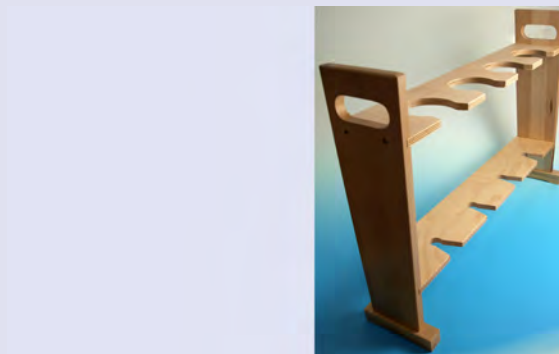
Cleaning brushes for sediment cones

Galvanised, nylon bristles, with wooden handle

	Upper brush Ø	Lower brush Ø	Brush length	Total length
44279010	approx. 130 mm	approx. 30 mm	approx. 430 mm	approx. 700 mm

Water-jet pumps according to Geißler

44280010   made of DURAN® borosilicate glass 3.3

Water-jet pumps made of polypropylene

with sleeve nut R 3/4", thread adapter R 1/2", hose connection
(olive 10-12 mm Ø) and vacuum connection (olive 6–10 mm Ø)
with integrated non-return valve,
temperature max. +80 °C/+176 °F (continuously)

44283010   Water-jet pump
44283040   Thread adapter R 3/8"
44283050   Thread adapter M 22x1
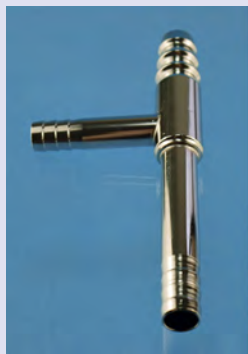
Water-jet pumps made of metal

Nickel-plated brass

	Water consumption	Suction volume	Suction power
44284010	235 l/h	290 l/h at 3.5 bar	up to 800 mbar

Voltameters Hofmann with platinum electrodes

Water decomposition apparatus, for educational purposes

consisting of
- Glass part no. 44287010
- Metal support
- 2 clamps no. 40870010
- 2 platinum electrodes no. 44288010

44285010   Scale 0-60 ml : 0.2

Voltameters Hofmann with carbon electrodes

Water decomposition apparatus, for educational purposes

consisting of
- Glass part no. 44287010
- Metal support
- 2 clamps no. 40870010
- 2 carbon electrodes no. 44288010

44286010   Scale 0-60 ml : 0.2

Spare glass part

without support, without electrodes

44287010   Length approx. 56 cm

Spare platinum electrodes

44288010   Length approx. 14 cm

Spare carbon electrodes

44289010   Length approx. 12.5 cm

Separatory Funnels

General information
- interchangeable plugs and reliable retaining devices
- interchangeable stoppers made of polyethylene (HDPE), resistant to alkali and acid
- Socket and neck are reinforced
- Capacity and joint sizes durably marked

Separatory funnels, DURAN® borosilicate glass 3.3, conical, with solid glass plug

DIN ISO 4800, with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42950024	19/26	2.5 mm	50 ml
42950030	19/26	2.5 mm	100 ml
42950048	29/32	4 mm	250 ml
42950060	29/32	4 mm	500 ml
42950066	29/32	6 mm	1000 ml
42950072	29/32	6 mm	2000 ml

DURAN® borosilicate glass 3.3, conical, with PTFE plug

DIN ISO 4800, with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42951024	19/26	2.5 mm	50 ml
42951030	19/26	2.5 mm	100 ml
42951048	29/32	4 mm	250 ml
42951060	29/32	4 mm	500 ml
42951066	29/32	6 mm	1000 ml
42951072	29/32	6 mm	2000 ml

Borosilicate glass 3.3, cylindrical, with solid glass plug

DIN ISO 4800, with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42956024	19/26	2.5 mm	50 ml
42956030	19/26	2.5 mm	100 ml
42956048	29/32	4 mm	250 ml
42956060	29/32	4 mm	500 ml
42956066	29/32	6 mm	1000 ml

Separatory funnels, borosilicate glass 3.3, pear shape, with solid glass plug

DIN ISO 4800, with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42970024	19/26	2.5 mm	50 ml
42970030	19/26	2.5 mm	100 ml
42970048	29/32	4 mm	250 ml
42970060	29/32	4 mm	500 ml
42970066	29/32	6 mm	1000 ml

Borosilicate glass 3.3, pear shape, with PTFE plug

DIN ISO 4800, with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42971024	19/26	2.5 mm	50 ml
42971030	19/26	2.5 mm	100 ml
42971048	29/32	4 mm	250 ml
42971060	29/32	4 mm	500 ml
42971066	29/32	6 mm	1000 ml

Borosilicate glass 3.3, according to Squibb, with solid glass plug

with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42985024	19/26	2.5 mm	50 ml
42985030	19/26	2.5 mm	100 ml
42985048	29/32	4 mm	250 ml
42985060	29/32	4 mm	500 ml
42985066	29/32	6 mm	1000 ml
42985072	29/32	6 mm	2000 ml

Separatory funnels, borosilicate glass 3.3, according to Squibb, with PTFE plug

with stopcock
Packing: 2 pieces in a box

	Stopper	Stopcock bore	Capacity
42986024	19/26	2.5 mm	50 ml
42986030	19/26	2.5 mm	100 ml
42986048	29/32	4 mm	250 ml
42986060	29/32	4 mm	500 ml
42986066	29/32	6 mm	1000 ml
42986072	29/32	6 mm	2000 ml

Funnels

made of DURAN® borosilicate glass 3.3

Angle of 60°, sloping stem

43990004	approx. 3 cm Ø
43990008	approx. 3.5 cm Ø
43990012	approx. 4 cm Ø
43990016	approx. 4.5 cm Ø
43990020	approx. 5 cm Ø
43990024	approx. 5.5 cm Ø
43990028	approx. 6 cm Ø
43990032	approx. 7 cm Ø
43990036	approx. 8 cm Ø
43990040	approx. 10 cm Ø

Analytical funnels

Borosilicate glass 3.3, angle of 60°, with long stem, ribbed, for rapid filtration

43991007	65 mm Ø
43991014	80 mm Ø
43991021	110 mm Ø

made of soda-lime glass
Angle of 60°, sloping stem

44000004	approx. 3 cm Ø
44000008	approx. 3.5 cm Ø
44000012	approx. 4 cm Ø
44000016	approx. 4.5 cm Ø
44000020	approx. 5 cm Ø
44000024	approx. 5.5 cm Ø
44000028	approx. 6 cm Ø
44000032	approx. 7 cm Ø
44000036	approx. 8 cm Ø
44000040	approx. 10 cm Ø
44000044	approx. 12 cm Ø
44000048	approx. 15 cm Ø
44000056	approx. 20 cm Ø (*)
44000060	approx. 25 cm Ø (*)
44000064	approx. 30 cm Ø (*)

* made of borosilicate glass 3.3

Powder funnels made of soda-lime glass
with short, wide stem

	Stem Ø	Stem length	Ø	Total length
44001012	approx. 14 mm	approx. 18 mm	approx. 4 cm	approx. 45 mm
44001020	approx. 18 mm	approx. 25 mm	approx. 5 cm	approx. 55 mm
44001028	approx. 20 mm	approx. 25 mm	approx. 6 cm	approx. 60 mm
44001036	approx. 24 mm	approx. 26 mm	approx. 8 cm	approx. 70 mm
44001040	approx. 26 mm	approx. 27 mm	approx. 10 cm	approx. 80 mm
44001044	approx. 26 mm	approx. 32 mm	approx. 12 cm	approx. 115 mm
44001052	approx. 35 mm	approx. 24 mm	approx. 16 cm	approx. 135 mm

44001052 made of borosilicate glass 3.3

Powder funnels made of polypropylene
Transparent

	Stem Ø	Length of stem	Outside Ø	Length
44002030	15 mm	25 mm	65 mm	68 mm
44002036	21 mm	25 mm	80 mm	76 mm
44002040	22 mm	20 mm	100 mm	94 mm
44002044	26 mm	20 mm	120 mm	110 mm
44002048	28 mm	22 mm	150 mm	138 mm

Dimensions given are approximate.

Funnels made of polyethylene (HDPE)

	Stem length	Ø
49050003	approx. 40 mm	approx. 6 cm
49050006	approx. 50 mm	approx. 8 cm
49050009	approx. 55 mm	approx. 10 cm
49050012	approx. 60 mm	approx. 12 cm
49050015	approx. 65 mm	approx. 14 cm
49050018	approx. 80 mm	approx. 16 cm
49050021	approx. 85 mm	approx. 20 cm
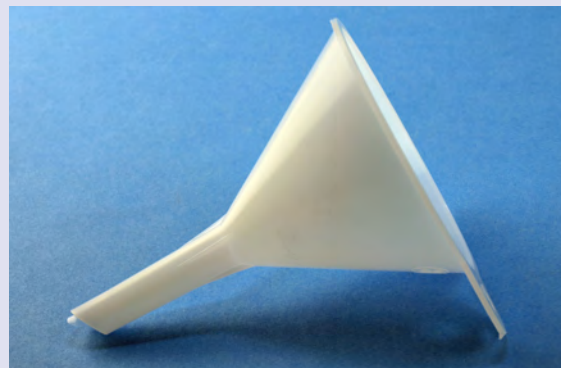
made of polypropylene (analytical funnels)
with fluted inner surface, for rapid filtration

	Ø	Stem length
49051024	approx. 25 mm	approx. 39 mm
49051027	approx. 35 mm	approx. 38 mm
49051030	approx. 45 mm	approx. 44 mm
49051033	approx. 65 mm	approx. 63 mm
49051036	approx. 80 mm	approx. 69 mm
49051039	approx. 100 mm	approx. 82 mm
49051042	approx. 120 mm	approx. 85 mm
49051045	approx. 150 mm	approx. 115 mm
49051048	approx. 180 mm	approx. 143 mm

Glass Tubing and Rods

Tubing made of DURAN® borosilicate glass 3.3

Factory length approx. 1.50 m
Kindly mention required diameter and wall thickness in your order.

42830001	4-5 mm outside Ø - 0.8 mm wall
42830002	6-8 mm outside Ø - 1 mm wall
42830003	9-14 mm outside Ø - 1 mm wall, 15-24 mm outside Ø - 1.2 mm wall, 26-30 mm outside Ø - 1.4 mm wall
42830004	32-38 mm outside Ø - 1.4 mm wall, 40-44 mm outside Ø - 1.6 mm wall, 50 mm outside Ø - 1.8 mm wall

Capillary tubing made of DURAN® borosilicate glass 3.3

Factory length approx. 1.50 m
Kindly mention required inside and outside diameter in your order.

	Inside Ø	Outside Ø
42833010	approx. 0.4-2.7 mm	approx. 6-8 mm
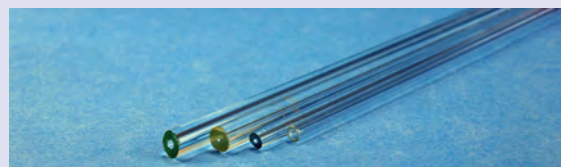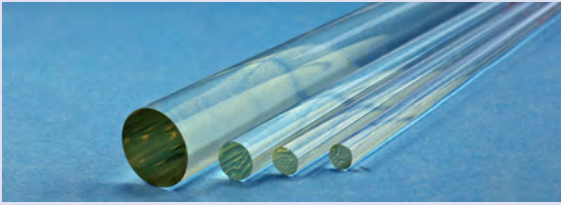
Rods made of DURAN® borosilicate glass 3.3

Factory length approx. 1.50 m
Kindly mention required diameter in your order.

42835001	Diameter approx. 4, 5 and 6 mm
42835002	Diameter approx. 8 mm

Tubing made of AR-Glas® (soda glass)

Factory length approx. 1.50 m
Kindly mention required outside diameter and wall thickness in your order.

42840001	Outside Ø approx. 4-5 mm
42840002	Outside Ø approx. 6-30 mm
42840003	Outside Ø approx. 32-34 mm
42840004	Outside Ø approx. 36-40 mm
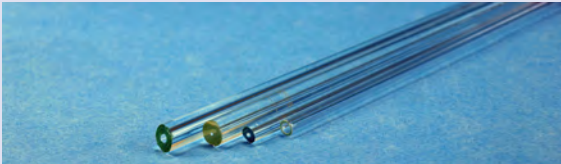
Capillary tubing made of AR-Glas® (soda glass)

Factory length approx. 1.50 m
Kindly mention required inside and outside diameter in your order.

	Inside Ø	Outside Ø
42843010	approx. 1-3 mm	approx. 5-7 mm
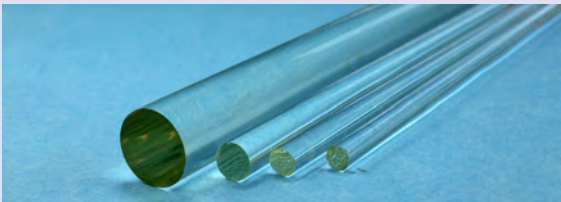
Rods made of AR-Glas® (soda glass)

Factory length approx. 1.50 m
Kindly mention required diameter in your order.

42845002	Diameter approx. 4 and 5 mm
42845003	Diameter approx. 6-12 mm

Glass tube cutter with cutting wheel

made of zinc die cast, nickel-plated, for tubes up to approx. 30 mm Ø

42847001	Spare wheels for no. 42847010
42847010	Glass tube cutter with cutting wheel

Stirring rods made of glass
Fused ends

	Length	Ø
42850006	approx. 150 mm	approx. 4 mm
42850012	approx. 150 mm	approx. 5 mm
42850018	approx. 150 mm	approx. 6 mm
42850024	approx. 200 mm	approx. 3 mm
42850030	approx. 200 mm	approx. 4 mm
42850036	approx. 200 mm	approx. 5 mm
42850042	approx. 200 mm	approx. 6 mm
42850048	approx. 250 mm	approx. 4 mm
42850054	approx. 250 mm	approx. 6 mm
42850060	approx. 250 mm	approx. 7 mm
42850066	approx. 300 mm	approx. 7 mm
42850072	approx. 300 mm	approx. 8 mm
42850078	approx. 300 mm	approx. 9 mm
42850084	approx. 500 mm	approx. 12 mm
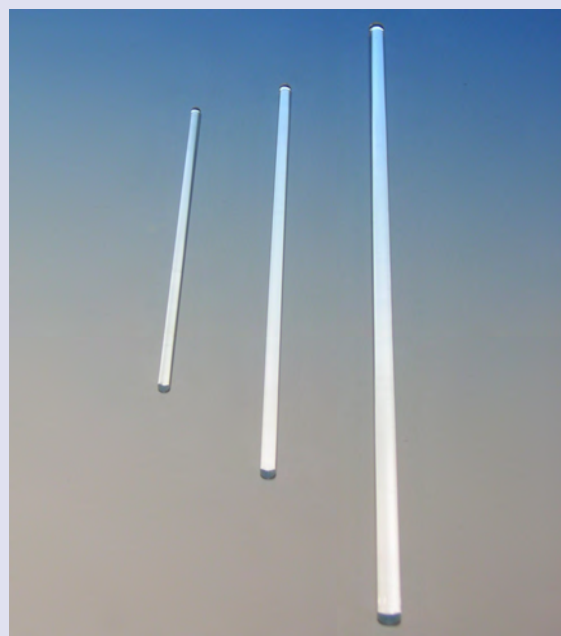
Bunsen Burners and Accessories

Bunsen burners and cartridges

All-gas Bunsen burner
with air regulation, needle valve and adjustable nozzle

	Tube Ø	Height	Head Ø
41385010	approx. 13 mm	approx. 160 mm	approx. 17 mm

Bunsen burners
with air regulation, head approx. 15 mm Ø

	Tube Ø	for
41390001	approx. 11 mm	natural gas
41390002	approx. 11/8 mm (outer/inner)	propane/butane gas

Bunsen burners

with stopcock and pilot flame,
height approx. 155 mm, head approx. 16 mm Ø

	Tube Ø	for
41391001	approx. 11/9 mm (outside/inside)	natural gas
41391002	approx. 11/9 mm (outside/inside)	propane/butane gas

Gas burners according to Teclu

with stopcock and pilot flame, tube approx. 13 mm Ø,
height approx. 160 mm, base approx. 80 mm Ø

41393001   for natural gas
41393002   for propane/butane gas
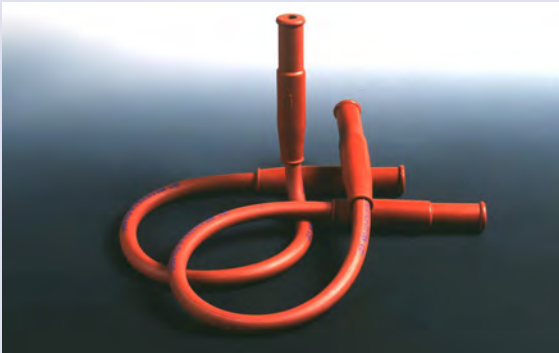
Safety gas tubing

according to DIN 30665, for all kinds of gases
according to worksheet G 260 of the German Technical and
Scientific Association for Gas and Water, tested and registered

41384001   Length 1000 mm
41384002   Length 1500 mm

Bunsen burners LABOGAZ® 470

with safety valve. Cartridge may always be disconnected easily,
provided that burner is not operating.

The burners no. 41395010 and cartridges no. 41395001 are
incompatible with burners no. 41396010.

41395010   Height including cartridge approx. 24 cm

without cartridge

Cartridges with butane gas

for LABOGAZ® Bunsen burners no. 41395010
Type: CV 470 PLUS

Burners no. 41395010 and cartridges no. 41395001 are
incompatible with burners no. 41396010 and cartridges
no. 41396020.

UN 2037, class 2
Safety data sheet comes with the item.

	Dimensions	Capacity
41395001	approx. 14 x 11 cm Ø	approx. 450 g (approx. 806 ml)

Bunsen burners LABOGAZ® 206

Assembly system for cartridges without safety valve, gas
consumption 55 g/h

Burners no. 41396010 and cartridges no. 41396020 are
incompatible with burners no. 41395010.
41396010   without cartridge

Cartridges with butane gas

for burners LABOGAZ® no. 41396010
Exchange of cartridge is only possible when completely empty.
Type: C 206 GLS

The burners no. 41396010 and cartridges no. 41396020 are
incompatible with burners no. 41395010.

UN 2037, class 2
Safety data sheet comes with the item.
41396020   Capacity approx. 190 g (approx. 314 ml)

Spirit lamps made of glass with side filler tube and stopper

with ground-on cap, complete with brass wickholder and wick,
each in a box
43030010   Capacity approx. 100 ml

LABORATORY EQUIPMENT

Spirit lamps made of glass without filler tube
with ground-on cap, complete with brass wickholder and wick,
each in a box
43031010   Capacity approx. 100 ml

Spare wicks
for spirit lamps no. 43030010 and 43031010
43031020   Length approx. 12 cm

Spirit lamps made of stainless steel
with wick
43033010   Capacity approx. 60 ml

Tripods

Height approx. 21 cm
made of galvanised iron

	Ø of inside ring	Ø of outside ring
41090010	approx. 11 cm	approx. 14 cm

Tripods, height approx. 28 cm

made of galvanised iron, suitable for LABOGAZ® Bunsen burners
no. 41395010 and 41396010

	Ø of inside ring	Ø of outside ring
41091010	approx. 11 cm	approx. 14 cm

Triangles made of iron wire

with plain clay tubes

41065004	Length approx. 4 cm
41065006	Length approx. 6 cm
41065008	Length approx. 8 cm
41065010	Length approx. 10 cm

Laboratory protective plates

made of glass ceramic CERAN®

41066001	Dimensions approx. 135 x 135 mm
41066002	Dimensions approx. 155 x 155 mm
41066003	Dimensions approx. 175 x 175 mm

Quadrupods for protective plates

made of chrome-nickel steel, with 4 legs

	for plates	Height
41067001	135 x 135 mm	approx. 210 mm
41067002	155 x 155 mm	approx. 210 mm
41067003	175 x 175 mm	approx. 220 mm
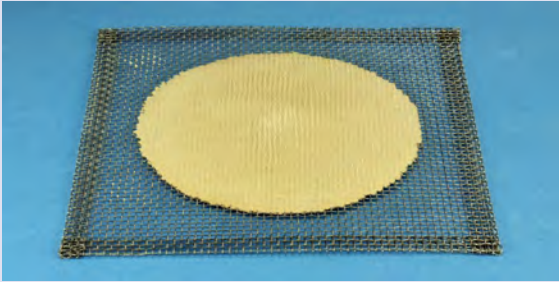
Iron wire gauzes

with ceramic centre
made of galvanised iron wire

	Dimensions	Ceramic centre
41071012	approx. 12 x 12 cm	approx. 80 mm Ø
41071016	approx. 16 x 16 cm	approx. 110 mm Ø
41071020	approx. 20 x 20 cm	approx. 150 mm Ø

Articles made of Rubber and Plastics

Tubing, stoppers and laboratory mats

Laboratory tubing, natural rubber, red
Hardness 50 Shore A

	Wall thickness	Inside Ø
41580004	approx. 1 mm	approx. 4 mm
41580006	approx. 1.5 mm	approx. 6 mm
41580008	approx. 2 mm	approx. 8 mm
41580010	approx. 2 mm	approx. 10 mm
41580012	approx. 2.5 mm	approx. 12 mm

Laboratory tubing, PVC, transparent
Resistant up to +60 °C/+140 °F

	Wall thickness	Inside Ø
41581004	approx. 1.5 mm	approx. 4 mm
41581006	approx. 1.5 mm	approx. 6 mm
41581008	approx. 1.5 mm	approx. 8 mm
41581010	approx. 2 mm	approx. 10 mm
41581012	approx. 2 mm	approx. 12 mm

Laboratory tubing, silicone, transparent, natural-coloured

Hardness 60 Shore A, resistant from -60 °C/-76 °F
up to +180 °C/+356 °F (temporary +250 °C/+482 °F)

	Wall thickness	Inside Ø
41582004	approx. 1 mm	approx. 4 mm
41582006	approx. 1.5 mm	approx. 6 mm
41582008	approx. 2 mm	approx. 8 mm
41582010	approx. 2 mm	approx. 10 mm
41582012	approx. 2 mm	approx. 12 mm

Silicone stoppers, solid

DIN 12871, transparent, hardness 50 Shore A
Max. temperature for use -50 °C +180 °C/-58 °F +356 °F
(for a short time up to +240 °C/+464 °F)
Autoclavable up to +121 °C/+249.8 °F (2 bar)

	Height	Bottom Ø	Top Ø
41583004	20 mm	5 mm	9 mm
41583008	20 mm	10.5 mm	14.5 mm
41583012	20 mm	12.5 mm	16.5 mm
41583016	20 mm	14 mm	18 mm
41583020	25 mm	17 mm	22 mm
41583024	30 mm	18 mm	24 mm
41583028	30 mm	21 mm	27 mm
41583032	30 mm	26 mm	32 mm
41583036	30 mm	29 mm	35 mm
41583040	35 mm	31 mm	38 mm
41583044	40 mm	36 mm	44 mm
41583048	40 mm	41 mm	49 mm
41583052	40 mm	47 mm	55 mm
41583056	55 mm	64.5 mm	75.5 mm
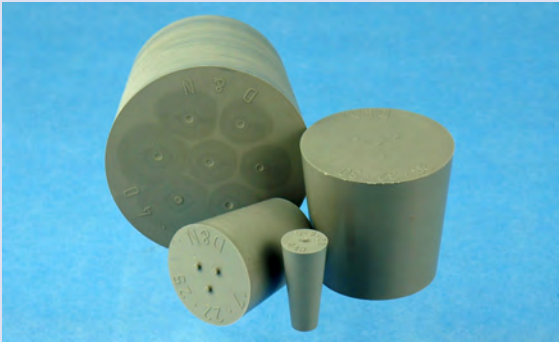
Rubber stoppers, solid

DIN 12871, made of natural rubber, hardness 40 Shore A

	Height	Bottom Ø	Top Ø
41590002	20 mm	4 mm	8 mm
41590005	20 mm	5 mm	9 mm
41590008	20 mm	8 mm	12 mm
41590011	19 mm	9 mm	12 mm
41590014	20 mm	10.5 mm	14.5 mm
41590017	25 mm	12 mm	17 mm
41590020	20 mm	14 mm	18 mm
41590023	25 mm	17 mm	22 mm
41590026	30 mm	18 mm	24 mm
41590029	30 mm	21 mm	27 mm
41590032	30 mm	26 mm	32 mm
41590035	30 mm	29 mm	35 mm
41590038	35 mm	31 mm	38 mm
41590041	35 mm	34 mm	41 mm
41590044	40 mm	36 mm	44 mm
41590047	40 mm	41 mm	49 mm
41590050	40 mm	47 mm	55 mm
41590053	45 mm	50.5 mm	59.5 mm
41590056	45 mm	56 mm	65 mm
41590059	55 mm	64.5 mm	75.5 mm
41590062	60 mm	71 mm	83 mm
41590065	65 mm	79 mm	92 mm

Rubber stoppers with hole(s)

DIN 12871, made of natural rubber, hardness 40 Shore A

	Holes	Bottom Ø	Top Ø	Height	Bore
41591017	1	12 mm	17 mm	25 mm	5 mm
41591020	1	14 mm	18 mm	20 mm	5 mm
41591029	2	21 mm	27 mm	30 mm	6 mm
41591032	2	26 mm	32 mm	30 mm	6 mm
41591035	2	29 mm	35 mm	30 mm	6 mm
41591041	2	34 mm	41 mm	35 mm	6 mm
41591055	2	47 mm	55 mm	40 mm	8 mm
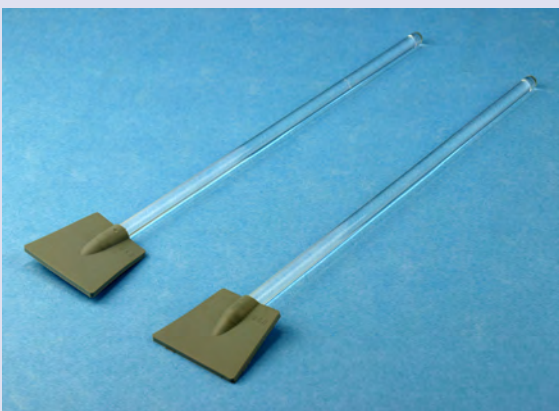
Rubber policeman, spade-shaped

made of natural rubber, hardness 40 Shore A, without glass rod
(suitable glass rod no. 42850042)

	Dimensions	Bore
41596010	approx. 35 x 25 x 32 mm	approx. 5 mm

Laboratory mats made of silicone
temperature resistant up to +260 °C, sterilisable, non-slip,
available in 2 colours and 2 sizes

	Dimensions	Colour
41598113	250 x 250 mm	red
41598118	250 x 250 mm	black
41598213	350 x 350 mm	red
41598218	350 x 350 mm	black

Tubing clamps
Band of stainless steel, with thumb screw

41586010	for tubing of 10 mm Ø
41586012	fot tubing of 12 mm Ø
41586014	for tubing of 14 mm Ø
41586017	for tubing of 17 mm Ø
41586019	for tubing of 19 mm Ø
41586021	for tubing of 21 mm Ø
41586022	for tubing of 22 mm Ø
41586025	for tubing of 25 mm Ø
41586027	for tubing of 27 mm Ø
41586030	for tubing of 30 mm Ø

Pinchcocks
according to Mohr
made of nickel-plated brass, sterilisable

	Opening up to	Length
42750050	approx. 12 mm	approx. 50 mm
42750060	approx. 16 mm	approx. 60 mm
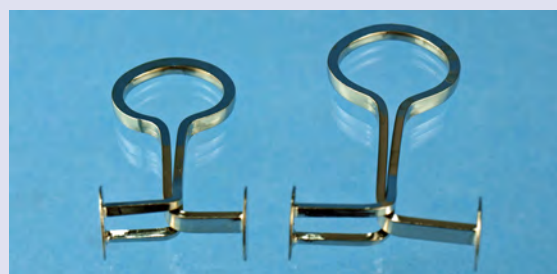
Clamps according to Hoffmann
with swivel jaw, made of nickel-plated brass, sterilisable

	Height inside	Opening to
42755020	approx. 16 mm	approx. 20 mm
42755025	approx. 21 mm	approx. 25 mm
42755030	approx. 25 mm	approx. 30 mm

Pipettors and Pipette Fillers

Pipettors

macro-Pipex

The macro-Pipex is not dependent on electricity or batteries, but is manually operated.
Pipetting at the touch of a button, whereby a complete stroke delivers approx. 2 ml.
The standard sterile filter acts as safety stop against the penetration of liquids into the device. The flowing out of the pipette is regulated via the lower control button.
Pipetting can be this simple, safe and inexpensive.

- suitable for all conventional pipettes from 0.5 ml on
- inbuilt protection against the penetration of liquids
- ergonomic design
- maintenance-free

	Sterile membrane filter	Weight
42575010	0.2 µm	approx. 140 g

macro-pipettors

suitable for working with measuring pipettes and volumetric pipettes from 0.1 up to 100 ml.
Standard membrane filter against penetration of liquids.
Resistant to steam sterilisation up to +121 °C/+249.8 °F

42576001	Membrane filter, 3 µm, unsterile, made of polypropylene and PTFE
42576002	Silicone adapter, length approx. 44 mm
42576003	Suction bellow with screw connection
42576004	Valve assembly made of polypropylene, PTFE and silicone
42576005	Adapter housing made of polypropylene
42576010	macro-pipettors with filter

Accupipex II with recharger, CE

with adjustable pipette nozzle, ergonomical, for easy serial pipetting, for all pipettes from 0.1 to 100 ml,
8 hours pipetting without recharging, charging display (LED), with storage stand and wall holder

Absorption and discharge speed as well as the operating mode "blow out" and "free outflow" are adjustable. The powerful motor provides for fast pipetting.
Operating and recharging temperature: +10 °C/+50 °F up to +35 °C/+95 °F
Pipette adapter and membrane filter resistant to steam sterilisation for 20 min. at +121 °C/+249.8 °F.

Pipette adapter: Polypropylene
Filter: PTFE
Battery: AAA 800 mAh 3.6 V

42577001	Recharger with universal plugs, 230 V 50 Hz
42577002	Silicone adapter
42577004	Membrane filter, 0.45 µm, non-sterile
42577010	Accupipex with recharger

Pipettors "pi-pump"

42578006   for pipettes up to 0.2 ml - without quick-release valve
42578012   for pipettes up to 2 ml
42578018   for pipettes up to 10 ml
42578024   for pipettes up to 25 ml

Pipette fillers, standard model

made of natural rubber, red, with 3 valves

42580010   for measuring pipettes and volumetric pipettes
           up to 10 ml
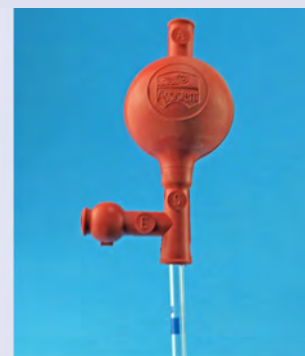
Pipette fillers, universal model

made of natural rubber, red, with 3 valves, with extended attachment

42581010   for measuring pipettes and volumetric pipettes
           up to 100 ml
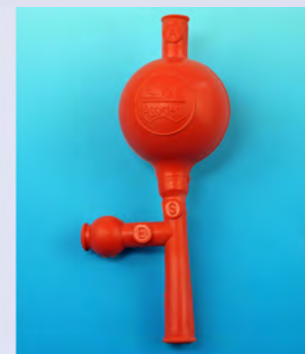
Pipette fillers "Flip"

made of natural rubber, red, with 2 valves
Convenient interior cleaning because of easy removable automatic valve.

42581020   for measuring pipettes and volumetric pipettes
           up to 100 ml

Test Tube Racks

Wooden

without pins
One level
42794001   for 6 tubes up to approx. 22 mm Ø
42794002   for 12 tubes up to approx. 22 mm Ø
42794013   for 6 tubes up to approx. 30 mm Ø

for 6 tubes, without pins
One level
42795010   for tubes up to approx. 18 mm Ø

for 12 tubes, without pins
Double level
42796010   for tubes up to approx. 18 mm Ø

Test tube racks wooden, for 18 tubes, without pins
Double level
42797010   for tubes up to approx. 18 mm Ø

Wooden test tube racks for 24 tubes, without pins
Double level
42798010   for tubes up to approx. 18 mm Ø

for 6 tubes, with 6 pins
One level
42800010   for tubes up to approx. 18 mm Ø

for 12 tubes, with 6 pins
Double level
42801010   for tubes up to approx. 18 mm Ø

for 18 tubes, with 9 pins
Double level
42802010   for tubes up to approx. 18 mm Ø

for 24 tubes, with 12 pins
Double level
42803010   for tubes up to approx. 18 mm Ø

Test tube racks made of Plexiglas®

for 12 tubes up to approx. 13 mm Ø, without pins
with numbered holes, one level

	Length	Width	Height
42807010	approx. 164 mm	approx. 55 mm	approx. 76 mm
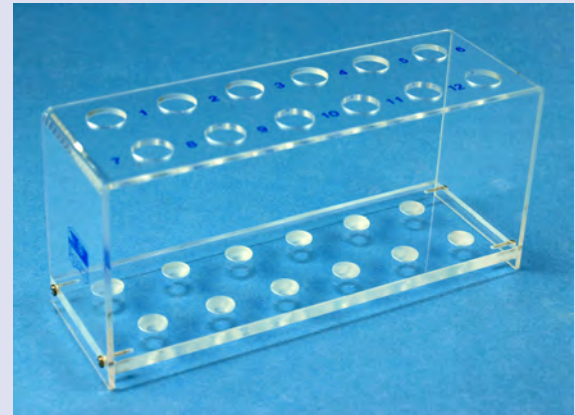
for tubes up to approx. 18 mm Ø, without pins
with numbered holes

	for	Length	Width	Height
42808006	6 tubes	approx. 165 mm	approx. 55 mm	approx. 75 mm
42808012	12 tubes	approx. 164 mm	approx. 55 mm	approx. 76 mm
42808024	24 tubes	approx. 220 mm	approx. 80 mm	approx. 79 mm
42808033	33 tubes	approx. 310 mm	approx. 80 mm	approx. 80 mm
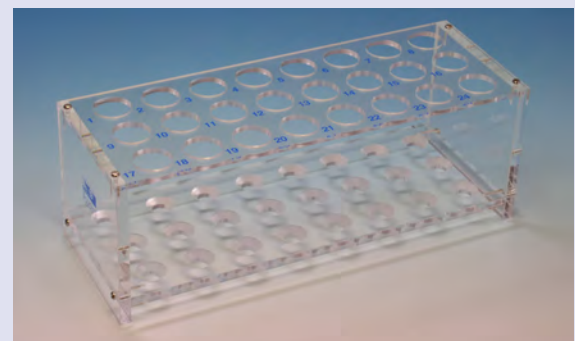
for 12 tubes up to approx. 18 mm Ø, with 6 pins

	Length	Width	Height
42809012	approx. 165 mm	approx. 70 mm	approx. 75 mm
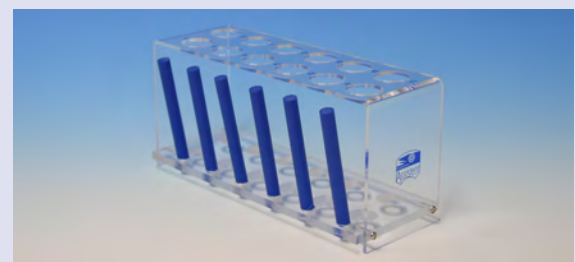
Test tube racks made of plastic

Polypropylene
Stackable, alphanumeric markings, autoclavable at +121 °C/
+249.8 °F, permanently −20 °C/−4 °F to +90 °C/+194 °F,
suitable for water baths

	Ø	Dimensions	for
42813.13	13 mm	265 x 126 x 75 mm	6 x 14 tubes
42813.18	18 mm	265 x 126 x 75 mm	5 x 11 tubes
42813.20	20 mm	265 x 126 x 75 mm	4 x 10 tubes
42813.25	25 mm	265 x 126 x 88 mm	4 x 8 tubes
42813.30	30 mm	265 x 126 x 88 mm	3 x 7 tubes

6th position of article number stands for colour: 1=blue, 2=yellow,
3=red, 4=white
Please indicate in your order!
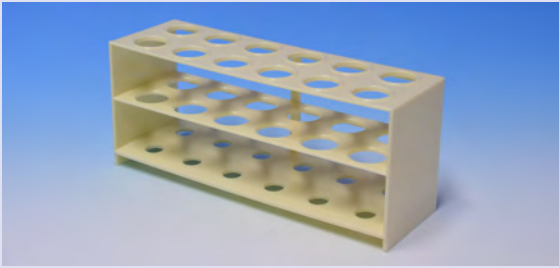
Polystyrene
One level, without pins
42814010   for 12 tubes up to approx. 20 mm Ø

Multi tube racks made of polyoxymethylene
Variable by 4 flexible holding areas, suitable for tubes 12 mm Ø up to
30 mm Ø (5 ml up to 50 ml), stackable, autoclavable +121 °C/
+249.8 °F, dimensions approx. 181 x 56 x 76 mm, different colour
combinations possible
Packing unit: 2 pieces
42822003   blue/green
42822005   blue/yellow
42822007   pink/white
42822013   blue/blue
42822015   white/white
42822017   pink/pink
42822019   yellow/yellow
42822021   green/green
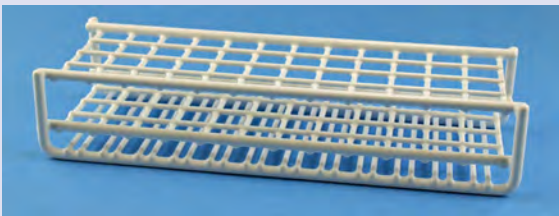
Test tube racks made of wire

Plastic-coated wire, white

for test tubes or centrifuge tubes

	for	for tubes up to	Height
42815012	12 tubes (3 x 4)	approx. 17 mm Ø	approx. 8 cm
42815024	24 tubes (4 x 6)	approx. 17 mm Ø	approx. 8 cm
42815036	36 tubes (3 x 12)	approx. 17 mm Ø	approx. 8 cm
42815048	48 tubes (4 x 12)	approx. 17 mm Ø	approx. 8 cm
42815248	48 tubes (4 x 12)	approx. 12 mm Ø	approx. 4 cm

for 48 (4 x 12) reaction tubes
plastic-coated, with handles
42818010   Height approx. 4 cm

Test tube racks made of wire for 24 (2 x 12) test tubes or centrifuge tubes

plastic-coated

	for tubes up to	Dimensions
44131010	approx. 17 mm Ø	approx. 25 x 5 x 7 cm
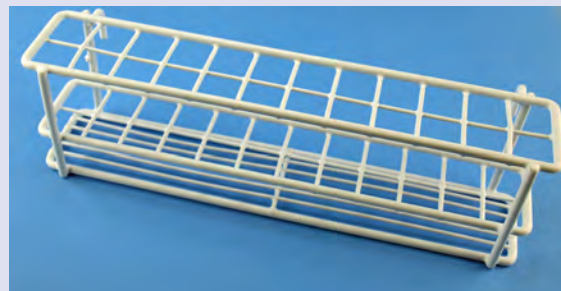
Laboratory tray 1 and accessories

42000008 Complete, consisting of plastic tray, Plexiglas® stand and 5 bottles
42000016 Plastic tray, approx. 35 x 25 x 4 cm
42000024 Plexiglas® stand, empty
42000
42000040 Bottles, wide neck, amber glass, 30 ml, with screw cap and frosted label for inscription (removable)
42000048 Bottles, narrow neck, amber glass, 50 ml, with screw cap and frosted label for inscription (removable)

Laboratory tray 2

42002008 Complete, consisting of
plastic tray no. 42000016,
rack for tubes
no. 42808024,
Plexiglas® stand, no. 42002024,
2 wide neck bottles, 30 ml, no. 42000040
1 narrow neck bottle,
50 ml, no. 42000048
42002024 Plexiglas® stand, small, empty
42002

Dishes and disposal boxes

Dishes made of melamine, white

Stackable
49064001 Dimensions approx. 35 x 25 x 4 cm
49064002 Dimensions approx. 29 x 16 x 3.5 cm

LABORATORY EQUIPMENT

Disposal boxes made of polypropylene

Sharps disposal box with cover, for used needles and clinical sharps, according to UN regulation

The UN examination includes:
- emission test
- GS test (meets safety requirements in accordance with German Equipment and Product Safety Act)
- license for the transport of infectious waste
- filling mark
- cover with incorporated closures

49070002   Capacity 1.8 litres

Draining Racks

Draining boards made of Plexiglas®, with trough

White back panel, with 23 pegs

49025010   Dimensions approx. 35 x 30 cm

Draining racks made of wire

Plastic-coated, white, suitable for hanging or standing, for 60 test tubes and 5 flasks, with plastic trough

49027010   Dimensions approx. 42 x 17 x 61 cm

Draining racks made of wire, small

Plastic-coated, white, suitable for hanging or standing, for up to 12 test tubes and 11 flasks, with plastic trough

49028010   Dimensions approx. 42 x 17 x 30 cm

Specimens Cups

Urine specimen cups

made of polypropylene
disposable, with scale and marking field, with red snap-on cover and lateral nipple
44115001   Capacity 125 ml

Urine specimen cups made of polypropylene
disposable, with scale and marking field, with green screw cap
44115002   Capacity 125 ml
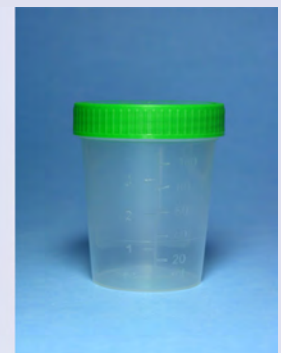
Transport containers

Faecal tubes, CE, with screw cap

44508010   made of polypropylene, with spoon and brown screw cap, approx. 76 x 20 mm, approx. 15 ml

44508020   Protection containers made of polypropylene, with screw cap, natural-coloured, loose, approx. 30 x 85 mm
suitable for no. 44508010

Porcelain Articles

Laboratory equipment made of porcelain

Evaporating dishes, half-round
with spout, glazed inside and outside

	Height	Capacity	Ø
47000006	approx. 25 mm	approx. 40 ml	approx. 63 mm
47000007	approx. 26 mm	approx. 50 ml	approx. 70 mm
47000008	approx. 34 mm	approx. 75 ml	approx. 80 mm
47000010	approx. 40 mm	approx. 115 ml	approx. 100 mm
47000012	approx. 47 mm	approx. 310 ml	approx. 115 mm
47000015	approx. 45 mm	approx. 370 ml	approx. 150 mm

Evaporating dishes, flat type
with spout, glazed, DIN 12903

	Height	Capacity	Ø
47002008	approx. 20 mm	approx. 40 ml	approx. 80 mm
47002010	approx. 22 mm	approx. 80 ml	approx. 100 mm

Büchner funnels

	Capacity	Stem	Filter area Ø	Height
47005040	approx. 25 ml	approx. 37 mm	approx. 40 mm	approx. 76 mm
47005055	approx. 75 ml	approx. 53 mm	approx. 55 mm	approx. 129 mm
47005070	approx. 135 ml	approx. 75 mm	approx. 70 mm	approx. 150 mm
47005090	approx. 290 ml	approx. 75 mm	approx. 90 mm	approx. 165 mm

Casseroles
Glazed, with handle

	Ø	Capacity	Height
47015010	approx. 102 mm	approx. 290 ml	approx. 69 mm
47015012	approx. 127 mm	approx. 500 ml	approx. 70 mm

Measuring jugs with handle and scale
with spout, cylindrical

	Capacity	Height
47020024	approx. 50 ml	approx. 55 mm
47020030	approx. 100 ml	approx. 72 mm
47020048	approx. 250 ml	approx. 96 mm
47020060	approx. 500 ml	approx. 131 mm
47020066	approx. 1000 ml	approx. 160 mm

Mortars with spout
Inside rough, outside glazed

	Capacity	Height	Ø
47030006	approx. 20 ml	approx. 32 mm	approx. 60 mm
47030008	approx. 70 ml	approx. 40 mm	approx. 80 mm
47030010	approx. 100 ml	approx. 50 mm	approx. 100 mm
47030013	approx. 300 ml	approx. 63 mm	approx. 130 mm
47030015	approx. 400 ml	approx. 65 mm	approx. 150 mm

Pestles with rough grinding surface
made of porcelain

	Length	Head Ø
47031006	approx. 100 mm	approx. 24 mm
47031008	approx. 115 mm	approx. 24 mm
47031010	approx. 135 mm	approx. 30 mm
47031013	approx. 150 mm	approx. 36 mm
47031015	approx. 180 mm	approx. 45 mm

Combustion boats
Unglazed

	Width	Length	Height
47035010	approx. 13 mm	approx. 80 mm	approx. 9 mm

Crucibles without cover
made of porcelain, medium-high form, glazed

	Height	Ø	Capacity
47040025	approx. 20 mm	approx. 25 mm	approx. 5 ml
47040030	approx. 25 mm	approx. 30 mm	approx. 10 ml
47040035	approx. 28 mm	approx. 35 mm	approx. 13 ml
47040040	approx. 32 mm	approx. 40 mm	approx. 20 ml
47040045	approx. 36 mm	approx. 45 mm	approx. 38 ml
47040050	approx. 40 mm	approx. 50 mm	approx. 50 ml

Covers for crucibles
made of porcelain
47041025   for 25 mm Ø
47041030   for 30 mm Ø
47041035   for 35 mm Ø
47041040   for 40 mm Ø
47041045   for 45 mm Ø
47041050   for 50 mm Ø

Stirrers

Mini stirrer, CE

Multi-purpose stirrer for easy stirring tasks with adjusted speed.
Drive motor, designed for continuous operation. Fixing is possible at any tripod due to the clamp.
Case made of polypropylene fully encapsulated and chemical-resistant.
Supporting bar, stirring rod and central attachment tube are made of stainless steel.
Power: 230 V, 50 Hz, 3 W
Speed: approx. 750 rpm fixed
Dimensions: approx. 85 x 60 mm Ø
Side arm (supporting bar): approx. 135 x 8 mm Ø
Stirring volume up to approx. 2 l (liquid)
Weight: approx. 210 g
Suitable stirring rods: 42067002 and 42067003

42068010   Delivery with stirring rod no. 42067003, without clamp and without stand
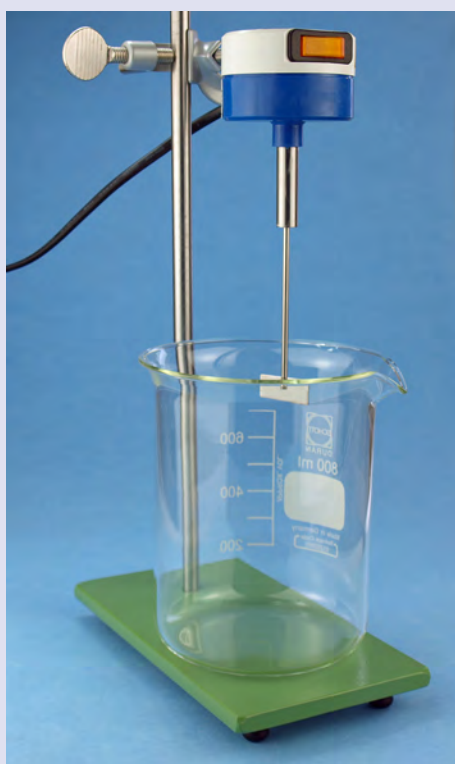
Stirrer R14, electronic speed control, CE

Handy, solid laboratory stirrer with stepless speed control for
continuous operation. The motor can be attached to every stand by
means of a clamp.
Standard stirring element is a stirring rod made of stainless steel
with wing end, which is adapted for the power of this motor.
Power: 220 V, 50 Hz
Motor: 25 W
Speed: steplessly from 100-2000 rpm
Dimensions: approx. 67 x 67 x 121 mm
Side arm: approx. 188 x 12 mm
Keyless drill chuck of approx. 38 x 18 mm Ø for stirring rod shafts of
up to 4 mm Ø
Stirring volume up to approx. 5 l (liquid)
Weight: approx. 1.2 kg

42068014   Delivery with stirring rod, without stand, without clamp

Stirrer R18, electronic speed control, CE

The solid laboratory stirrer is driven directly and is ideal for stirring
tasks of up to 50 litres (liquid), e.g. in schools and laboratories.
Small dimensions, large range of capacity.
Also suitable for high-viscosity solutions.
Suitable stirring rods: 8 mm shaft diameter (no. 42067004)
Output power: 85 W

42068018   Delivery without stand, without clamp, without stirring
               rod

Plastic stirring rods
Diameter approx. 2.5 mm, rod width approx. 3 mm
42067001   In bags of 500 pieces

Stirring rods made of stainless steel
with elongated stirring end for dipping into small openings.
Total length approx. 120 mm, head approx. 25 x 12 mm
(suitable for mini stirrer no. 42068010)
42067002   Elongated

Stirring rods made of stainless steel
with transverse stirring end for maximum stirring power.
Total length approx. 120 mm, head approx. 25 x 12 mm
(suitable for mini stirrer no. 42068010)
42067003   Transverse

Stirring rods made of stainless steel
suitable for no. 42068018, with transverse stirring end.
Total length approx. 350 mm, head approx. 90 x 15 mm,
shaft diameter approx. 8 mm
42067004   Transverse

Test tube shaker Reamix, CE

Operation by pressure onto the plate or continuous operation. One-hand operation
Suitable for mixing liquids in test tubes of up to 30 mm Ø as well as in small flasks
Shaking rate infinitely variable.
According to VDE
Power: 230 V, 50 Hz
Shaking rate: 0-45 Hz
Power switch with indication light
Electronically controlled motor, steplessly adjustable from 0-2800 rpm
Cable 1.5 m long with safety plug
Plate made of polypropylene, chemical-resistant
Dimensions: approx. 156 x 150 x 110 mm
Weight: approx. 1.7 kg

42789010   with double function

Reamix, CE

Test tube shaker with dual function.
Dimensions: approx. 110 x 100 x 90 mm
Weight: approx. 1.1 kg
All other specifications as with article no. 42789010

42789020   Small type

Test tube shakers, optoelectronically controlled, CE

for test tubes, small flasks, beakers, reaction vessels, microplates etc.
Circular shaking motion with soft start.
Universal attachment for test tubes up to 30 mm Ø in the centre and foam holes with 8, 10 and 15 mm Ø for centrifuge tubes and other tubes.
At low speed the foam platform can hold small beakers or dishes for smooth shaking motions.
Power: 230 V, 50 Hz
Power switch with indication light
Shaded-pole motor 45 W
Speed: steplessly adjustable from 100-2800 rpm
Attachment: Polypropylene, chemical-resistant
Shaking rate: 45 Hz
Timer: 1-60 minutes
Dimensions: approx. 150 x 160 x 103 mm
Weight: approx. 1.9 kg

42789030   with dual function

Magnetic Stirrers

Mini magnetic stirrer, CE

in flat housing made of polypropylene, fully encapsulated. The synchronous motor is rated for continuous operation at 500 rpm. This device is suitable for light mixing jobs. The housing is fully encapsulated, construction according to VDE, cable with Europlug.
Cable: 1.5 m
Voltage: 230 V, 50 Hz, 4 W
Dimensions: approx. 147 x 77 x 49 mm
Weight: approx. 350 g

42069010   for volumes up to 1 litre (liquid)

Magnetic stirrer, CE, fully electronic speed control

with cover made of stainless steel.
The motor is being readjusted electronically. No speed fluctuations in case of changing viscosity or in case of power fluctuations.
Power: 230 V, 50 Hz
Power consumption: 18 W
Motor: brushless drive motor
Power switch with indicator light
Speed: steplessly adjustable from 100 - 1100 rpm
Cable: 1.5 m long with safety plug
Dimensions: approx. 210 x 245 x 100 mm
Weight: approx. 4.5 kg

42070020   for volumes up to 50 litres (liquid)

Magnetic stirrer, CE, fully electronic speed control

Specifications as with article no. 42070020
Dimensions: approx. 300 x 310 x 100 mm
Weight: approx. 6.5 kg

42070028   for volumes up to 100 litres (liquid)

Magnetic stirrer, CE

with cover made of stainless steel, quiet motor with precise, electronic speed control. Base painted acid-resistant.
Construction according to VDE.
Power: 230 V, 50 Hz
Power consumption: 40 W
Motor: shaded-pole motor
Power switch with indication light
Speed: steplessly adjustable from 80 - 1600 rpm
Cable: 1.5 m long with safety plug
Dimensions: approx. 160 x 160 x 100 mm
Weight: approx. 1.6 kg
Capacity up to approx. 10 litres (liquid)

42070004   without heating

Magnetic stirrer, CE, fully electronic speed control

It is not possible to exceed the given set point.
No speed fluctuations even with different viscosities of the stirring material. Even fluctuations in the mains supply have no effect on that.
Specifications as with article no. 42070004

42070012   without heating

Mini magnetic stirrer, CE

Power: 230 V, 50 Hz
Power consumption: 6 W
Motor: stepper motor
Power switch with indication light
Speed: steplessly adjustable from 10 - 1200 rpm
Cable: 1.5 m long with safety plug
Dimensions: approx. 110 x 100 x 55 mm
Weight: approx. 0.9 kg
Stirring quantity up to approx. 1 litre (liquid)

42070036   without heating

Magnetic stirrer TMA, CE

Cover made of stainless steel, good temperature control.
Base painted acid- and alkali-resistant. Precise, electronic speed control. Construction according to VDE.
Power: 230 V, 50 Hz
Power consumption: 40 watts
Motor: shaded-pole motor
Power switch with indication light
Indication light for heating plate
Diameter of heating plate: approx. 130 mm
Heating power: 500 watts
Temperature control: steplessly from room temperature to +300 °C/+572 °F
Speed: steplessly adjustable from 80 - 1600 rpm
Cable: 1.5 m long with safety plug
Dimensions: approx. 150 x 150 x 100 mm
Weight: approx. 2.5 kg
Stirring quantity up to approx. 10 litres (liquid)

42071004   Circular stainless steel heating plate

Magnetic stirrer TMA, CE, fully electronic

Fully electronic speed and temperature control with digital display
and timer as well as connection for a PT-100 temperature sensor
Power: 230 V, 50/60 Hz
Power consumption: 25 W
Motor: shaded-pole motor
Power switch and heating plate switch with LED
Diameter of heating plate: approx. 130 mm
Heating power: 500 W
Temperature control: steplessly from room temperature
to +350 °C/+662 °F
Speed: steplessly adjustable from 60 - 1600 rpm
LED display, 4 digits
Cable: 1.5 m long with safety plug
Dimensions: approx. 210 x 145 x 110 mm
Weight: approx. 2.3 kg
Stirring quantity up to approx. 10 litres (liquid)

Further details such as programmable sensor and heating plate
temperature, security system, tolerance of setting, stability with and
without PT-100 temperature sensor etc. are listed in the manual.

42071012   Circular stainless steel heating plate

Magnetic stirrer, CE

Fully electronic speed and temperature control, with digital display
and timer, as well as connection for PT-100 temperature sensor
Dimensions of heating plate: approx. 135 x 135 mm
All other specifications as with article no. 42071004

42072012   Square CERAN® heating plate

Magnetic stirrer TMC, CE

Dimensions of heating plate: approx. 135 x 135 mm
Heating power: 600 W
All other specifications as with article no. 42071004

42072004   Square CERAN® heating plate

Mini magnetic stirrer, CE

with heating
Power: 230 V, 50/60 Hz
Power consumption: 6 W
Motor: stepper motor
Power switch with indication light
Speed: steplessly adjustable from 10 - 1200 rpm
Heating plate: Aluminium anodised
Heating power: 160 W
Temperature: steplessly adjustable from room temperature
to +250 °C/+482 °F
Dimensions heating plate: approx. 90 x 90 mm
Cable 1.5 m long with safety plug
Total dimensions: approx. 110 x 100 x 80 mm
Weight: approx. 1.2 kg
Capacity up to approx. 1 litre (liquid)

42073004   Energy-saving device

Magnetic stirring bars

PTFE-coated
Axially magnetised centre, suitable for high, slim vessels such as
measuring cylinders, jars etc.

	Length	Ø
42075001	approx. 12 mm	approx. 4.5 mm
42075002	approx. 15 mm	approx. 4.5 mm
42075003	approx. 20 mm	approx. 6 mm
42075004	approx. 25 mm	approx. 6 mm
42075005	approx. 30 mm	approx. 6 mm
42075006	approx. 40 mm	approx. 8 mm
42075007	approx. 50 mm	approx. 8 mm
42075008	approx. 60 mm	approx. 9 mm
42075009	approx. 70 mm	approx. 9 mm

Retrievers made of PTFE
for removing the stirring bar from the liquid

42076010   Dimensions approx. 350 x 8 mm

Magnetic stirring bars, PTFE-coated, octagonal
with central ring, suitable for vessels with slightly uneven bottom
The central ring reduces the contact face and the bar automatically
gets to the ideal stirring position.
The edged surface creates high turbulences, even with low speed.

	Length	Ø
42077001	approx. 13 mm	approx. 8 mm
42077002	approx. 15 mm	approx. 8 mm
42077003	approx. 25 mm	approx. 8 mm
42077004	approx. 25 mm	approx. 10 mm
42077005	approx. 38 mm	approx. 8 mm
42077006	approx. 38 mm	approx. 10 mm
42077007	approx. 38 mm	approx. 13 mm
42077008	approx. 51 mm	approx. 8 mm
42077009	approx. 51 mm	approx. 10 mm
42077010	approx. 64 mm	approx. 10 mm
42077011	approx. 75 mm	approx. 12 mm

PTFE-coated, triangular
suitable for large vessels with flat bottom
These stirring bars create intense turbulences and detach solids.

	Length	Ø
42078001	approx. 12 mm	approx. 6 mm
42078002	approx. 20 mm	approx. 8 mm
42078003	approx. 25 mm	approx. 8 mm
42078004	approx. 25 mm	approx. 14 mm
42078005	approx. 35 mm	approx. 10 mm
42078006	approx. 40 mm	approx. 14 mm
42078007	approx. 50 mm	approx. 12 mm
42078008	approx. 55 mm	approx. 14 mm
42078009	approx. 80 mm	approx. 16 mm

Magnetic stirring bars, PTFE-coated, oval

suitable for round bottom flasks
The shape of the stirring bar ensures a complete mixing.

	Length	Ø
42079001	approx. 20 mm	approx. 10 mm
42079002	approx. 25 mm	approx. 12 mm
42079003	approx. 35 mm	approx. 16 mm
42079004	approx. 40 mm	approx. 20 mm
42079005	approx. 50 mm	approx. 20 mm
42079006	approx. 65 mm	approx. 20 mm
42079007	approx. 70 mm	approx. 20 mm

Sand bath

TS

for heating sand and liquid material of all kinds.
The bath attachment connected with the device is made of stainless steel.
The temperature regulation is controlled by a sensor. Setup according to VDE.
with cable, 1.5 metres, and safety plug
Bath approx. 140 x 140 x 55 mm inside
Voltage: 230 V
Power consumption: 600 W
Dimensions: approx. 16 x 15 x 15 cm
Temperature control range: +40 °C +330 °C/+104 °F +626 °F
Weight: approx. 1.3 kg

42081010   Capacity 1000 ml

Water Distilling Apparatus

CE

with special outlet for practical emptying and cleaning, complete with heater and directions for use, without tubing

Required quantity of cooling water: approx. 45 l/h
Temperature of cooling water (discharge): max. +60 °C/+140 °F

Spare parts
No. 40225805 Glass part
No. 40225810 Levelling U-tubes made of DURAN®
No. 40225815 Spare O-ring seals made of synthetic rubber (EPDM)
No. 40225820 Quick-action clamping ring, stainless steel
No. 40225825 Set of special accessories for filling connection
No. 40225830 Filling tubes for purifying agent, DURAN®
No. 40225835 Heater 230 V 2500 W
No. 40225840 Distillate discharge tube

	40225010
Conductivity	0.85 µs
Voltage	220 V, 2500 W
Quality	pH 7.06
Distillate temperature	approx. +60 °C/+140 °F
Capacity	approx. 3.5 l/h
Weight	approx. 4 kg

Water Purification

Ion exchanger

Mixed bed deioniser with conductivity meter, CE

Practical ion exchanger for purified water, according to DAB (German Pharmacopeia) and EuAB (European Pharmacopeia).
Including conductivity meter with inlet hose, outlet hose and wall holder (hose attachments R 3/4").
Blue lightproof cartridge avoids growth of algae.

	Range	Total capacity	Capacity	Dimensions
40075010	0-50 µs/cm (Conductivity)	approx. 4250 l at 1 °dH salt content	approx. 45 l per hour	approx. 600 x 100 mm Ø

Spare cartridge for no. 40075010

The used resin filling can be disposed of in the domestic refuse.
The empty PE cartridge is recyclable by a recycling station (not in the domestic refuse).
Cartridge with used resins may also be returned to us for free disposal.

40076010 2 screw connections

Aquademat (Demineraliser)

Demineralisation device - ion exchanger for demineralised water, according to DAB (German Pharmacopeia) and EuAB (European Pharmacopeia).
The exhaustion is indicated by colour indicator. Change of colour from amber to red.
consisting of three filter cartridges, of which the second cartridge is a safety filter and the third one a spare cartridge.
with accessories, wall holder and directions for use.

	Dimensions	Capacity	Total capacity
40080010	370 x 2 x 125 mm Ø	approx. 40 l per hour	approx. 7500 l at 1 °dH salt content

Reconditioned cartridge for Aquademat

for no. 40080010, regenerated cartridge in return
of the exhausted one
Notice: Spare cartridge no. 40088010 will be supplied and invoiced if no cartridge has been returned.

40087010   without hose

Spare cartridge (new) for Aquademat

included in set no. 40080010

40088010   Dimensions H 370 x 125 mm Ø

LABORATORY EQUIPMENT

Pocket pH meter, CE

Practical, battery-powered device
Measuring range: pH 0.0 - 14.0 : 0.1
Electrode approx. 8 x 1.2 cm Ø
Delivery including
- interchangeable electrode
- calibration set
- granulate for standard solutions for pH 4.0 / 6.86 and 9.18
- KCl solution, bottle of approx. 50 ml, for storing the electrode

detailed directions for use

43252010   Pocket pH meter, CE
43252001   Spare electrode with substances for standard solutions, pH 4.0 - 6.86 and 9.18
43252002   Spare granulate for standard solutions, pH 4.0 - 6.86 and 9.18
43252003   Spare KCl solution for storing the electrode, approx. 50 ml
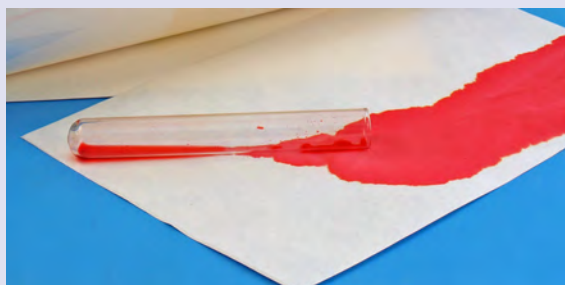
Absorbent paper

Rolls of protection paper

White, one side PE-coated (weight: cellulose 100 g/m² + PE 25 g/m²), protects laboratory benches and drawers
Absorption approx. 170 g/m²

44075040   Size 400 mm x 50 m
44075046   Size 460 mm x 50 m
44075060   Size 600 mm x 50 m
44075092   Size 920 mm x 50 m

Sheets of protection paper

Features like no. 44075...
100 sheets/pack

44080042   Size 420 x 520 mm
44080046   Size 460 x 570 mm
44080050   Size 500 x 600 mm

Detergents

Biorex M

Liquid concentrate for manual cleaning of laboratory equipment
  • phosphate-free, alkaline
  • easily measurable, self-acting and efficient cleaning.
    Suitable for glass, porcelain, ceramics, rubber, plastics,
    silicone, stainless steel
  • biodegradable, solvent-free, diluted not sewage-hazardous
UN 1824, class 8
Safety data sheet comes with the item.

	Capacity	pH value of 5 % solution
41406010	5 litres	approx. 12.5

Pipette brushes in sets of 4 pieces

42588010   for measuring pipettes 1-10 ml

Pipette brushes for measuring pipettes

Individually

	for measuring pipettes	Dimensions
42589001	1 ml	approx. 410 x 70 x 4.0 mm Ø
42589002	2 ml	approx. 405 x 75 x 4.5 mm Ø
42589005	5 ml	approx. 400 x 75 x 8.0 mm Ø
42589010	10 ml	approx. 400 x 100 x 12.0 mm Ø
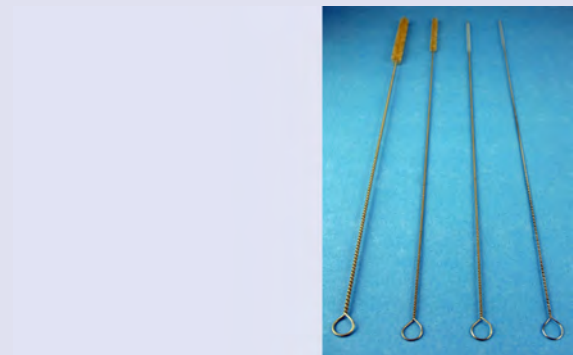
Laboratory Timers

Interval timers with alarm

for hanging, standing or lying.
Available in 3 different colours, easy operation

41974016   Running time up to 60 minutes, colour beige

41974024   Running time up to 60 minutes, colour blue

41974032   Running time up to 60 minutes, colour white

41974040   Running time up to 120 minutes, colour white

Digital interval timers, CE

- LCD display, 4 digits showing minutes and seconds
- programmable up to 99 min 59 s
- counts down in seconds
- Alarm sounds for 30 s when countdown reaches zero
- Memory recall function
- individual setting for minutes and seconds
- with magnetic back
- incl. battery (button cell LR 44 1.5 V)

41977010   Silver
41977020   White

Digital interval timers, table model, without magnetic back, CE

incl. battery AA 1.5 V
Features as with no. 41977010 and 41977020

41977030   Silver

Multi-function timers, CE

Interval timer with stopwatch and clock
- LCD display, 6 digits
- with clip, stand, magnetic back and battery
- with clock
- incl. battery (button cell) 1.5 V LR 44

41977040   Stopwatch up to 23 h 59 min 59 s
interval timer up to 23 h 59 min 59 s with alarm

Digital interval timers, 2 different timer channels, CE

- with magnet, stand and clip
- large LCD display, 6 digits for hours, minutes and seconds
- separate buttons for hours, minutes and seconds
- two different timer channels
- programmable for 99 h 59 min 59 s
- Stopwatch for counting upwards
- Clock showing standard time
- incl. battery AA 1.5 V

	Weight	Dimensions
41977050	approx. 100 g incl. battery	approx. 76 x 66 x 18 mm

Digital interval timers with large display, CE

- with magnet and stand
- LCD display, 4 digits showing minutes and seconds
- Countdown 99 min 59 s with acoustic signal
- Countdown in seconds
- incl. battery AAA 1.5 V

	Weight	Dimensions
41977060	approx. 70 g incl. battery	approx. 84 x 77 x 14 mm

Nurses lapel watch, non-toxic

- with clip, solid metal chain, 5 mm wide
- metal case, silvery polished
- fluorescent hour, minute and second hand
- quartz movement Seiko PC 21, watch glass made of mineral glass, 25 mm Ø
- including button cell 1.5 V (SR 66)

41975006	blue
41975012	green
41975018	orange
41975024	pink
41975030	red
41975036	white

Hand stopwatches
- Metal case, with 7 jewels
- Graduation 0 – 60 in 1/5 s and 1/100 min
- Solid version
- shock- and dustproof, water-protected

41978010   up to 30 minutes

Stopclocks, table model
Electronic analog table/wall stopclock,
clear face with persistent figures and hands.
incl. battery AA 1.5 V

	Inner scale	Outer scale
41979010	0-100/100 min	0-60 s, 0-60 min

Digital stopwatches, black, CE
- LCD display, 7 digits
- Division 0.01 s
- incl. battery (button cell) SR 54 1.55 V
- Functions: Start/Stop/Reset
           Addition/Reset
           Split
           Dual measurement

41980010   Display: 9 h 59 min 59.99 s
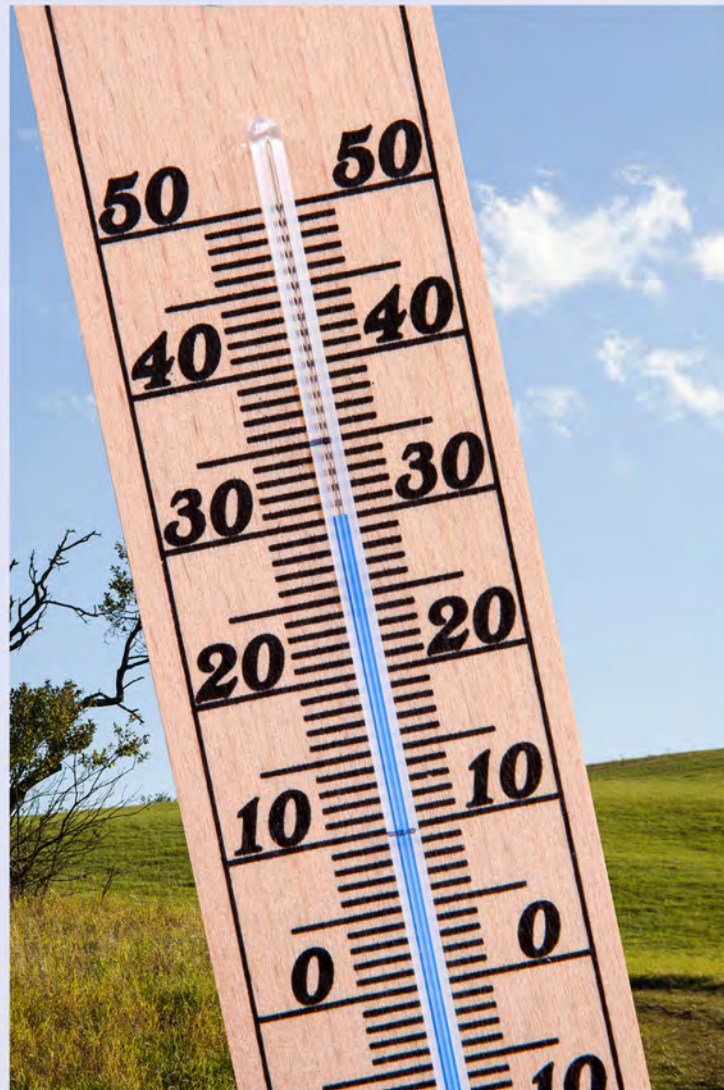
Thermometers

Laboratory Thermometers

Chemical thermometers

Mercury filling

DIN 12770, ordinary glass, division 1 °C/1.8 °F,
diameter approx. 7-8 mm
Packing: Each in a tube

	Range:
	Range:
43200008	0 +50 °C / 32 +122 °F
43200016	100 °C/212 °F
43200024	150 °C/302 °F
43200032	200 °C/392 °F
43200040	250 °C/482 °F
43200048	300 °C/572 °F
43200056	360 °C/680 °F
43200064	420 °C/788 °F

Red filling

Ordinary glass, division 1 °C/1.8 °F, diameter approx. 7-8 mm
Packing: Each in a tube

	Range:
43201008	0 +50 °C / 32 +122 °F
43201016	100 °C/212 °F
43201024	150 °C/302 °F
43201032	200 °C/392 °F
43201040	250 °C/482 °F

Maximum thermometers

for shaking

DIN 12770, reset of mercury by shaking, division 1 °C/1.8 °F
The maximum thermometer +200 °C/+392 °F is being used as
control thermometer with sterilisers.
Packing: Each in a tube

	Range	Dimensions
43205024	-10 +150 °C / +14 +302 °F	approx. 260 x 7-8 mm Ø
43205032	-10 +200 °C / +14 +392 °F	approx. 300 x 7-8 mm Ø

Maximum thermometers for shaking, for steriliser temperature control

DIN 12770, short type, with mercury filling, blue reflecting,
+80 +220 °C : 2 °C / +176 +428 °F : 3.6 °F
Packing: Each in a tube

43206010   Length approx. 11 cm
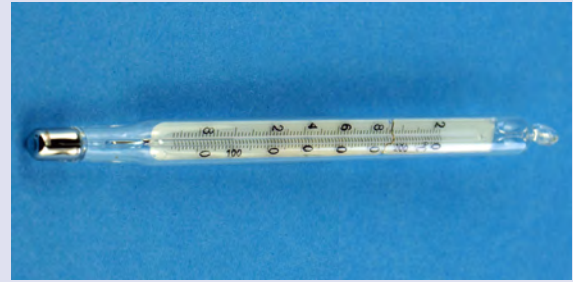
Pocket thermometers

Prismatic graduated glass

in nickel case with bayonet catch and clip, red or blue filling,
division 1 °C/1.8 °F, length approx. 14 cm

43208008   Range -35 +50 °C / -31 +122 °F
43208016   Range -10 +100 °C / +14 +212 °F

Precision thermometers

DIN 12770, ordinary glass, enclosed scale, Richter top finish with
knob, suitable for official testing, mercury filling
Packing: Each in a tube

	Range	Division	Length
43210001	-10 °C +50 °C / +14 °F +122 °F	0.5 °C / 0.9 °F	approx. 22 cm
43210002	-10 °C +50 °C / +14 °F +122 °F	0.1 °C/0.18 °F	approx. 42 cm
43210003	-10 +100 °C / +14 +212 °F	1 °C/1.8 °F	approx. 30 cm
43210004	-10 +100 °C / +14 +212 °F	0.5 °C / 0.9 °F	approx. 27 cm
43210005	0 +100 °C / 32 +212 °F	0.1 °C/0.18 °F	approx. 55 cm
43210006	-10 +150 °C / +14 +302 °F	1 °C/1.8 °F	approx. 30 cm
43210007	-10 +150 °C / +14 +302 °F	0.5 °C / 0.9 °F	approx. 35 cm
43210008	-10 +200 °C / +14 +392 °F	1 °C/1.8 °F	approx. 35 cm
43210009	-10 +200 °C / +14 +392 °F	0.5 °C / 0.9 °F	approx. 35 cm

Distillation thermometers

with standard ground 14/23

DIN 12770, with mercury filling, blue reflecting,
immersion length with ground 75 mm,
immersion tube diameter approx. 7 mm

43225024   Range -10 +150 °C : 0.5 °C / +14 +302 °F : 0.9 °F
43225040   Range -10 +250 °C : 1 °C / +14 +482 °F : 1.8 °F
43225056   Range -10 +360 °C: 1 °C / +14 +680 °F: 1.8 °F
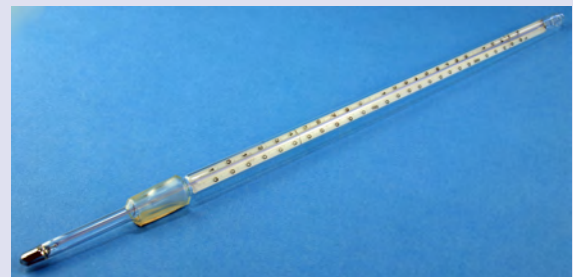
Clinical thermometers without mercury, CE

Classic liquid thermometer made of glass

- **can be disinfected completely** (the temperature of the cleaning solution and disinfectant must not exceed +42 °C/+107.6 °F)
- **non-toxic measuring fluid** Galinstan® (eutectic alloy consisting of gallium, indium and tin)
- **eco-friendly -** may be disposed of as domestic waste

	Range	Tolerance
43310010	+35 °C +42 °C/+95 °F +107.6 °F	± 0.1 °C/32.18 °F

Digital clinical thermometer with signal

Electronic, waterproof, for measuring the body temperature of human and animal, with LCD display and battery LR 41
Each in plastic tube and box, with directions for use

	43315010
Range	+32 °C +42 °C/+89.6 °F +107.6 °F
Measuring time	approx. 1 min at room temperature
Battery life	approx. 250 hours
Accuracy	± 0.1 °C/32.18 °F

Bath thermometers

for hospital

Solid finish, plastic, coloured filling

	Range	Length
43690010	0 °C +50 °C/+32 °F +122 °F	approx. 40 cm
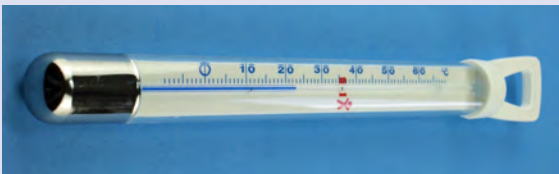
Bath thermometer, cylindrical

Floating vertically, coloured filling, completely closed model, shock-protected capillary

	Range	Length
43698010	0 °C +70 °C/+32 °F +158 °F	approx. 24 cm

Bath thermometer in square wooden case

with handle, paper scale, coloured filling

	Range	Length
43700010	-10 °C +50 °C/+14 °F +122 °F	approx. 25 cm

Bath thermometer in boat shape

made of plastic, assorted colours (blue, rose, white)

	Range	Length
43711010	0 °C +50 °C/+32 °F +122 °F	approx. 16 cm

Bath thermometer in fish shape

in plastic frame, coloured filling, measuring range 0 °C/32 °F up to +50 °C/+122 °F

43720010 blue
43720020 pink

In- and Outdoor Thermometers

Thermometers

based on the principle of Galileo Galilei

Galileo discovered that the density of a liquid changes in proportion to its temperature.
The temperature is indicated by discs hanging from coloured spheres. The weight difference of the spheres is 0.006 g only and ensures an accuracy of 1 °C/1.8 °F.
The spheres descend slowly when the temperature increases and they rise when the temperature falls. The temperature has to be read from the lowest disc of the high floating spheres.
The liquid is ozone friendly and hardly inflammable. No toxic fumes are emitted.

- free of CFC
- no cloudiness of the liquid

	43510101	**43510102**	**43510103**	**43510128**
Range	+18 +26 °C / +64.4 +78.8 °F	+18 +24 °C / +64.4 +75.2 °F	+17 +27 ºC / +62.2 +80.6 °F	+18 +26 °C / +64.4 +78.8 °F
Division	2 °C / 3.6 °F	1 °C/1.8 °F	1 °C/1.8 °F	2 °C/3.6 °F
Height	33 cm	44 cm	64 cm	28 cm
Spheres	5	7	11	5
Filling of spheres	green, cognac, blue, multi-coloured	red, cognac, blue, green, multi-coloured	red, cognac, blue, green, multi-coloured	red, cognac, blue, multi-coloured

6th position of article number stands for colour: 1=blue, 2=multi-coloured, 3=cognac, 4=green, 5=red
Please indicate in your order!

Room thermometers, beech wood, natural varnish
with coloured filling, range -30 °C +50 °C/-22 °F +122 °F
43513010   Length approx. 20 cm

Freezer-fridge thermometers, digital, CE
- according to EN 13485
- Indication of temperature with corresponding freezer-fridge symbol
- highest and lowest temperature
- switchable °C/°F
- with stand and frame for mounting on surfaces or behind glass
  (display fridge, vegetable drawer)

	43595010
Range	-30 °C +50 °C / -22 °F +122 °F
Division	0.1 °C/0.18 °F
Weight	approx. 65 g
Dimensions	approx. 72 x 91 x 13 mm
including battery	CR 2032 button cell
Accuracy	± 0.8 °C at -20 °C +10 °C, otherwise ± 1 °C

Freezer thermometers
Officially tested, with holder
43599010   Range -35 °C +25 °C / -31 °F +77 °F

Freezer-fridge thermometers
Cylindrical plastic case, for hanging, coloured filling,
range -40 °C +50 °C / -40 °F +122 °F
43600010   Length approx. 21 cm

Window thermometers, Vienna type, fittings of metal
Blue filling, range -50 °C +50 °C
43605010   Length approx. 20 cm

Maximum-minimum thermometers
Plastic case with push button magnet, environmentally friendly
capillary filling, without roof, black
43646010   Range -35 °C +50 °C/-31 °F +122 °F

Maximum-minimum thermometers
Plastic case with push button magnet,
environmentally friendly capillary filling, with roof, beige
43647010   Range +35 °C +50 °C/+95 °F +122 °F

Sauna hygrometers
Metal, circular, range 0-100 %
43623010   Diameter approx. 10 cm

Manometers (Vacuum gauges) according to Bennert
Each in a box, wooden stand with adjustable mirror glass scale,
0-90 torr
42085001   with mercury filling

Digital Thermometers

Thermometer, electronic, CE
Multi-purpose thermometer, with sensor made of stainless steel and
extension cable.

- LCD display
- Temperature Celsius or Fahrenheit
- Maximum and minimum display with temperature
  memory
- Hi-Lo alarm, programmable
- Display for low battery
- Resolution ± 0.1 °C/± 0.18 °F : -19.9 °C/-3.82 °F
  to +199.9 °C/+391.82 °F (otherwise: ± 1 °C/± 1.8 °F)
- Precision: ± 1 °C/± 1.8 °F : -30 °C/-22 °F
  to +250 °C/+482 °F, otherwise more than ± 2 °C/± 3.6 °F
- Ambient temperature for plastic case:
  -10 °C +50 °C/+14 °F +122 °F
- Delivery incl. battery (1.5 V AAA) and directions for use

	43232010
Range	-50 +300 °C / -58 +572 °F
Cable	approx. 1 m long
Metal sensor	approx. 13 cm long

Digital thermometer "mini"

Light, electronic digital thermometer with temperature memory function, sensor made of stainless steel, with battery
Operating
Right switch set to "ON", left switch set to "TEST" = normal temperature display.
Left switch set to "HOLD" = current display and hold down, °C flashes.

	43235010
Max. ambient temperature for plastic case	-10 °C up to +50 °C
Range	-50 °C +150 °C
Division	0.1 °C at -20 °C +150 °C
Accuracy	± 1 °C for -30 +150 °C
Battery life	approx. 5000 h
Immersion depth	approx. 60 mm

Digital pocket thermometers "ThermoJack", CE

Battery-powered, with foldable insertion sensor incl. button cell 3 V
- Folding angle up to 180°
- Accuracy ± 0.5 °C/32.9 °F from - 20 °C/-4 °F
  to +150 °C/+302 °F (otherwise ± 1 °C/33.8 °F)
- Large display
- Temperature Celsius or Fahrenheit

The thermometer automatically switches on at a folding angle of 45°. It switches off when the sensor is folded up again. The thermometer automatically switches off after approx. 10 minutes, if the folding up of the sensor is being omitted.
Particularly handy and ideal for frequently changing work sites.
The functional thermometer is suitable for temperature measurement of fluid, pasty and semisolid mediums - also for food in accordance with HACCP and EN 13485.

	Range	Division	Length insertion sensor
43238010	-40 °C +250 °C / -40 °F +482 °F	0.1 °C/32.18 °F	approx. 60 mm

Temperature data logger „MicroLite", CE

robust and watertight
Application in all areas where temperature recording is needed, e.g. food sector, transport and storage business, pharmaceutical industry etc.
Free software available (internet download).

Product features
• Adjustable interval: 1 second up to 1 hour
• Graphic and tabular presentation of measured values
• Export function for Excel
• IP68 waterproof
• USB interface
• Hi-Lo alarm
• Case of plastic (ABS)
• with fixing

	43240010
Range	-40 °C +80 °C / -40 °F +176 °F
Division	0.1 °C / 0.18 °F
Lithium battery	1x CR2032 (3 volts)
Memory capacity	32000 measurements
Display	7 segment LCD
Dimensions	approx. 110 x 39 x 26 mm
Weight	approx. 70 g
Connection	USB standard port
Interface	USB 2.0
Accuracy	± 0.3 °C / 0.54 °F

Maximum-minimum thermometer with digital display, CE

for indoor and outdoor, splash-proof,
measuring range -20 °C +50 °C/-4 °F +122 °F,
temperature Celsius or Fahrenheit
   •   present temperature / highest and lowest day temperature
   •   including button cell 1.5 V AAA

43653010   green
43653020   black

Weather station with sender unit, CE

Barometer (tendency), thermometer, hygrometer, radio-controlled clock, date display
Thermometer
- Range -10 °C +60 °C / +14 °F +140 °F
- Resolution 0.1 °C/32.18 °F
- °C or °F

Radio-controlled clock
- incl. 3 batteries AA 1.5 V (LR 6)

Sensor unit
- with LCD display and LED indicator
- low battery warning
- stand-up device, wall mounting
- range dependent on building structure and placement: max. 100 m from station
- incl. 2 batteries AA 1.5 V (LR 6)

	43655010
Range	-40 °C +60 °C / -40 °F +140 °F (sensor unit)
Relative humidity	20 - 95 %
Sensor unit	approx. 160 x 43 x 26 mm / 75 g
Station	approx. 180 x 102 x 33 mm / 230 g

Maximum-minimum thermometer, electronic, CE

for measuring indoor and outdoor temperatures
- present temperature/highest and lowest day temperature
- for hanging or standing
- extra thin cable for easily leading through window seals
- waterproof exterior sensor
- including battery 1.5 V AA

	43656010
Measuring range inside	-10 °C +50 °C / +14 °F +122 °F
Measuring range outside	-50 °C +70 °C / -58 °F +158 °F
Cable	approx. 3 m long
Temperature	Celsius/Fahrenheit

Maximum-minimum thermometer, solar-powered, CE

with digital display, for measuring indoor and outdoor temperatures
- present temperature/highest and lowest day temperature
- for hanging or standing
- extra thin cable for easily leading through window seals
- waterproof exterior sensor
- incl. interchangeable backup round cell battery 1.5 V AA (LR 44, GA 13)
- Guarantee: 5 years

	43657010
Measuring range inside	-20 °C +70 °C / -4 °F +158 °F
Measuring range outside	-40 °C +70 °C / -40 °F +158 °F
Cable	approx. 3 m long
Temperature	Celsius/Fahrenheit
Colour	black
Accuracy	± 1 °C/1.8 °F

Rain Gauges

made of clear plastic, with holder for easier removing. Easily readable scale.
Each graduation mark = 1 mm (1 litre) precipitation per m²

Packing: Each in cardboard box

44278010   Height approx. 25 cm

Hydrometers

Hydrometers

General information:

- All density hydrometers, if not stated differently, have a reference temperature of 20 °C/68 °F
- Baumé hydrometers have a reference temperature of 15 °C/59 °F
- Hydrometers with other reference temperatures are available as well. Please mention the required temperature in your order
- The given lengths must be calculated with a tolerance of ± 2 cm

The hydrometers are with paper scale and steel metal ballast.
Packing: Each in protective plastic tube
Density hydrometers can be manufactured with scale according to specific weight on request. Reference temperatures of 15, 20 or 27.5 °C/59, 68 or 81.5 °F are possible.
(In the following charts you can find an abstract of our hydrometers, further executions with other measuring ranges can be found on our website.)

Density hydrometers

Scale range 0.060 : 0.001 g/cm³

46000... without thermometer, approx. 300 mm long

46001... without thermometer, approx. 160 mm long

46004... with thermometer

Length Thermometer Range	300 mm Without Catalogue no.	160 mm Without Catalogue no.	350 mm 0+35/40:1°C Catalogue no.	
1.000-1.060	46000008	46001008	46004008	
1.060-1.120	46000009	46001009	46004009	
1.120-1.180	46000010	46001010	46004010	
0.700-2.000	46000040	46001040	46004040	Range finder

Scale range 0.100 g/cm³

46012... without thermometer, division 0.001 g/cm³

Length Thermometer Range	300 mm Without Catalogue no.
0.600-0.700	46012001
0.700-0.800	46012002
0.800-0.900	46012003
0.900-1.000	46012004
1.000-1.100	46012005
1.100-1.200	46012006
1.200-1.300	46012007
1.300-1.400	46012008
1.400-1.500	46012009
1.500-1.600	46012010
1.800-1.900	46012013

Density hydrometers, scale range 0.200 g/cm³

46023... without thermometer, division 0.002 g/cm³

46025... with thermometer, division 0.002 g/cm³

Length	**280 mm**	**350 mm**
Thermometer	**Without**	**0+35/40:1°C**
Range	**Catalogue no.**	**Catalogue no.**
0.800-1.000	46023002	---
1.000-1.200	46023003	46025003
1.200-1.400	46023004	---
1.400-1.600	46023005	---
1.600-1.800	46023006	---

without thermometer

Division 0.001 g/cm³, length approx. 35 cm

46022003   Range 1.000-1.200 g/cm³

46022004   Range 1.200-1.400 g/cm³

Density hydrometers, different scale ranges, division 0.005 g/cm³

without thermometer

Range:

46040001   0.700-1.000 g/cm³

46040002   1.000-1.300 g/cm³

46040003   1.300-1.600 g/cm³

46040005   1.000-1.400 g/cm³

46040006   1.400-2.000 g/cm³

46040007   1.000-1.500 g/cm³

with thermometer

	Reference temperature	Division	Range	Length
46041001	+20 °C/+68 °F	0.005 g/cm³	0.700-1.000 g/cm³	approx. 32 cm

Universal hydrometers

without thermometer

	Division	Range	Length
46105001	0.010/0.020 g/cm³	0.700-2.000 g/cm³	approx. 33 cm
46105003	0.010 g/cm³	1.000-2.000 g/cm³	approx. 29 cm

with thermometer

	Division	Range	Length
46106001	0.010 / 0.020 g/cm³	0.700-2.000 g/cm³	approx. 41 cm

Hydrometers according to Baumé

46140... without thermometer

46141... with thermometer

Length	220 mm	280 mm	320 mm
Thermometer	Without	Without	0 +40:1 °C
Division	1 Bé	0.1 Bé	0.1 Bé
Range	Catalogue no.	Catalogue no.	Catalogue no.
00 - 10	---	46140027	46141027
10 - 20	---	46140028	46141028
20 - 30	---	46140029	46141029
30 - 40	---	46140030	46141030
40 - 50	---	46140031	46141031
50 - 60	---	46140032	46141032
60 - 70	---	46140033	46141033
Length	240 mm		300 mm
0 - 30	46140001	---	46141001
0 - 50	46140003	---	46141003
0 - 70	46140004	---	46141004

Saccharometers according to Baumé see **46269010**

Alcoholmeters in percentage by weight (% mass)

without thermometer

Reference temperature +20 °C/+68 °F

	Range	Division	Length
46165001	0-100	1	approx. 25 cm
46165004	0-30	0.5	approx. 32 cm
46165005	30-60	0.5	approx. 32 cm
46165023	90-100	0.1	approx. 35 cm

Alcoholmeters in percentage by volume, reference temperature 20 °C/68 °F

46170... without thermometer

46171... with thermometer

	Range	Division	Length	Catalogue no.	Catalogue no.
Thermometer				Without	0+35/40:1°C
	0-100	1%vol.	260 mm	46170001	46171001
	0-70	1%vol.	360 mm	46170002	46171002

Alcoholmeters according to Richter and Tralles

without thermometer
Reference temperature +20 °C/+68 °F

	Range	Division	Length
46175010	0-100 weight % / volume %	1	approx. 25 cm

with thermometer
Reference temperature +20 °C/+68 °F

	Range	Division	Length
46176010	0-100 weight % / volume %	1	approx. 30 cm

Alcoholmeters according to Tralles
with glass jar in cardboard box, reference temperature +20 °C/+68 °F
46178010   Range 0-50: 2 and 50-100: 1 vol%

Hydrometers for potassium hydroxide

without thermometer

	Reference temperature	Range	Length
46197001	+15 °C/+59 °F	0 - 50 : 1° Baumé	approx. 25 cm

Lactodensimeters according to Gerber

without thermometer
Reference temperature +20 °C/+68 °F

	Division	Range	Length
46205010	0.5	1.020-1.040	approx. 23 cm

with thermometer
Reference temperature +20 °C/+68 °F

	Division	Range	Length
46206010	0.5	1.020-1.040	approx. 23 cm

Lactodensimeters according to Quevenne

without thermometer
Reference temperature +20 °C/+68 °F (+15 °C/+59 °F also available)

	Division	Range	Length
46210010	0.001 g/ml	1.015 - 1.040 g/ml	approx. 23 cm

with thermometer
Reference temperature +20 °C/+68 °F (+15 °C/+59 °F also available)

	Division	Range	Length
46211010	0.001 g/ml	1.015 - 1.040 g/ml	approx. 23 cm

Hydrometers for sodium chloride

without thermometer

with double scale for % weight (Dr. Bischoff) and density (g/cm³),
reference temperature +20 °C/+68 °F

	Range 1	Range 2	Length
46223001	0 - 30 : 0.5 % weight	1.000 - 1.230 : 0.002 g/cm³	approx. 27 cm

Hydrometers for sea water

without thermometer

1.000 - 1.040 : 0.0005 g/cm³
reference temperature +20 °C/+68 °F

46236001   Length approx. 25 cm

with thermometer

1.000 - 1.040 : 0.0005 g/cm³
reference temperature +20 °C/+68 °F

46236002   Length approx. 27 cm

Hydrometers for must according to Oechsle

without thermometer

0-130: 1 ° Oechsle
reference temperature +20 °C/+68 °F

46250010   Length approx. 30 cm

Hydrometers for wine and must according to Oechsle

without thermometer

0-120: 1 ° Oechsle and 0-15: 1 volume %,
reference temperature +15 °C or +20 °C/+59 °F or +68 °F

46252010   Length approx. 25 cm

Saccharometers according to Baumé

without thermometer

	Reference temperature	Range	Length
46269010	+20 °C/+68 °F	0 - 50: 1° Baumé	approx. 16 cm

Hydrometers for lime milk

without thermometer

Reference temperature +20 °C/+68 °F

46199010   Range 0 - 340 : 5.0 g/ml

Alcoholmeters according to Gay Lussac

with thermometer

	Reference temperature	Range	Length
46181010	+20 °C/+68 °F	0 - 100 : 1	approx. 34 cm

Density hydrometers, set of 6 pieces

without thermometer

Reference temperature +20 °C/+68 °F

	Division	Range	Length
46120010	0.005 g/cm³	0.700-2.000 g/cm³	approx. 18 cm

Range finders

without thermometer

	Division	Range
46123020	0.02 g/cm³	0.700-2.000 g/cm³

Hydrometers for sodium hydroxide solution

without thermometer

	Reference temperature	Range	Length
46224001	+20 °C/+68 °F	0 - 27 : 0.5 % weight	approx. 25 cm

Hydrometers for phosphoric acid

without thermometer

	Reference temperature	Range	Length
46228001	+15 °C/+59 °F	0 - 30 : 0.5 % weight	approx. 27 cm

Hydrometers for hydrochloric acid

without thermometer

with double scale in % weight and density (g/cm³),
reference temperature +20 °C/+68 °F

	Range 1	Range 2	Length
46230001	0 - 40 : 0.5 % weight	1.000 - 1.210 : 0.002 g/cm²	approx. 27 cm

Saccharimeters

without thermometer

according to Brix or Balling, in % weight (% mass sucrose/water),
reference temperature +20 °C/+68 °F, length approx. 28 cm

46265016   Range 0-20: 0.2
46265031   Range 0-10: 0.1

with thermometer

according to Brix or Balling, in % weight (% mass sucrose/water),
reference temperature +20 °C/+68 °F

	Range	Length
46266001	0-30: 1	approx. 20 cm
46266003	30-60: 1	approx. 20 cm
46266007	0-10: 0.1	approx. 28 cm
46266024	0-30: 0.2	approx. 30 cm
46266032	10-20: 0.1	approx. 28 cm
46266040	0-20: 0.1	approx. 38 cm

Hydrometers for ammonia

without thermometer
double scale 0.880-1.000: 0.002 g/cm³

	Reference temperature	Range	Length
46186010	+20 °C/+68 °F	0-36: 0.5 % weight	approx. 27 cm

Hydrometers for ammonia with thermometer
double scale 0.880-1.000: 0.002 g/cm³

	Reference temperature	Range	Length
46187010	+20 °C/+68 °F	0-36: 0.5 % weight	approx. 30 cm

Hydrometers for hydrogen peroxide

without thermometer

	Reference temperature	Range	Length
46227010	+20 °C/+68 °F	0-50: 1 % weight	approx. 27 cm

Miscellanea
Fermenting tubes
made of glass with 2 bulbs and extension

	Tube Ø	Total length
41350010	10-11 mm	approx. 200 mm
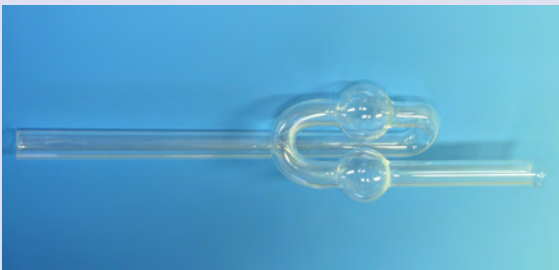
Vinometers
according to Bernadotte made of glass, amber graduation
44200010   Wine test glasses

Hospital Equipment

Equipment for Physician and Hospital

Medicine glasses, CE
Conical, with straight rim, with engraved scale in grams and spoons,
50 pieces/box
41101010   Capacity approx. 25 ml

Medicine cups, CE
made of polypropylene, disposable, approximate scale,
capacity approx. 30 ml, smallest packing unit 80 pieces
41102001   colourless
41102002   blue
41102003   red
41102004   yellow
41102005   green

Covers, CE
for medicine cups no. 41102...,
500 pieces in bag, 4000 pieces in carton
41102015   Colour white

Medicine dispensers
with print in German: "Morgen" - "Mittag" - "Abend" - "Nacht"
("Morning" - "Noon" - "Evening" - "Night"), with sliding cover
made of clear plastic
Packing: 200 pieces
41103010   White, made of polypropylene, with 4 cases

Medicine tray made of polystyrene

White, for 19 medicine cups no. 41102001 and 19 medicine dispensers no. 41103010 (without cups, without dispensers)

41104010   Dimensions approx. 340 x 440 x 15 mm

Medicine tray (without cups)

consisting of white melamine tray, with Plexiglas® rack, with area for inscription

41105010   with 20 holes for medicine cups

Medicine spoons made of porcelain

Glazed, with scale in German (1 Teelöffel = 1 teaspoon, 1/2 Esslöffel = 1/2 tablespoon, 1 Esslöffel = 1 tablespoon)

41111010   White

Medicine spoons made of polypropylene

with scale in German (1 Teelöffel = 1 teaspoon, 1 Esslöffel = 1 tablespoon)

41112010   White

Feeding cups, CE

made of polypropylene, with approximate scale, without cover

44010010   Capacity approx. 250 ml
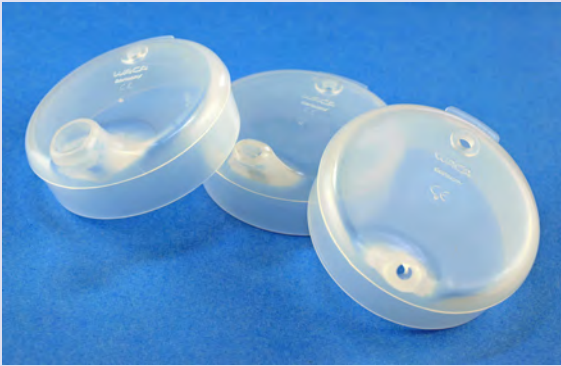
Feeding cup covers, CE
made of polypropylene, suitable for feeding cups no. 44010010

	Dimensions opening	Opening
44011004	approx. 4 mm	round
44011012	approx. 12 mm	round
44011048	approx. 4 x 8 mm	oval

Tubes made of clear glass, bent

44020010   25 pieces/pack

Sputum cups, CE
made of polypropylene, with removable hinged lid and funnel inset,
individually packed

	Capacity	Colour
43112010	approx. 410 ml	white

Kidney dishes made of polypropylene, CE
White, sterilisable
41120010   Length approx. 26 cm
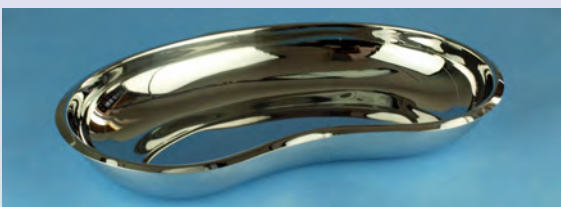
Kidney dishes made of stainless steel, CE
Sterilisable
41130010   Length approx. 25 cm

Bedpans made of polypropylene, CE
with cover, ivory-coloured, sterilisable up to +130 °C/+266 °F
43150010   Diameter approx. 32 cm

Bedpans made of stainless steel, CE
with knob lid, sterilisable
43155010   Diameter approx. 31 cm

Urinals made of polyethylene (LDPE) with cover, CE
Approximate scale, for men
44090010   Capacity 1000 ml

Urinals made of polycarbonate with cover, CE
Transparent, approximate scale, sterilisable, for men

	Capacity	Resistant to steam sterilisation	Hot air
44092010	1000 ml	max. +125 °C/+257 °F	max. +135 °C/+275 °F

Urinals made of polycarbonate without cover, CE

Transparent, approximate scale, sterilisable, for men

	Capacity	Resistant to steam sterilisation	Hot air
44093010	1000 ml	max. +125 °C/+257 °F	max. +135 °C/+275 °F

Urinals made of polyethylene, CE

for women, natural-coloured, approximate scale, with cover,
heat-resistant up to +90 °C/+194 °F

44104010   Capacity 1000 ml
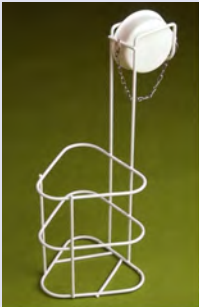
Urinal supports made of wire

with white plastic coating, with chain and cover,
for hanging on bed frame

44108010   for 1 urinal, triangular shape

Brushes for urinals

with wooden handle

44106010   Dimensions approx. 470 x 160 x 70 mm

Nameplate holder
made of Plexiglas®, for hospital bed

	Length	Ø
42325010	approx. 11 cm	approx. 3.5 cm
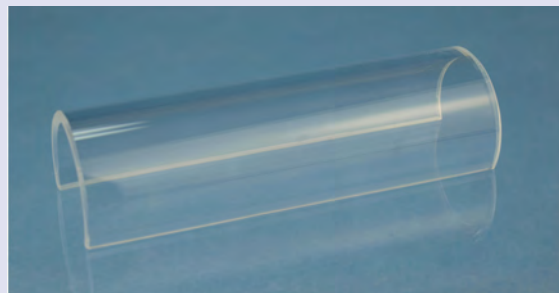
Notepad for nameplate holder
42325020 25 sheets

Sand glasses (hourglasses)
in nickel-plated metal case
42871010 1/4 minute
42871020 1/2 minute
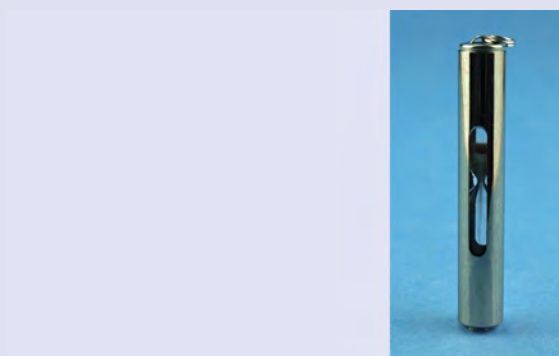
Sand glasses (hourglasses) with clip
in nickel-plated metal case
42872010 1/4 minute
42872020 1/2 minute
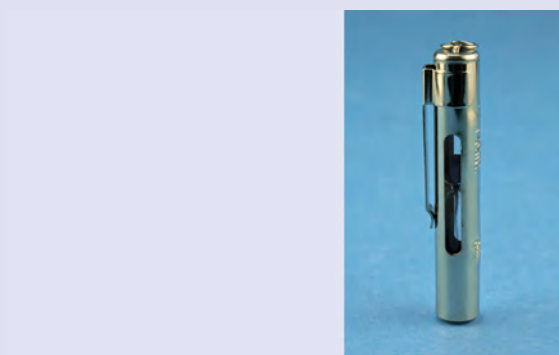
Eye baths, CE
made of plastic (SAN), 10 pieces in a plastic bag

	Capacity	Height	Ø
40302010	approx. 25 ml	approx. 37 mm	approx. 42 mm

Eye douches according to Schuster, CE
Clear glass, without stopper
40303006   Capacity approx. 50 ml
40303012   Capacity approx. 100 ml

Eye drop bottles according to Strohschein
with ground-in pipette, clear glass, without inscription

	Capacity	Bottle height	Outside Ø upper olive	Total height
40306010	approx. 32 ml	approx. 50 mm	approx. 8 mm	approx. 85 mm (incl. pipette)

Glass rods, both sides fused, CE
Clear glass, disposable, 100 pieces/pack

	Length	Ø
40320010	approx. 100 mm	approx. 3-4 mm

Glass rods, with knob and spatula, CE

Clear glass, disposable, 100 pieces/pack

	Length	Ø
40321010	approx. 100 mm	approx. 3-4 mm
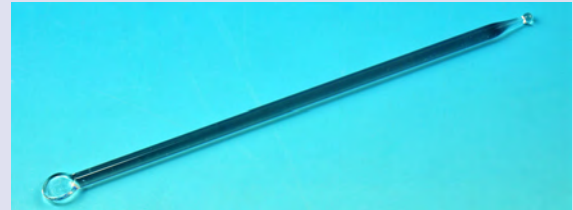
Dropping pipettes, with straight end

Clear glass, solid finish, without rubber teat, 50 pieces/pack
Suitable rubber teat: no. 42620010

	Ø	Length
40326010	approx. 7-8 mm	approx. 80 mm

Dropping pipettes, with bulbous end

Clear glass, solid finish, without rubber teat, 50 pieces/pack
Suitable rubber teat: no. 42620010

	Ø	Length
40328010	approx. 6-7 mm	approx. 70 mm

Dropping pipettes with 2 extensions

according to DAB (German Pharmacopeia)

40334010   Total length approx. 15 cm

Dropping pipettes with German inscription

"Normal 20 Tropfen = 1 g"

40335010   Length approx. 85 mm

Nasal douches according to Fränkel, CE
made of glass
42330010   Capacity approx. 30 g

Nasal douches according to Harke, CE
made of glass
42331010   Capacity approx. 100 g
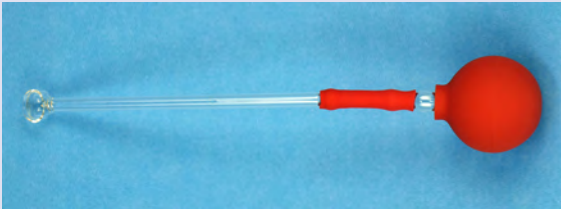
Tonsil suction set according to Roeder, CE
consisting of bulb made of PVC, free of cadmium, with glass
connecting piece and rubber hose connection, with 4 suction tubes
42880010   Bulb Ø approx. 51 mm

Spare tonsil suction tubes, CE
for suction set no. 42880010, total length approx. 180 mm
42881001   Suction part approx. 17 x 13 x 15 mm
42881002   Suction part approx. 20 x 15 x 16 mm
42881003   Suction part approx. 23 x 17 x 18 mm
42881004   Suction part approx. 27 x 20 x 20 mm

Nasal aspirators according to Muck, CE
Clear glass, with rubber stopper

	Wall thickness	Outside Ø	Length
42896010	1.2 ± 0.05 mm	20.0 ± 0.25 mm	approx. 85 mm

Infusion cylinders
with fused graduation "ASSISTENT-PERMANENT", hole at top, olive at bottom, for use in the veterinary medicine

	Division	Capacity
41600018	5 ml	approx. 250 ml
41600030	20 ml	approx. 1000 ml
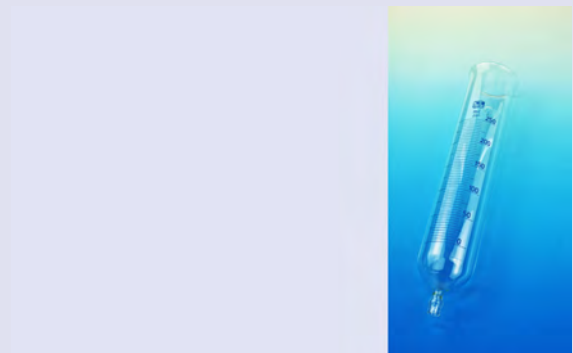
Specula, CE
made of clear glass, length approx. 15.5 cm
43017001 22-24 mm Ø
43017002 28-30 mm Ø
43017003 34-36 mm Ø
43017004 41-43 mm Ø

HOSPITAL EQUIPMENT

Dilators, CE
made of glass

	Upper Ø cone	Cone length
41024001	approx. 20 mm	approx. 70 mm
41024002	approx. 28 mm	approx. 80 mm
41024003	approx. 32 mm	approx. 80 mm

Breast pumps made of glass without ball, CE
with lateral bulb
40765010   with olive 12 mm

Breast pumps made of glass with ball, CE
with lateral bulb, with ball made of flexible PVC,
free of cadmium, each in a box
40766010   Ball Ø approx. 51 mm

Baby feeding bottles made of borosilicate glass 3.3, narrow neck
with scale

	Neck inside Ø	Capacity
41865010	approx. 20 mm	approx. 250 ml

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Baby feeding bottles made of borosilicate glass 3.3, wide neck
with scale

	Capacity	Neck inside Ø
41866010	approx. 250 ml	approx. 30 mm

Protective paper for treatment couch
White, 2 layers, perforated 38 cm, 100% cellulose
44085001	Roll 39 cm x 50 m
44085002	Roll 50 cm x 50 m
44085003	Roll 55 cm x 50 m
44085004	Roll 59 cm x 50 m

Wire baskets, square
Stainless steel
41075012	Dimensions approx. 12 x 12 x 12 cm
41075014	Dimensions approx. 14 x 14 x 14 cm
41075016	Dimensions approx. 16 x 16 x 16 cm
41075020	Dimensions approx. 20 x 20 x 20 cm

Applicators for cotton, beech wood, unpointed
Round, in bundles of 100 pieces, without cotton

	Length	Ø
44300015	approx. 15 cm	approx. 3 mm
44300020	approx. 20 cm	approx. 3 mm
44300025	approx. 25 cm	approx. 3 mm
44300030	approx. 30 cm	approx. 3 mm

Applicators for cotton, beech wood, one end pointed
Round, in bundles of 100 pieces, without cotton

	Length	Ø
44301015	approx. 15 cm	approx. 3 mm
44301020	approx. 20 cm	approx. 3 mm
44301030	approx. 30 cm	approx. 3 mm
44301035	approx. 35 cm	approx. 3 mm

Cotton sticks with one cotton end
100 pieces/pack
44302010   Length approx. 15 cm
44302020   Length approx. 20 cm
44302030   Length approx. 23 cm

Cotton sticks with one large cotton end
50 pieces/pack, cotton end approx. 10 mm Ø
44303010   Length approx. 20 cm
44303015   Length approx. 15 cm
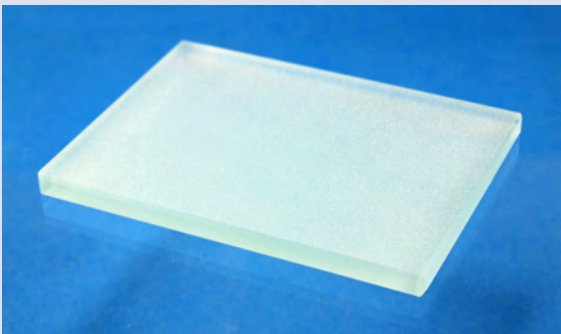
Glass plates (Cementum plates)
made of glass, for dentists, both surfaces frosted (also available with plain surfaces or one frosted surface), ground edges, 10 pieces/box
44355010   Dimensions approx. 95 x 70 x 6 mm

Dappen glasses
10 edges
41041004   green
41041008   crystal
41041012   rose
41041016   amber

Tongue depressors made of Plexiglas®, CE
Bent
44362010   Length approx. 20 cm
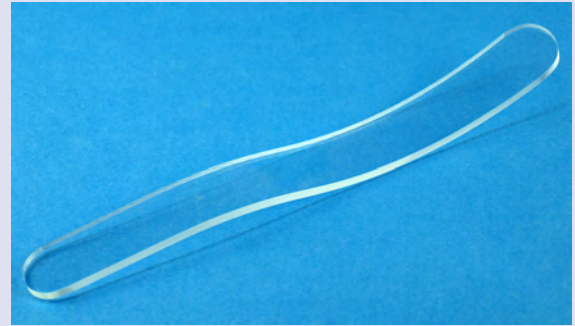
Wooden tongue depressors, CE
Disposable, splinterproof, length approx. 15 cm, in boxes of 5000 pieces
44365010   in polybags of 100 pieces
44365020   in small boxes of 100 pieces

Face shields
Areas of use:

Orthopaedics
General surgeries
Plastic surgery
Brain surgery
Urology
Ambulance service
Dentistry
Laboratories
49075010   made of polycarbonate, autoclavable

Kinesiology tape, NASARA®

consists of flexible cotton material, which can be stretched lengthwise by approx. 155-160 %. The tape, with the thermoplastic acrylic glue at the emplastic side, perfectly adjusts to the ambient temperature by stretching or contracting.

The tape is characterised by outstanding adhesive features, high wearing comfort and very good skin tolerance.
It is permeable to air and can be easily removed from the skin after the therapy.

Dimensions: 5 m long x 5 cm wide

42884004	beige
42884008	blue
42884012	yellow
42884016	green
42884020	violet
42884024	orange
42884028	pink
42884032	red
42884036	black
42884040	white

Tape scissors

Stainless, with titanium coating, hardened blade

	Total length	Blade length
42884110	approx. 20 cm	approx. 8.5 cm

Massage balls with spiky sensory points

made of flexible PVC, free of cadmium

	Ø	Colour
42882008	approx. 5.5 cm	orange
42882016	approx. 7 cm	green
42882024	approx. 8 cm	yellow
42882032	approx. 9 cm	red
42882040	approx. 10 cm	blue

Massage balls with spiky sensory points, transparent blue
made of flexible PVC, free of cadmium
42883006   Diameter approx. 6 cm

Cupping Glasses

Suction glasses according to Bier, CE, with bulb made of flexible PVC, free of cadmium
with tube olive at top

	Ø	Height without bulb
42885003	approx. 3 cm	approx. 50 mm
42885004	approx. 4 cm	approx. 60 mm
42885005	approx. 5 cm	approx. 70 mm
42885006	approx. 6 cm	approx. 80 mm

CE, without bulb
with tube olive at top

	Ø	Total height
42886003	approx. 3 cm	approx. 50 mm
42886004	approx. 4 cm	approx. 60 mm
42886005	approx. 5 cm	approx. 70 mm
42886006	approx. 6 cm	approx. 80 mm

Massage cupping glasses without olive, without bulb, CE

	Height	Ø
42887010	approx. 11 cm	approx. 5 cm
42887020	approx. 9 cm	approx. 3 cm

with olive, without bulb, CE

	Height	Ø
42888010	approx. 11 cm	approx. 5 cm
42888020	approx. 9 cm	approx. 3 cm

with olive and bulb, CE
Bulb made of flexible PVC, free of cadmium

	Ø	Height without bulb
42889001	approx. 3 cm	approx. 9 cm
42889010	approx. 5 cm	approx. 11 cm

Glass rods for cupping glasses
One end fused, one end conical
for removing cupping glass from skin
42894010   Dimensions approx. 140 x 7 mm

Cupping glasses, CE, without olive
made of glass

	Ø	Height
42890004	approx. 4 cm	approx. 5.5 cm
42890005	approx. 5 cm	approx. 6 cm

Cupping glasses, mouth-blown, CE, without olive, without bulb
Borosilicate glass 3.3

42891001	Diameter approx. 2.5 cm
42891002	Diameter approx. 3.5 cm
42891003	Diameter approx. 4.4 cm
42891004	Diameter approx. 5.0 cm
42891005	Diameter approx. 6.5 cm

with olive, without bulb, CE
Borosilicate glass 3.3

	Ø	Olive Ø
42892001	approx. 2.5 cm	approx. 9 mm
42892002	approx. 3.5 cm	approx. 9 mm
42892003	approx. 4.4 cm	approx. 10 mm
42892004	approx. 5.0 cm	approx. 10 mm
42892005	approx. 6.5 cm	approx. 10 mm

with olive and bulb, CE
Borosilicate glass 3.3, bulb made of flexible PVC, free of cadmium

	Ø	Bulb dimension
42893001	approx. 2.5 cm	approx. 56 x 51 mm
42893002	approx. 3.5 cm	approx. 56 x 51 mm
42893003	approx. 4.4 cm	approx. 61 x 56 mm
42893004	approx. 5.0 cm	approx. 61 x 56 mm
42893005	approx. 6.5 cm	approx. 61 x 56 mm

Instrument Trays

made of glass, without cover
Sterilisable in hot air up to +180 °C/+356 °F
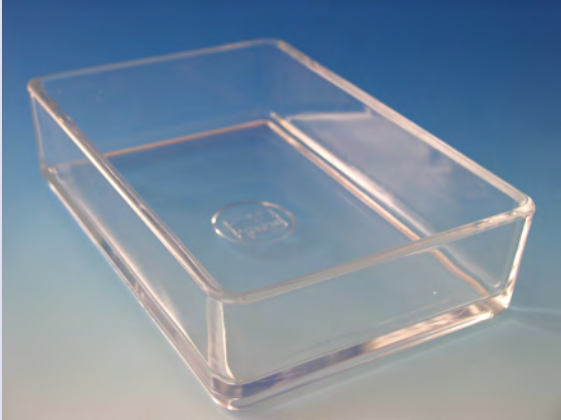
42900001	Dimensions approx. 12 x 6 x 4 cm
42900002	Dimensions approx. 17 x 9 x 4.5 cm
42900003	Dimensions approx. 20 x 10 x 5 cm
42900004	Dimensions approx. 22 x 15 x 5.5 cm
42900005	Dimensions approx. 27.5 x 15 x 6 cm
42900007	Dimensions approx. 35 x 22 x 7 cm
42900010	Dimensions approx. 20 x 10 x 10 cm

Stainless steel covers
with knob, for above glass trays, sterilisable in hot air up to +180 °C/+356 °F

42905001	Dimensions approx. 12 x 6 cm
42905002	Dimensions approx. 17 x 9 cm
42905003	Dimensions approx. 20 x 10 cm
42905004	Dimensions approx. 22 x 15 cm
42905005	Dimensions approx. 27.5 x 15 cm
42905007	Dimensions approx. 35 x 22 cm
42905010	Dimensions approx. 20 x 10 cm

Stainless steel covers with knob, with foam pad and weight (glass plate)
Sterilisable in hot air up to +180 °C/+356 °F

42906001	Dimensions approx. 12 x 6 cm
42906002	Dimensions approx. 17 x 9 cm
42906003	Dimensions approx. 20 x 10 cm
42906004	Dimensions approx. 22 x 15 cm
42906005	Dimensions approx. 27.5 x 15 cm
42906007	Dimensions approx. 35 x 22 cm
42906010	Dimensions approx. 20 x 10 cm

Instrument trays made of glass with stainless steel cover
Sterilisable in hot air up to +180 °C/+356 °F

42910001	Dimensions approx. 12 x 6 x 4 cm
42910002	Dimensions approx. 17 x 9 x 4.5 cm
42910003	Dimensions approx. 20 x 10 x 5 cm
42910004	Dimensions approx. 22 x 15 x 5.5 cm
42910005	Dimensions approx. 27.5 x 15 x 6 cm
42910007	Dimensions approx. 35 x 22 x 7 cm
42910010	Dimensions approx. 20 x 10 x 10 cm

made of glass with stainless steel cover
Cover with knob, foam pad and weight (glass plate),
sterilisable in hot air up to +180 °C/+356 °F

42911001   Dimensions approx. 12 x 6 x 4 cm
42911002   Dimensions approx. 17 x 9 x 4.5 cm
42911003   Dimensions approx. 20 x 10 x 5 cm
42911004   Dimensions approx. 22 x 15 x 5.5 cm
42911005   Dimensions approx. 27.5 x 15 x 6 cm
42911007   Dimensions approx. 35 x 22 x 7 cm
42911010   Dimensions approx. 20 x 10 x 10 cm

made of stainless steel with stainless steel cover
Sterilisable in hot air up to +180 °C/+356 °F

42915002   Dimensions approx. 16 x 10 x 3 cm
42915003   Dimensions approx. 20 x 10 x 5 cm
42915004   Dimensions approx. 22 x 15 x 5.5 cm
42915005   Dimensions approx. 26 x 15 x 5 cm
42915006   Dimensions approx. 30 x 20 x 5 cm

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Jars made of Glass and Stainless Steel

Glass jars
for dressing material, cotton, clinical thermometers,
forceps and other instruments, with base, without cover

Dimensions:

44405006	approx. 10 x 2.5 mm Ø
44405012	approx. 10 x 5 cm Ø
44405018	approx. 8 x 8 cm Ø
44405024	approx. 10 x 10 cm Ø
44405030	approx. 12 x 12 cm Ø
44405036	approx. 15 x 15 cm Ø
44405042	approx. 18 x 18 cm Ø
44405048	approx. 21 x 21 cm Ø
44405054	approx. 12 x 8 cm Ø
44405060	approx. 20 x 8 cm Ø
44405066	approx. 15 x 10 cm Ø
44405072	approx. 20 x 10 cm Ø
44405078	approx. 30 x 10 cm Ø

Glass covers
with knob, for jars no. 44405...

44409018	for 8 cm Ø
44409024	for 10 cm Ø
44409030	for 12 cm Ø
44409036	for 15 cm Ø
44409042	for 18 cm Ø

Glass jars
Drop-on cover with knob

Dimensions:

44410018	approx. 8 x 8 cm Ø
44410024	approx. 10 x 10 cm Ø
44410030	approx. 12 x 12 cm Ø
44410036	approx. 15 x 15 cm Ø
44410042	approx. 18 x 18 cm Ø
44410054	approx. 12 x 8 cm Ø
44410060	approx. 20 x 8 cm Ø
44410066	approx. 15 x 10 cm Ø
44410072	approx. 20 x 10 cm Ø

Glass jars with covers made of stainless steel
Cover with knob
44415018   Dimensions approx. 8 x 8 cm Ø
44415024   Dimensions approx. 10 x 10 cm Ø
44415030   Dimensions approx. 12 x 12 cm Ø
44415036   Dimensions approx. 15 x 15 cm Ø
44415054   Dimensions approx. 12 x 8 cm Ø
44415060   Dimensions approx. 20 x 8 cm Ø
44415066   Dimensions approx. 15 x 10 cm Ø
44415072   Dimensions approx. 20 x 10 cm Ø

Covers made of stainless steel
with knob, for jars no. 44405...
44411018   Diameter approx. 8 cm
44411024   Diameter approx. 10 cm
44411030   Diameter approx. 12 cm
44411036   Diameter approx. 15 cm

Glass jars with cover made of stainless steel with weight
Cover with foam pad and weight (glass plate)
44416018   Dimensions approx. 8 x 8 cm Ø
44416024   Dimensions approx. 10 x 10 cm Ø
44416030   Dimensions approx. 12 x 12 cm Ø
44416036   Dimensions approx. 15 x 15 cm Ø
44416054   Dimensions approx. 12 x 8 cm Ø
44416060   Dimensions approx. 20 x 8 cm Ø
44416066   Dimensions approx. 15 x 10 cm Ø
44416072   Dimensions approx. 20 x 10 cm Ø

Cotton dispenser (Delivery without cotton)
Sterilisable, consisting of glass jar with cover made of stainless steel
44295010   Glass jar approx. 10 x 10 cm Ø
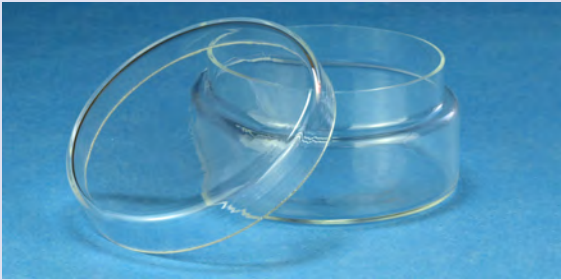
Boxes made of glass

Low form with notch, overlapping cover

	Height	Outside Ø
41050004	approx. 25 mm	approx. 40 mm
41050005	approx. 30 mm	approx. 50 mm
41050006	approx. 35 mm	approx. 60 mm
41050008	approx. 40 mm	approx. 80 mm
41050010	approx. 50 mm	approx. 100 mm
41050012	approx. 60 mm	approx. 120 mm
41050015	approx. 75 mm	approx. 150 mm

Glass jars for dressing forceps

including stainless steel cover with aperture

	Height	Outside Ø
41965012	approx. 12 cm	approx. 8 cm
41965020	approx. 20 cm	approx. 8 cm

Spare stainless steel cover

41965001   for jars of approx. 8 cm Ø

Jars for clinical thermometers

made of stainless steel

with base, without cover

44440007   Dimensions approx. 9 x 3 cm Ø
44440014   Dimensions approx. 10 x 5 cm Ø
44440021   Dimensions approx. 13 x 5 cm Ø
44440028   Dimensions approx. 17.5 x 5 cm Ø
44440035   Dimensions approx. 13 x 8.5 cm Ø

Jars made of stainless steel

with knob cover

44420018   Dimensions approx. 8.5 x 8.5 cm Ø
44420024   Dimensions approx. 10 x 10 cm Ø
44420030   Dimensions approx. 12 x 12 cm Ø
44420036   Dimensions approx. 15 x 15 cm Ø

W

40010	144	40190	93	40444	40	40734	32
40011	144	40193	93	40445	40	40765	290
40012	145	40194	93	40446	41	40766	290
40033	11	40199	94	40447	41	40780	99
40034	11	40210	90 - 91	40449	41 - 42	40791	100
40035	11	40212	90	40450	42	40792	101
40036	11	40225	252	40452	42	40793	101 - 102
40037	11	40240	32	40453	43	40795	102 - 103
40038	12	40241	33	40454	43	40796	105
40039	12	40242	33	40455	20	40797	105
40040	12	40245	33	40456	20	40798	106
40041	12	40247	33	40457	21	40799	106
40070	146	40248	34	40458	21	40811	103
40075	252	40302	286	40459	21	40812	104
40076	252	40303	286	40460	22	40820	104
40080	253	40306	286	40467	22	40821	105
40087	253	40320	286	40470	21	40823	105
40088	253	40321	287	40471	21	40850	139
40101	82	40326	287	40514	16	40860	109
40102	82	40328	287	40521	98	40861	109
40104	83	40334	287	40523	99	40862	109
40110	83	40335	287	40535	16	40863	109
40111	83	40344	28	40545	15	40865	110
40112	83	40345	28	40551	24	40866	110
40120	94	40347	45	40553	24	40868	110
40122	88	40348	44 - 46	40554	25	40869	110
40123	89	40349	46	40555	25	40870	110
40124	89	40350	47	40557	25 - 26	40871	110
40125	90	40351	47	40558	26	40875	111
40126	90	40352	48	40559	23	40895	180
40131	84	40353	48	40560	22	40896	180
40132	84	40355	14	40563	27	40920	74
40134	85	40356	15	40564	27	40930	180
40135	85	40357	14	40565	27	40931	180
40137	85	40358	14	40566	27	40937	175
40138	86	40359	15	40567	28	40938	175
40140	85	40360	16	40568	29	40939	176
40144	86	40361	16	40569	29	40940	176
40146	86	40365	13	40619	69	40942	176
40147	86	40366	13	40623	69	40943	176
40154	86	40367	17	40624	69	40944	177
40155	87	40377	17 - 18	40625	69	40946	177
40156	87	40379	17	40705	29	40947	177
40157	87	40380	18	40706	29	40948	177
40163	80	40382	18	40710	30	40949	177
40164	81	40385	19	40712	30	40950	178
40165	81	40388	19	40713	30	40951	178
40173	91	40389	19	40715	31	40955	178
40175	92	40440	38	40717	31	40956	178
40183	92	40441	39	40720	31	40958	179
40187	92	40442	39	40722	32	40959	179
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41000	54		41190	59		41323	147		41594	199
41001	55		41191	59		41324	148		41596	228
41014	55		41192	59		41325	148		41598	229
41015	55		41198	60		41326	149		41600	289
41019	75		41200	60		41330	149		41710	77
41020	75		41201	60		41331	150		41720	77
41024	290		41202	60		41333	150		41865	290
41025	75		41203	61		41334	150		41866	291
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41029	208		41210	61		41336	151		41875	186
41033	209		41218	57		41340	151		41877	187
41036	209		41220	57		41341	152		41910	201
41037	209		41221	57		41342	152		41911	205
41041	292		41223	57		41343	152		41912	206
41042	75		41224	58		41344	152		41913	182, 205
41043	76		41225	58		41345	153		41914	206
41044	76		41226	58		41350	278		41915	203
41045	76		41227	58		41370	23		41916	142
41049	76		41230	62		41375	24		41917	142
41050	302		41231	62		41384	222		41918	203
41065	225		41232	62		41385	221		41920	204
41066	225		41234	62		41390	221		41921	204
41067	225		41238	73		41391	222		41924	204
41071	226		41240	73		41393	222		41925	205
41075	291		41250	190		41395	222 - 223		41929	164
41090	224		41255	190		41396	223		41930	164 - 165
41091	225		41260	191		41400	193		41934	165
41101	280		41265	191		41401	193		41935	165
41102	280		41266	191		41402	193		41936	166
41103	280		41270	192		41406	255		41940	166
41104	281		41271	192		41408	194		41941	167
41105	281		41272	192		41469	210		41943	167
41111	281		41273	192 - 193		41470	210		41945	168
41112	281		41278	153		41480	109		41946	168
41120	282		41279	153		41503	108		41947	168
41130	282		41280	153		41504	108		41954	197
41145	22		41281	154		41510	108		41955	198
41150	181		41282	154		41511	108		41956	74
41151	181		41283	154		41522	108		41965	302
41153	181		41284	154		41523	108		41969	145
41154	182		41285	155		41550	106		41974	256
41155	182		41286	155		41551	106		41975	257
41160	187		41287	155		41552	107		41977	256 - 257
41161	187		41301	156		41553	107		41978	258
41162	188		41303	156		41554	107		41979	258
41163	188		41311	156		41555	107		41980	258
41175	188		41313	156		41580	226		41981	183
41177	188		41314	157		41581	226		41982	183
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