



# Assistent.

Glaswarenfabrik Karl Hecht GmbH & Co KG







# CATEGORIES

HEALTHCARE.  
LIFE SCIENCE.  
LIQUID HANDLING.  
VOLUMETRIC INSTRUMENTS.  
LABORATORY EQUIPMENT.

[www.assistent.eu](http://www.assistent.eu)

# ABOUT US

## Quality for over 105 years

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For over 105 years, our company has symbolised precision and quality awareness in the production of glass instruments. In 1919, Karl Hecht laid the foundation for today's business in Sitzendorf-Unterweißbach, Thuringia. After the Second World War, a new beginning took place in 1945 in Sondheim vor der Rhön, Bavaria, followed by a phase of dynamic expansion: in 1948, a second German branch was opened in Bernhausen, followed in 1962 by international locations in Switzerland, France and Austria.

With the expansion of its product and distribution network, the company consolidated its market position over decades.

In 1995, its quality management system was certified according to DIN EN ISO 9001.

From 2009 onwards, the company underwent a strategic realignment: Sondheim became the central production facility, while the foreign locations functioned purely as sales offices. Today, we are represented in Germany and Switzerland but operate worldwide.

## Our company philosophy

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We stand for precision, quality and tradition.

Customer satisfaction is our top priority. That is why we offer not only high-quality standard products, but also customised solutions for individual requirements.

Our employees dedicate their experience and expertise every day to ensure the highest quality standards. The respectful treatment of partners, customers and colleagues, as well as sustainable practices, are integral parts of our corporate culture.

Looking to the future, we remain committed to our tradition and are constantly developing our products and processes – for progress in the world of glass instruments.

# TRADEMARKS

## ASSISTENT PREMIUM

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Our Premium Line stands for the highest level of quality, precision, and reliability. The products are frequently manufactured in our own facilities or in close cooperation with selected, exclusive partners operating under the most stringent quality management standards. The use of high-grade materials and state-of-the-art manufacturing technologies ensures consistently outstanding performance.

The Premium Line is the first choice for demanding laboratory applications where maximum precision, durability, and process reliability are essential.



## ASSISTENT BASIC

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Basic Line – reliable and cost-efficient

The Basic Line offers a high-quality product portfolio at an attractive and competitive price point. All products are manufactured and tested in accordance with defined quality standards to ensure dependable performance in everyday laboratory use.

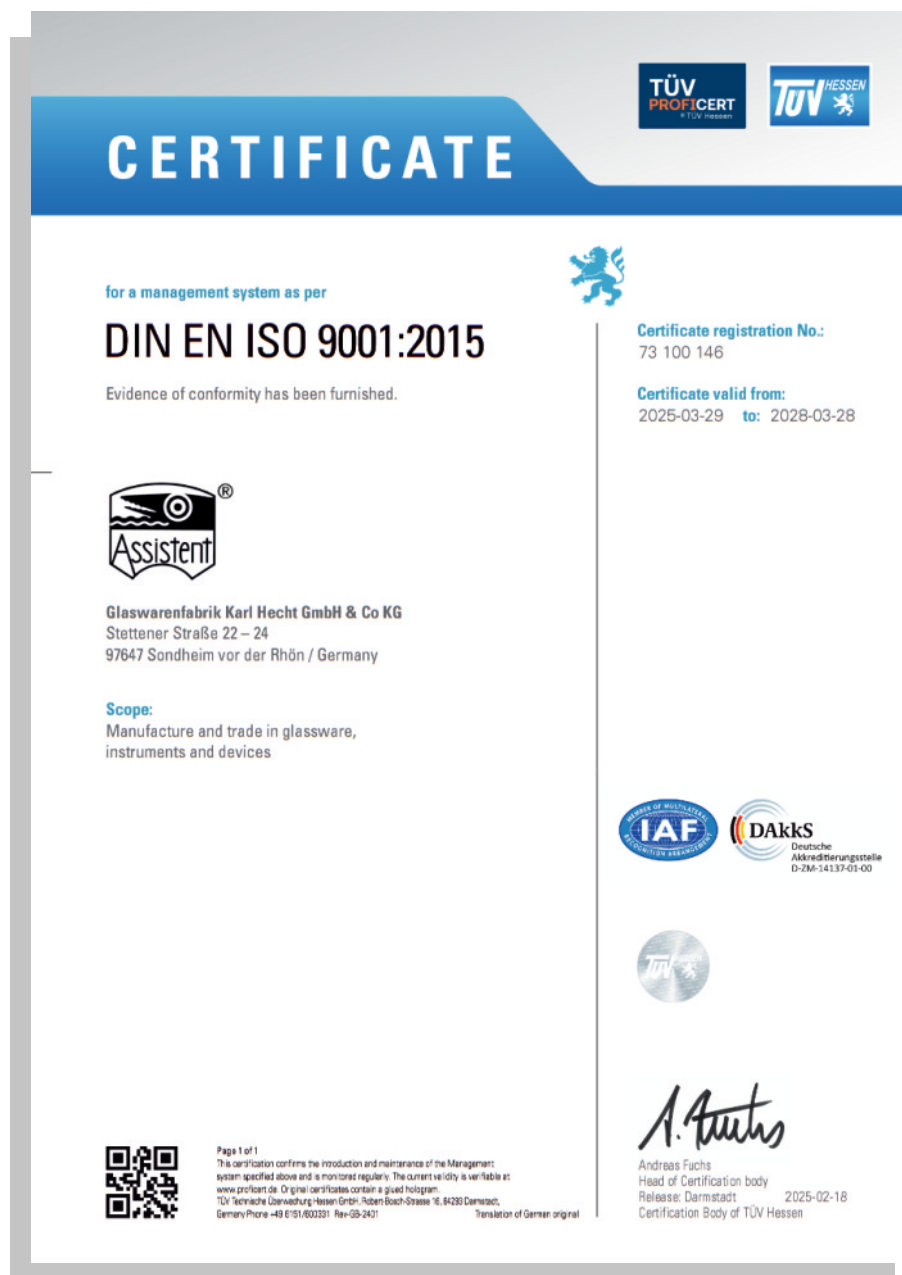
This product line is particularly well suited for laboratories that require solid quality and functionality while maintaining a cost-efficient budget.



# CERTIFICATIONS

Our quality management system was first certified in 1995.

Our company is currently certified according to DIN EN ISO 9001:2015.



Authorised Economic Operator (AEO)

We are an Authorised Economic Operator. This enables us to export our goods under a simplified customs procedure.

[www.assistent.eu](http://www.assistent.eu)



# QUALITY MANAGEMENT

## REPAIRS

Repairs will only be carried out if the defective device has been properly cleaned, sterilised or decontaminated and the repair is economically viable. We reserve the right to request a certificate of safety.

## GRADUATION

The graduations are subject to ongoing quality improvements through regular monitoring tests of colour resistance, precision, etc. Blue, white and red graduations are fused and baked in to be resistant to acids and alkalis. Brown graduations are fused into the glass surface and thus offer absolute resistance for the highest demands. State-of-the-art adjustment devices guarantee a high degree of accuracy for the volume measuring devices, resulting in the following designs:

### Standard version

1.5 times the error limit of class A/class AS for the total volume (therefore more accurate than class B)

### Certified version

With the marking DE-M , followed by the last two digits of the year in which the marking was affixed, we confirm that volume measuring devices comply with the applicable German Measurement and Calibration Regulation (Deutsche Mess- und Eichverordnung).

## MEASUREMENT AND CALIBRATION REGULATION

The new German Measurement and Calibration Regulation, valid since January 1st 2015, requires volume measuring devices that are used and kept ready for measurements in the medical and pharmaceutical sectors to have a certificate of conformity from the manufacturer. This is fulfilled by the DE-M marking.

Conformity ensures that a device complies with the German Measurement and Calibration Regulation and the applicable standards. The exact procedure can be found in the German Measurement and Calibration Regulation. Responsible for the use and provision of conformity-certified devices is the user. The certificate of conformity is valid indefinitely, unless otherwise specified by the manufacturer. Conformity-certified devices that were produced before January 1st 2015 may also continue to be used. Conformity is certified by 'Assistent' directly on the devices. For single-use capillary pipettes, this is indicated on the smallest packaging unit, and for liquid handling devices, it is indicated in the enclosed instructions for use.

## PLEASE NOTE

All information in this catalogue has been compiled to the best of our knowledge and belief using the latest data, which is regularly updated and may therefore vary.

All data is approximate, except of course for precision measuring instruments. Dimensions, volumes, etc. may therefore differ slightly.

The data is valid as of November 2025.

## GENERAL INFORMATION ON VOLUMETRIC INSTRUMENTS

Calibrated to contain: designation "In"

The basis for measurement for the graduation is the poured or drawn-in liquid volume. It is recommended to rinse capillary pipettes adjusted to the tip.

Calibrated to expiry: designation "Ex"

The basis for measurement for graduation is the amount of liquid flowing out of the device. Do not blow out residual liquid! (Only blow out if using blow-out pipettes that are designated as such.)

Adjustment to partial expiry (not divided to the tip): As above. During expiry, set the meniscus to the lowest mark, e.g. for enzyme pipettes, burettes or even full pipettes with 2 marks.

General instructions for using measuring pipettes, volumetric pipettes and burettes: Fill burettes 5 mm and measuring and volumetric pipettes 10 mm above the desired mark, drain the liquid to the mark and wipe off the drop remaining on the tip. Hold the pipette vertically when pipetting, placing the tip on the inside wall of the vessel. Allow the pipette contents to flow to about 10 mm above the graduation mark for the desired volume and stop. Then slowly adjust to the graduation mark. With the outlet tap fully open, allow the burette contents to flow to about 5 mm above the desired graduation mark and stop. Then carefully adjust to the graduation mark. If necessary, allow the remainder to flow out after a waiting period. Observe the waiting times specified in the catalogue or on the devices. The surface-hardened tips of the pipettes and burettes are calibrated to achieve precise measurements. They must not be damaged. Measuring pipettes from 5 to 25 ml generally have a narrowing in the suction tube for inserting a cotton wool plug – extra safety space above the scale.

## MEDICAL DEVICES ACT

The Medical Devices Act regulates the placing on the market of products covered by Directive (EU) 2017/745 on medical devices and Directive (EU) 2017/746 on in vitro diagnostic medical devices. The products must bear a CE mark and may only be placed on the market within the European Union if they bear the CE mark. The manufacturer is responsible for ensuring that the products are placed on the market in accordance with the regulations. The manufacturer is the person or company indicated on the product or packaging. We would like to point out that the Medical Devices Act requires a system to be set up for medical devices that enables the traceability of the products and the reporting of incidents involving these products.

# OEM YOUR BRAND - OUR QUALITY

## Fast Track to Your Private Label Portfolio

With our OEM program, you gain direct access to a proven portfolio of high-quality laboratory and medical products. Leverage our long-standing expertise in laboratory, diagnostics, and medical technology to bring your own product line to market quickly, efficiently, and reliably..

### Your Path to a Finished Private Label Product Line

#### 1. Product Selection & Quotation

You select the products – we provide a customized quotation.

#### 2. Branding & Packaging

You provide your logo and design guidelines. Upon request, we also support you with layout and design.

#### 3. Marketing & Product Materials

Flyers, product information sheets, and other sales materials are created for you individually in your corporate design.

#### 4. Production & Delivery

We handle manufacturing, assembly, and packaging.

You receive fully branded, ready-to-sell products.

### Blanks: quality products without branding

Do you require high-quality laboratory and medical products without any branding?

Our blanks provide direct access to proven quality products from our production, supplied in a neutral, unbranded format.

They are ideal for individual customization, repackaging, or further processing.

Benefit from short lead times and high availability—without compromising precision, quality, or reliability.

HEALTHCARE.

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### Eye baths



The eye baths are made of high-quality, durable polypropylene and are ideal for safe and hygienic cleaning.

**Note:** Please only use sterile liquids for the procedure and clean the eye bath after each use.

- + packed 10 pcs in a poly bag
- + made of polypropylene
- + classification: Class 1

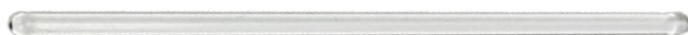


Art.No.	Capacity (ml)	Height (mm)	Diameter (mm)
40302010	25	37	42

### Glass rods both sides fused

**Note:**

Glas swabs should be carefully cleaned and sterilized after each use to ensure a safe reuse.



- + packed in pieces of 100
- + for multiple use

Art.No.	Length (mm)	Diameter (mm)	Material
40320010	100	3 - 4	AR-Glas®

### Glass rods with knob and spatula

**Note:**

Glas swabs should be carefully cleaned and sterilized after each use to ensure a safe reuse.



- + packed in pieces of 100
- + for multiple use

Art.No.	Length (mm)	Diameter (mm)	Material
40321010	100	3 - 4	AR-Glas®

### Dropping pipettes with straight end

The straight tip enables precise dosing and application of liquids.



- + packaged in pieces of 100
- + clear glass
- + without rubber teat

Art.No.	Length (mm)	Diameter (mm)	Material
40326010	80	7 - 8	AR-Glas®

### Dropping pipettes

- + with two extensions
- + according to DAB (German Pharmacopoeia)
- + one end smoothly fused
- + one end with 2 spherical extensions (10 mm Ø)



This dropper complies with the specifications of the German Pharmacopoeia (DAB) and is therefore particularly suitable for use in medical and pharmaceutical applications. The two spherical extensions ensure precise regulation of the drop size and facilitate dosing.

Art.No.	Length (mm)	Material
40334010	150	AR-Glas®

### Dropping pipettes with German inscription



This dropper is labeled to indicate the standard dosage of 20 drops per gram. It is ideal for standardized dispensing of drops & is particularly suitable for pharmaceutical and medical applications where accuracy is crucial.

Normally:  
20 drops = 1 g

Art.No.	Length (mm)
40335010	85
Material	
Soda-lime glass	

### Medicine cups



- + with practical graduation for precise dosing
- + for single-use

The single-use multipurpose cups and the associated lids comply with all relevant EU directives and have CE mark as a sign of their conformity with the applicable health and safety standards.



Art.No.	Capacity (ml)	Height (mm)	Upper Ø (mm)	Lower Ø (mm)	Colour	PU (pcs)	Material
41102001	30	42	37	27	transparent	80 Box 4800	Polypropylene
41102002					blue		
41102003					red		
41102004					yellow		
41102005					green		

### Covers



suitable for  
medicine cups  
Art.No. 41102



Art.No.	Material
41102015	Polypropylene
Colour	PU (pcs)
white	500
Box (pcs)	
4000	

### Medicine dispensers

Perfect for patients of all ages who need to take medication several times a day. The dispenser helps to organise the daily intake of medication and supports care staff and relatives in monitoring the correct intake.

- + clear imprint of the times of day: Morning - Noon - Evening - Night
- + practical transparent sliding cover for easy access and protection
- + includes Braille for barrier-free use
- + high-quality, durable polypropylene



Art.No.	PU (pcs)
41103010	200
Colour	Material
white	Polypropylene

### Medicine trays



The tray enables structured and hygienic handling of medication for multiple patients at the same time.

Designed to hold:

19 Medication cups Art.No. 41102001

19 Medication dispensers Art.No. 41103010

Supplied without medication cup  
and dispenser.

Art.No.	Material
41104010	Polystyrene
Colour	Dimensions (mm)
white	340 x 440 x 15

### Medicine spoons

- + precise division in German (1 teaspoon, 1 tablespoon)
- + dishwasher-safe



Art.No.	Material
41112010	Polypropylene
Colour	Graduation
white	15 ml

### Feeding cups



The integrated scale makes it possible to dose liquids, which is particularly advantageous when taking medication.



Supplied without lid.

Art.No.	Capacity (ml)
44010010	250

### Covers for Art.No. 44010010



#### Drink opening 4 mm

- + ideal for slow and controlled drinking, ideal for patients with limited swallowing ability

#### Drink opening 12 mm

- + enables quick and easy fluid intake, ideal for larger sips

Art.No.	Opening dimensions (mm)
44011004	4
44011012	12

### Face shields



- + headband: with adjustable Velcro strap
- + shield: transparent
- + can be worn together with surgical goggles
- + covers the entire face
- + significantly reduces the risk of infection
- + covered with a protective film on both sides to prevent scratching
- + individually adjustable with Velcro fastener
- + disposable
- + very wide viewing angle

Art.No.	Material shield	PU (pcs)
49075010	Polycarbonate	100

### Instrument trays without lid

These instrument trays offer an ideal solution for the safe and hygienic storage of surgical instruments.

Boro 3.3

Suitable for high-temperature sterilisation up to +180°C/ +356°F

Matching lids are available under Art.No. 42905.



Art.No.	Dimensions (mm)
42900003	200 x 100 x 50
42900010	200 x 100 x 100

### Instrument trays made of stainless steel with lid



These stainless steel instrument trays with lids are indispensable aids for medical professionals and guarantee maximum functionality, safety and hygiene in hospital supplies.

**Sterilisable:** suitable for high-temperature sterilisation up to +180°C/ +356°F

**Cover:** for additional protection and hygienic covering

Art.No.	Dimensions (mm)
42915002	160 x 100 x 30
42915003	200 x 100 x 50
42915004	220 x 150 x 50
42915005	260 x 150 x 50
42915006	300 x 200 x 50

### Glass trays with stainless steel lid



These glass trays with matching stainless steel lids are robust, durable and offer a hygienic solution for medical applications.

Boro 3.3

**Sterilisable:** suitable for high-temperature sterilisation up to +180°C/ +356°F

**Cover:** for additional protection and hygienic covering

Art.No.	Dimensions (mm)
42910003	200 x 100 x 50
42910010	200 x 100 x 100

### Stainless steel lids replacement



The matching stainless steel lids with handle have been specially developed for instrument trays of the series Art.No. 42900.

They provide additional protection for the instruments stored and enable hygienic covering.

Art.No.	Dimensions (mm)
42905003	200 x 100

### Dishes made of melamine



The trays can be stacked inside each other, which enables space-saving storage and efficient use of your workspace.

Art.No.	Dimensions (mm)	Colour
49064001	350 x 250 x 40	white
49064002	290 x 160 x 35	

### Kidney dishes



The characteristic curved shape allows it to be brought close to various parts of the patient's body, ensuring efficient and practical handling.

- + made of polypropylene
- + sterilisable for multiple use

Art.No.	41120010
Colour	white
Dimensions (mm)	260 x 137 x 40
Operating temp. (max.)	125°C/257°F
Cold resistance	-30°C/-22°F
Density (g/cm³)	0.90



### Kidney dishes

smooth edges



Kidney dishes are shallow, kidney shaped containers used for collecting fluids, holding instruments or managing waste, adapting easily to body contours.

+ autoclavable

Art.No.	41130010
Material	Stainless steel
Dimensions (mm)	250 x 130 x 30

### Faecal tubes

With integrated spoon and brown screw cap for safe and easy handling



Art.No.	
44508010	
PU (pcs)	Capacity (ml)
1000	15
Dimensions (mm)	Material
76 x 20 Ø	Polypropylene

### Protection containers



- + made of polypropylene
- + with screw cap
- + packed in pieces of 100
- + suitable for Art.No. 44508010

Art.No.	Colour	Dimensions (mm)
44508020	natural	85 x 30 Ø

### Urine bottles



- + for male patients
- + with scale
- + with lid
- + made of polyethylene (PE-LD)
- + autoclavable up to 90°C/194°F

Art.No.	Capacity (ml)	Dimensions (mm)
44090010	1000	310 x 85

### Urine bottles



- + for male patients
- + with scale
- + with lid
- + crystal clear, made of polycarbonate
- + sterilisable

Art.No.	Capacity (ml)
44092010	1000
Steam sterilisation max.	Hot air sterilisation max.
+125°C/+257 °F	+135°C/275°F

### Urine bottles



- + for female patients
- + with scale
- + with lid
- + natural colour, made of polypropylene
- + heat-resistant up to +90°C/194°F

Art.No.	Capacity (ml)
44104010	1000

## Urine specimen cups for single use, made of polypropylene



- + disposable sample beaker with scale and labeling field
- + practical red snap-on lid with side nipple

Art.No.	Capacity (ml)	PU (pcs)	Box (pcs)
44115100	125	100	500

## Urine specimen cups for single use, made of polypropylene



- + disposable sample beaker with scale and labeling field
- + robust green screw cap for secure closure

Art.No.	Capacity (ml)	PU (pcs)	Box (pcs)
44115200	125	100	400

## Brushes for urine bottles

Specially developed for the hygienic cleaning of urine bottles.

- + with wooden handle
- + twisted wire 2.8 mm galvanised
- + with nylon bristles



Art.No.
44106010
Dimensions (mm)
470 x 160 x 70

## Urine bottle holders made of wire

- + with chain and cover
- + for attaching to the bed frame
- + triangular shape for optimal stability
- + with white plastic cover



Art.No.
44108010
Capacity
1 urine bottle

## Urine collecting containers with handle and lid

Art.No.	Capacity (ml)	Divison (ml)	Dimensions (mm)
44116010	2000	20	220 x 150 Ø



- + with ergonomic handle for easy handling
- + raised scale for precise reading
- + can be sterilised for multiple use
- + white polycarbonate lid
- + polypropylene collection jar



## Urine collecting containers

- + with reference scale for precise measurements
- + with securely lockable lid
- + ergonomic handle for easy handling

Art.No.	Capacity (ml)	Operating temp. max.	Handle	Material	Colour	Dimensions (mm)	Features
49117010	2700	+75°C/167°F	no	PE	white	135 x 124 x 248	with screw cap
49117020	2000	+70°C/158°F	yes	SAN	clear	130 x 130 x 170	with lid

### Urine collecting containers

square urine bottles

Art.No.	Scale (ml)	Capacity (ml)	Dimensions (mm)	Material
49118010	2000	2000	92 x 120 x 242	Polyethylene



- + ergonomic handle for easy handling
- + embossed scale for precise reading
- + available with or without label
- + not autoclavable
- + made of PE-HD
- + coloured amber
- + with screw cap

### Bedpans



- + with practical button lid for secure closure
- + sterilizable, ideal for multiple use
- + high-quality, robust and durable

Art.No.	Diameter (mm)	Material
43155010	310	Stainless steel

### Dilators

(Anal dilators)



Our dilators (anal dilators) are specially developed for medical use and meet the highest quality standards. They are made of robust borosilicate glass 3.3, which impresses with its exceptional chemical and thermal resistance.

The CE marking guarantees that the dilators comply with European safety and quality requirements.

#### Application:

The use of dilators should always be performed or supervised by a healthcare professional to ensure safe and effective use.

#### Features and benefits:

- + CE-certified for safety and reliability in the medical sector
- + ideal for professional use in clinics and surgeries

Art.No.	Upper cone Ø (mm)	Cone length (mm)
41024001	20	70
41024002	28	80
41024003	32	80

### Specula

Our specula made of high-quality clear glass are specially developed for professional use in gynecology, dermatology and other medical specialties



#### Application:

The specula are used to create access to body orifices and facilitate diagnostic or therapeutic procedures.

#### Features and benefits:

- + clear optics for an unrestricted view of the examination area
- + available sizes for optimal adaptation to individual needs

Art.No.	Ø (mm)	Length (mm)
43017001	22-24	155
43017002	28-30	
43017003	34-36	
43017004	41-43	

## Nameplate holders



\*incl. 1 Notepad  
Art.No. 42325020

Our nameplate holders for hospital beds provide clear and visible labeling for patient information. The nameplate ensures easier identification and organisation of patients for both medical staff and relatives.

Art.No.	Length (mm)	Diameter (mm)	Material	Variant
42325010*	110	35	Plexiglas®	Nameplate holder
42325020	-	-	Paper	Tear-off paper à 25 sheets

## Hourglasses in nickel-plated metal housing



Our hourglasses are an indispensable tool for precise pulse measurements in medical and diagnostics.

- + easy to use
- + measuring material: sand
- + measuring time: 15 s & 30 s

Art.No.	Variant
42871010	¼ min, without Clip
42871020	½ min, without Clip

## Tongue depressors wooden



Our CE-certified, disposable tongue depressors made of high-quality birch wood are ideal for examining the mouth and throat. They offer optimum handling and stability. Conveniently packed in folding boxes of 100 pieces.



Art.No.	Dimensions (mm)	Material	PU (pcs/box)
44365020	150 x 18 x 1.6	Birchwood	100

## Cotton dispensers with stainless steel lid



This sterilisable absorbent cotton dispenser consists of a glass cylinder with a stainless steel top. It is perfect for the hygienic storage of absorbent cotton in surgeries and laboratories.

Art.No.	Dimensions (mm)	Material
44295010	80 x 80	Glass

## Cotton sticks with one cotton end



- + bag of 100 pieces / 1,000 pieces in carton
- + diameter stick approx. 2.2 mm
- + sticks: birch wood
- + head: cotton



Art.No.	Length (mm)	Cotton head (mm)
44302010	150	12 x 5 Ø
44302030	230	15 x 5 Ø



### Cotton sticks

with large absorbent cotton head on one side



+ bag of 50 pieces / 500 pieces in carton

+ sticks: birch

+ head: cotton



Art.No.	Length (mm)	Cotton head (mm)
44303010	200	30 x 10 Ø

### Cotton carriers, unsharpened

without cotton



Our round, unsharpened absorbent cotton carriers made of beech wood are available in various lengths and are packaged in packs of 100.

Art.No.	Length (mm)	Diameter (mm)
44300015	150	3.0
44300020	200	
44300025	250	
44300030	300	

### Cotton carriers, one side sharpened

without cotton



These round absorbent cotton holders made of beech wood are sharpened on one side, available in different lengths and packaged in packs of 100.

Art.No.	Length (mm)	Diameter (mm)
44301015	150	3.0
44301020	200	
44301035	350	

### Dishes made of glass



Ideal for storing small medical utensils or consumables.

+ made of soda-lime glass

+ low form with fold

+ with loose overlap lid

Art.No.	Outer Ø approx. (mm)	Height approx. (mm)
41050004	40	25
41050005	50	30
41050006	60	35
41050008	80	40
41050010	100	50
41050012	120	60

### Jars made of stainless steel with knob lid

+ smooth edges



Art.No.	Dimensions (mm)
44420018	85 x 85
44420024	100 x 100
44420030	120 x 120
44420036	150 x 150

### Thermometer jars

made of stainless steel



+ without cover

+ with round base

Art.No.	Dimensions (mm)
44440014	100 x 50 Ø

## Glass jars

with base and with loose overlapping glass lid

+ made of soda-lime glass



Art.No.	Dimensions (mm)	Art.No.	Dimensions (mm)
44410018	80 x 80	44410042	180 x 180
44410024	100 x 100	44410054	120 x 80
44410030	120 x 120	44410066	150 x 100
44410036	150 x 150	44410072	200 x 100

## Glass jars

with base, without cover

The cylinder is suitable for bandages, absorbent cotton, clinical thermometers, tweezers, forceps and other instruments.

+ made of soda-lime glass



Art.No.	Dimensions (mm)	Art.No.	Dimensions (mm)
44405012	100 x 50	44405048	210 x 210
44405018	80 x 80	44405054	120 x 80
44405024	100 x 100	44405066	150 x 100
44405030	120 x 120	44405072	200 x 100
44405036	150 x 150	44405078	300 x 100
44405042	180 x 180		

## Glass Covers



+ made of soda-lime glass

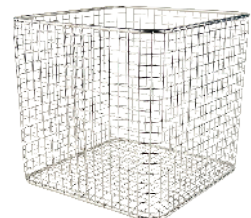
+ cover with handle + for cylinder Art.No. 44405

Art.No.	Diameter (mm)
44409018	80
44409024	100
44409030	120
44409036	150
44409042	180

## Wire baskets

made of stainless steel

Ideal for storing medical utensils, instruments or consumables.



Art.No.	Dimensions (mm)
41075016	160 x 160 x 160
41075020	200 x 200 x 200

## Protective paper (medical crepe) for treatment couches

Made of 100 % cellulose, they offer reliable protection and comfort in medical and therapeutic facilities.

They are double layered, highly absorbent and tear-resistant to meet the highest hygienic standards. The rolls are white and perforated for easy handling and precise separation.



Art.No.	Dimensions (mm x m)
44085001	390 x 50
44085002	500 x 50
44085003	550 x 50
44085004	590 x 50

## Disposal boxes with cover

The UN verification includes:

- + emission test
- + GS test
- + approval for infectious waste, i.e. in addition to disposal in these containers, transportation is also permitted
- + filling mark
- + cover with built-in locking flaps



Single-use needle disposal container with cover, for the disposal of used ampoules, needles, syringes, acc. to UN regulation

Art.No.	49070002
Material	Polypropylene
Capacity (l)	1.8

### Cupping glasses – made in Germany

Our glass cupping jars are crafted with great care and artisanal precision in our own manufactory. Each jar undergoes a meticulous production process in which we place particular emphasis on stability, a pleasant feel, and optimal application properties.

Whether for traditional cupping methods, fascia techniques, or modern wellness applications – our cupping jars are available in various sizes and are perfectly tailored to the needs of therapists, naturopaths, and discerning users.

With our glass cupping jars, we combine traditional knowledge with modern manufacturing quality – for effective treatments that support both body and well-being.

#### Glass rods for cupping glasses

One end fused, the other conically shaped. The glass rod is used to gently and precisely release cupping glasses from the skin without causing irritation.



Art.No.	Dimensions (mm)
42894010	140 x 7 Ø

#### Massage cupping glasses



They are made of high-quality, mouth-blown glass and carry the CE certificate for tested safety.

Art.No.	Height (mm)	Diameter (mm)
42887020	90	30

#### Massage cupping glasses



Equipped with an olive and a ball made of soft PVC, which is cadmium-free and particularly skin-friendly, they offer easy handling and a pleasant application experience. CE-certified for the highest quality and safety.

Art.No.	Height without bulb (mm)	Diameter (mm)
42889001	90	30

#### Cupping glasses acc. to Bier with bulb

AR-Glas®



Equipped with an olive and a ball made of soft PVC, which is cadmium-free and particularly skin-friendly, they offer easy handling and a pleasant application experience. CE-certified for the highest quality and safety.



Art.No.	Height without bulb (mm)	Diameter (mm)
42885003	50	30
42885004	60	40
42885005	70	50
42885006	80	60

#### Cupping glasses acc. to Bier without bulb

AR-Glas®



Equipped with an olive at the top, they offer flexibility when connecting to hose systems. The CE certificate guarantees tested quality.



Art.No.	Height (mm)	Diameter (mm)
42886003	50	30
42886004	60	40
42886005	70	50
42886006	80	60

## Cupping glasses

mouth-blown  
without bulb



Mouth-blown cupping glasses made of high-quality borosilicate glass 3.3. Manufactured without an olive, they are ideal for classic cupping procedures. The CE certificate guarantees tested quality.

\*individually packed in a carton

Art.No.	Diameter (mm)	Art.No.	Diameter (mm)
42891001	25	42891401*	25
42891002	35	42891402*	35
42891003	44	42891403*	44
42891004	50	42891404*	50
42891005	65	42891405*	65

## Cupping glasses

mouth-blown  
without bulb

Mouth-blown cupping glasses made of high-quality borosilicate glass 3.3. The CE certificate guarantees tested quality.



Art.No.	Diameter (mm)	Olive Ø (mm)
42892001	25	9
42892002	35	9
42892003	44	10
42892004	50	10
42892005	65	10



## Cupping glasses

mouth-blown  
with bulb



Art.No.	Ø (mm)	Bulb (mm)	Art.No.	Ø (mm)	Bulb (mm)
42893001	25	56 x 51	42893401*	25	56 x 51
42893002	35	56 x 51	42893402*	35	56 x 51
42893003	44	61 x 56	42893403*	44	61 x 56
42893004	50	61 x 56	42893404*	50	61 x 56
42893005	65	61 x 56	42893405*	65	61 x 56

Made of borosilicate glass 3.3, these cupping glasses are equipped with an olive and a ball made of soft PVC, which is cadmium-free and skin-friendly. CE-certified for the highest quality standards.

\*individually packed in a carton

## Kinesiology Tape

### Original NASARA®

multiple colours,  
5 m x 50 mm



Made from flexible cotton fabric that can be stretched by approx. 155 - 160 % lengthwise. Thanks to the thermoplastic acrylic adhesive on the adhesive side, the tape adapts perfectly to the ambient temperature by expanding and contracting.

The tape is characterized by excellent adhesive properties, high wearing comfort and very good skin compatibility. It is permeable to air and can be easily removed from the skin after therapy.

Art.No.	Colour
42884004	beige
42884008	blue
42884012	yellow
42884016	green
42884020	violet
42884024	orange
42884028	pink
42884032	red
42884036	black
42884040	white

## Tape-Scissors



- + stainless steel
- + titanium-coated
- + hardened blade

Ideal for cutting kinesiology tape.

Art.No.	Blade length (mm)	Total length (mm)
42884010	85	200

**LIFE SCIENCE.**

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### Blood lancets safety blood lancets Safe Lite III



#### Advantages:

- + improved aiming due to smaller estuary diameter and raised estuary with a ring
- + easier activation thanks to a longer activation button with a rough surface
- + easier, ergonomic handling due to narrower lancet body
- + less pain for the patient due to shortened free-standing needle, i.e. reduced needle vibration



Art.No.	Specification	Insertion depth (mm)	Colour
40365011	18G needle	1.8	green
40365012	28G needle	1.8	violet
40365013	26G needle	1.8	yellow
40365014	26G needle	2.4	blue
40365015	21G needle	1.8	orange
40365016	21G needle	2.4	pink

**User safety:** the needle is fully protected before and after use

**User comfort:** ready to use, pre-tensioned, releases at the touch of a button

**Patient safety:** single use, sterilised by gamma radiation, not reusable

**Patient comfort:** high-quality, ultra-sharp, triple-beveled needle, very fast penetration

**Efficiency:** a range of tip configurations and penetration depths to suit most capillary blood collection requirements

**Area of application:** blood glucose and other diagnostic in-vitro tests

**Shelf life:** 5 years

**Packaging unit:** 100 pieces

### Blood lancets



The asymmetrical shape of the cutting edge combined with a material thickness of only 0.16 mm leads to a one-sided cut and therefore reduces tearing of the wound edges. As the skin is less damaged, the sensation of pain is reduced and the wound heals more quickly.



- + disposable, individually sealed, sterile packaging, no risk of infection
- + burr-free, optimal, sharp lancet tip
- + right insertion depth, good blood discharge
- + non-slip lancet shaft, easy handling
- + made of stainless steel

Art.No.	Material	Thickness (mm)	Chromium content	PU (pcs)
40366010	Stainless steel	0.16	16 - 18 %	200

### Mouthpieces made of polystyrene



Art.No.	Colour
40360001	red
40360002	white

### Mouthpieces with tubing of silicone



Art.No.	Length (mm)	Material	Colour
40361001	150	Polystyrene	red
40361002	150	Polystyrene	white

## Blood sedimentation apparatus MACRO



Complete with:

- + blood sedimentation pipettes Art.No. 40380010
- + pipette protective caps
- + blood mixing tubes with rubber stoppers Art.No. 40379010
- + special rubber caps Art.No. 40377015
- + instruction manual in individual box

Metal stand made of stainless steel  
with swivel arm for inclined position for  
rapid sedimentation

Art.No.	Variant	Graduation
40367005	5 pipettes	blue
40367010	10 pipettes	blue

## Special rubber caps



This rubber cap and filling method is recognized and endorsed by the German Professional association for health services and welfare.

For filling by puncturing a syringe cannula. Cap can be used 10 to 20 times, closes automatically after insertion. Clean by rinsing with cold water.

Art.No.	Length (mm)	Ø (mm)
40377015	15	5.5
Material	Thickness (mm)	Colour
Latex	0.75	natural

## Blood sedimentation pipettes MACRO according to Westergren-Katz



- + DIN EN ISO 13079
- + clear glass
- + packed in 10 pieces/box
- + amber graduation is also available as a custom-made product

Art.No.	Inner Ø (mm)	Outer Ø (mm)	Length (mm)	Division (mm)	Graduation
40380010	2.42	6.3	300	0 - 200 : 1	blue

## Brushes for Westergren-pipettes



- + made from twisted wire
- + galvanised
- + natural bristles

Art.No.	Dimensions (mm)
40388001	410 x 70 x 4 Ø

### Pipettes with rubber teat



Spare rubber cap:  
see Art.No. 42620010

The pipette has an elongated tip of approx. 30 mm, which enables precise dosing. The flanged edge ensures easy handling, while the markings at 0.5 ml and 1 ml guarantee precise volume measurement.

Art.No.	Length (mm)	Wall thickness (mm)	Diameter (mm)
40514030	90	0.9	7

### Rubber teat made of silicone

suitable for  
pipette bottles,  
Pasteur pipettes etc.



Reusable only if water is handled.

Otherwise, do not reuse the rubber teat!

**Storage:** avoid sunlight, store in a cool, dry place

**Shelf life:** up to 5 years in unopened packages

Art.No.	Opening approx. (mm)	Capacity approx. (ml)	Hardness	Colour
42620010	4 - 5 Ø	2	40 Shore A	white/semi-transparent

### Hematocrit tubes according to Wintrobe



The Wintrobe hematocrit tubes are specially designed to determine the volume of blood cells. They are made of clear glass and feature double rows of numbers in different colours (white/red) for easy and precise reading. The rim and straight inner base ensure stability and ease of use.

Boro  
3.3

Art.No.	Length (mm)	Division (mm)	Graduation
40535010	112	105 in 1	red/white

### Volume capillaries disposable

**Calibrated to contain = „In“** from end to end

Filling & emptying of the volume capillaries can be done with or without capillary holder.

- + accessories: capillary holder Art.No. 40553001
- + packaged in pieces of 100 per pack / Art.No. 40551024 in pieces of 50
- + ISO 7550
- + shelf life: 4 years



Art.No.	Capacity (µl)	Precision	Accuracy	Inner Ø (mm)	Outer Ø (mm)	Length (mm)
40551003	1	≤ 1.5 %	≤± 0.5 %	0.200	0.80 ± 0.05	29 ± 1.0
40551006	2	≤ 1 %	≤± 0.5 %	0.293	1.15 ± 0.05	29 ± 1.0
40551009	3	≤ 1 %	≤± 0.5 %	0.363	1.05 ± 0.05	29 ± 1.0
40551012	5	≤ 1 %	≤± 0.5 %	0.447	1.22 ± 0.05	29 ± 1.0
40551015	10	≤ 1 %	≤± 0.5 %	0.666	1.25 ± 0.05	29 ± 1.0
40551018	20	≤ 1 %	≤± 0.5 %	0.943	1.28 ± 0.05	29 ± 1.0
40551021	25	≤ 1 %	≤± 0.5 %	1.054	1.35 ± 0.05	29 ± 1.0
40551024	50	≤ 1 %	≤± 0.5 %	1.416	1.88 ± 0.05	29 ± 1.0
40551027	100	≤ 2 %	≤± 0.5 %	1.128	1.50 ± 0.05	100 ± 1.0

CE

Boro  
3.3

## Micropipettes disposable



Calibrated to contain = „In“

### Accuracy:

Difference between mean value and nominal value in %

### Precision:

Standard deviation in relation to the average value in %

### Tolerance:

Difference between the upper and lower admissible limit deviation

The tolerance is ensured by statistical quality testing.

Please observe the guidelines of the accident prevention regulations when pipetting. We do not accept any product liability for the use of tubing and mouthpiece.

Our recommendation:

pipetting aid Art.No. 40558010

Art.No.	Volume (µl)	Precision	Accuracy	PU (pcs)
40555003	1-2-3-4-5	≤ 0.6 %	± 0.30 %	250
40555006	10	≤ 0.5 %	± 0.25 %	250
40555009	20	≤ 0.5 %	± 0.25 %	250
40555015	25	≤ 0.5 %	± 0.25 %	250
40555021	50	≤ 0.5 %	± 0.25 %	250
40555024	50-100	≤ 0.5 %	± 0.25 %	250
40555027	100	≤ 0.5 %	± 0.25 %	250
40555030	200	≤ 0.5 %	± 0.25 %	125



## Micro hematocrit capillaries heparinised



- + disposable, manufactured according to international specifications
- + inner diameter uniform over the total length (0.02 conicity)
- + ungraduated heparinised for 40 µl content, can be used in hematocrit centrifuges
- + heparinised on the entire inner surface, with Na- heparin
- + fire-polished ends, one end marked red
- + packaged in tubes of 100 pieces, 10 tubes in a box

Art.No.	Inner Ø (mm)	Outer Ø (mm)	Length (mm)
40563010	1.1 - 1.2	1.5	75 ± 1
Wall (mm)	Material	Capacity (µl)	
0.2 ± 0.025	AR-Glas®	75	



## Micro hematocrit capillaries not heparinised



- + disposable, manufactured according to international specifications
- + inner diameter uniform over the total length (0.02 conicity)
- + ungraduated heparinised for 40 µl content, can be used in hematocrit centrifuges
- + fire-polished ends, one end marked blue
- + packaged in tubes of 100 pieces, 10 tubes in a box

Art.No.	Inner Ø (mm)	Outer Ø (mm)	Length (mm)
40564010	1.1 - 1.2	1.5	75 ± 1
Wall (mm)	Material	Capacity (µl)	
0.2 ± 0.025	AR-Glas®	75	



## Micro hematocrit capillaries heparinised



- + fire-polished at the end of the color ring, one end marked red
- + filling of the tubes by capillary effect up to the mark
- + with Na-heparin
- + packaged in tubes of 100 pieces, 10 tubes in a box

For centrifugation, sealed with haematocrit sealing wax Art.No. 40566010

Art.No.	Inner Ø (mm)	Outer Ø (mm)
40565010	0.55 ± 0.05	1.5 ± 0.05
Length (mm)	Capacity (µl)	Mark at (mm)
75 ± 0.5	18	60

### Capillary holders



The capillary holder is a practical accessory for working with capillaries.

It consists of a short tube with a rubber teat, rubber stopper and a ventilation hole which allows precise handling and control.

Art.No.	Length of glass tube (mm)	Autoclavable
40553001	35	no

### Blood capillaries



- + for determining the clotting time and blood grouping
- + cut off smoothly
- + diameter: approx. 1.35 mm

Art.No.	Length (mm)	Wall thickness (mm)	PU (pcs)
40560010	90	0.22	100

### Hematocrit sealing material



For sealing micro hematocrit capillaries. The plastic plate has 2 x 24 numbered positions per pair.

This wax prevents the blood sample from leaking and does not dry out. Which makes it easy to seal and transport samples.

One plate is enough for sealing several hundred capillaries.

Art.No.	Dimensions (mm)	Shelf life	PU (pcs)
40566010	115 x 42 x 6	4 years	10

### Pasteur pipettes made of glass

- + ISO 7712
- + uniform, precise execution
- + for single use
- + with constriction in the upper part for cotton plugs
- + soda-lime glass
- + packed in pieces of 250/box



Art.No.	Length (mm)	Variant	Capacity (ml)	Body (mm)	Inner Ø capillary tip (mm)
40567001	150	short form	1.5	90 x 7 Ø	1
40567002	230	long form	1.9	90 x 7 Ø	1
40567091	150	short form, with cotton plug	1.5	90 x 7 Ø	1
40567092	230	long form, with cotton plug	1.9	90 x 7 Ø	1

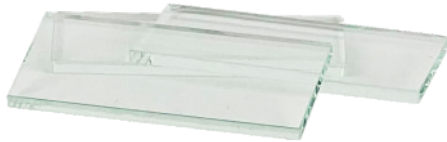
### Pasteur pipettes made of polyethylene

- + made of soft, transparent PE, quality B, non-sterile
- + packed in pieces of 500/box



Art.No.	Length (mm)	Graduation	Capacity (ml)	Body Ø (mm)	Stem Ø (mm)	Drops per ml
40569001	150	none	0.5	13	2.3	19 - 21
40569002	150	up to 1 ml	1.0	13	4.7	23 - 25
40569003	150	up to 3 ml	3.0	13	2.3	27 - 29

### Blood smear slides according to Undritz



They are characterized by polished surfaces on both sides, which enable a clear and unadulterated presentation of microscopic specimens. The beveled edges and 45° ground corners ensure safety and comfortable handling. These glasses are manufactured without a frosted edge.

Art.No.	Dimensions (mm)	Thickness (mm)	Density (g/cm <sup>3</sup> )	Material
40619010	40 x 20	1.8 - 2.2	2.5	Float glass (soda-lime glass)

### Nissl tubes (centrifuge tubes) with elongated tip



The Nissl tubes, also known as centrifuge tubes with an elongated tip, are specially developed for volumetric fibrin determination. They offer precise measurement and excellent stability during analysis.

Boro 3.3

Art.No.	Dimensions (mm)	Capacity (ml)	Graduation
41145010	105 x 11	3	blue

### Reaction tubes (micro tubes) made of high quality polypropylene



- + with leak free cap
- + disposable
- + non-sterile

Art.No.	Capacity (ml)	PU (pcs)
49040010	1.5	1,000

### Stirring spatulas made of plastic, with crossbar



- + clear
- + improves mixing of samples, especially in rectangular cuvettes
- + packaged in pieces of 100

Art.No.	Length (mm)	Diameter (mm)	Crossbar (mm)	Material
40734010	120	3	9	Polystyrene

### Pipetting aid „micro-classic“

- + with tube and adapter for pipette holder

Ideal for pipetting with disposable micropipettes and other pipettes up to approx. 1 ml.

Particularly suitable for microscopy, as the right-angled pipette position is advantageous here. Easy to use.

The pipetting aid must not be used with end-to-end capillaries!



Art.No.	Autoclavable at
40558010	+121°C/249.8°F (2 bar)

### Disposable cuvettes – macro



Optically excellent transparency. Deepened windows as a protection against scratches. Arrow marking of the transmission direction.  
+ packed in pieces of 100

Art.No.	40705010
Material	Polystyrene
Light path (mm)	10
Application range (nm)	from 340 nm on
Windows (mm)	10 x 35
Dimensions (mm)	12.5 x 12.5 x 45
Capacity (ml)	min. 2.5/max. 4.5
Standard deviation at 360 nm	± 0.005 extinction units

### Disposable cuvettes – semi-micro



Optically excellent transparency. Deepened windows as a protection against scratches. Arrow marking of the transmission direction.  
+ packed in pieces of 100

Art.No	40706010
Material	Polystyrene
Light path (mm)	10
Application range (nm)	from 340 nm on
Windows (mm)	5 x 23
Dimensions (mm)	12,5 x 12,5 x 45
Capacity (ml)	min. 1.5/max. 3.0
Standard deviation at 360 nm	± 0.005 extinction units

## Blood cell counters

### Counter

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

The electronic storage devices make the counting of the blood count more precise.

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

### Interfaces:

+ data transfer – USB mini

### Power supply:

+ mains operation - USB mains adapter 5VDC / 300mA  
+ battery operation - external USB power bank

### Function buttons:

+ labelling - On/Off, -/Eva 1, +, Go On, Corr.  
+ clear counting buttons

### Labelling:

+ Art.No. 40345010 – Eos, Baso, Promy, Myelo, Div, Juve, Stab, Seg, Lym, Mono  
+ Art.No. 40345015 – At Ly, My Bl, Met My, Myelo, Normo, Lym, Seg, Mono, Plas, Tox Gr, Stab, Eos, Baso, Div/Reti, Div/Ery

### Programmes:

+ counting steps – 10-1000 in steps of 10  
+ programmes – LEUKO, MYELO/RBC, RETI, FREE

### Advantages:

+ mains operation/battery operation  
+ software (download) with PC evaluation  
+ large TFT colour display  
+ storage of the last count in the device



Art.No. 40345010

Art.No. 40345015

Art.No.	40345010	40345015
Counting keys	10	15
Function keys	5	5
Counting range	max. 1000	max. 1000
Display	TFT colour display 3.5"	TFT colour display 3.5"
Dimensions (mm)	130 x 235 x 35	130 x 235 x 35
Colour	blue	blue



## Tubes for urinalysis

### U-shape, with handle and round bottom

Made of clear glass which provides an optimal view of the samples.

U-shaped design with sturdy round base and practical handle for safe handling.

The beaded edges at the top opening facilitate handling and reduce the risk of damage or glass breakage.



The tube is a high-quality tool for urine tests.

Art.No.	Height (mm)	Material
41375010	135	AR-Glas®

## Fermentation saccharometer according to Dr. Einhorn with measuring tube

### Saccharometer:

- + with engraved graduations in ml and % for gas and sugar
- + graduation from 1 - 5 ml and 1/4 - 1 %
- + tube with sphere, curved, on glass base
- + capacity to below sphere: approx. 9 ml

### Measuring tube:

- + with ring mark at 10 ml
- + cylinder glasses with round bottom and beaded rim
- + with spout
- + 140 mm length



Art.No.	Total capacity (ml)	Outer tube Ø (mm)	Graduation	Variant
41370010	14	15	white	Saccharometer
41370020	250	14.5	amber	Spare measuring tube

## Glass cylinder for Urinometers

A glass cylinder that is perfectly matched to the urinometers according to Dr. Vogel.

- + low form
- + ungraduated



Art.No.	Inner Ø (mm)	Dimensions (mm)	Wall (mm)
40247010	21	125 x 24 Ø	1.5

## Glass cylinder for Urinometers

Boro 3.3

**Stable construction:** The cylinder is equipped with a solid base which ensures that it cannot tip over.

**Practical spout:** Allows samples to be poured out easily and without spilling.

- + low form
- + ungraduated
- + DIN EN ISO 4788



Art.No.	Dimensions (mm)	Base Ø (mm)	Capacity (ml)	Weight (g)
44401030	170 x 39 Ø	70	100	100



### Urinometers according to Dr. Vogel

A urinometer consists of a float, the weight and the stem.

It is immersed in a specially designed glass cylinder.

The paper scale integrated in the stem precisely indicates the specific gravity of the urine. This model is ideal for general analyses and routine laboratory tests.

Equipped with an air-filled glass tube as a float, which guarantees stability and accurate readability.

The weight consists of a glass cylinder loaded with iron shot to ensure reliable balance and measurement.



Art.No.	Measuring range g/cm <sup>3</sup>	Reference temperature	Length (mm)	Division g/cm <sup>3</sup>
40240010	1.000 - 1.060	+20°C/68°F	150	0.001

### Urinometers according to Dr. Vogel

The urinometer is specially designed for the analysis of very small amounts of urine.

The compact probe also uses an iron shot load, which guarantees a high degree of accuracy.



Art.No.	Masuring range g/cm <sup>3</sup>	Reference temperature	Length (mm)	Division g/cm <sup>3</sup>
40245010	1.000 - 1.060	+20°C/68°F	90	0.002

### Urinometers according to Dr. Vogel

This set combines the reliable urinometer according to Dr. Vogel with a matching glass cylinder for immediate use. The urinometer has an iron shot-loaded float and an easy-to-read scale in the glass stem.

Thanks to its stand and practical spout, the glass cylinder supplied is the ideal complement for smooth measurements.



Art.No.	Length (mm)	Measuring range g/cm <sup>3</sup>	Reference temperature
40242010	150	1.000 - 1.060	+20°C/68°F
40248010	90	1.000 - 1.060	+20°C/68°F

## Thermostatic water bath

fully electronic, digital, complete with Plexiglas® tank Art.No. 43194001

All immersing, bare metal parts are made of stainless steel. Fully electronic, wear-free temperature control with digital display. Cooling coil and connection piece for consumers available as accessories.

### Technical data

**Temperature display / resolution:** LED / 0,1 K

**Temperature setting / resolution:** digital / 0,1 K

**Temperature consistency :**  $\pm 0,1$  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:** -30°C/-22°F up to +100°C/+212°F

**Pump capacity:** max. 5 l/min

**Safety class:** 3 (DIN 12876)



Art.No.	43180010
Heating (W)	1000
Voltage (V)	230
Weight (kg)	3
Dimensions (mm)	120 x 130 x 330
Pressure max. (bar)	0.12

**Tanks** made of Plexiglas®  
for Art.No. 43180010  
without inclined bottom



Art.No.	Dimensions (mm)
43194001	349 x 140 x 162

**Tanks** made of Plexiglas®  
with inclined bottom

+ for better circulation



Art.No.
43187003
Dimensions (mm)
430 x 130 x 150

**Flow monitors**  
made of plastic (SAN)  
transparent



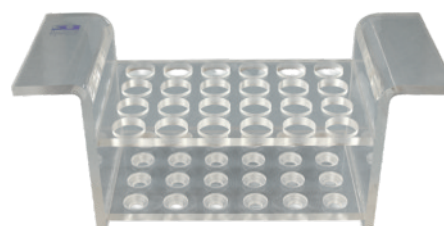
+ to control  
the water flow

Art.No.	for tubing inner Ø (mm)
43178010	6 - 11

**Water bath racks** made of Plexiglas®

+ for hanging into the tank

Art.No.	Holes	Diameter (mm)	for
43188003	20	18	20 centrifuge- or test tubes
43188004	24	11	24 reaction tubes



### ThermoClean DC stabilising solutions for water baths

#### Application:

Pour 1 ml of the solution for 1 l of distilled water into a clean tank



#### 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 with no odour formation
- + no obstructions in tubings and temperature control system
- + frequent cleaning of the tank becomes unnecessary
- + solution is free of aggressive phosphates and oxidising or reducing substances
- + only minor pH value change of the water
- + solvent-free
- + prevents foam formation, even with strong circulation

Art.No.	Concentrate	Capacity (ml)
43170001	methylene blue	100
43170003	clear	100

### Histokitt

- + does not fluoresce
- + does not yellow even after prolonged exposure to UV light
- + does not crack or change shape even after prolonged storage and temperature changes
- + even sensitive colourations are preserved thanks to the acid number = 0
- + refractive index of 1.5 (nD 20 °C) is adapted to the microscope slide and cover glass
- + water-repellent
- + can be stored practically indefinitely in the original sealed bottle



Inclusion agent for the histological-microscopic technique.

Lightfast, neutral, colourless, no effect on staining, soluble e.g. in benzene, chloroform, dioxane, xylene

Art.No.	Curing time (min)	Capacity (ml)	Cold resistance
41025010	20	500	up to -17 °C/1.4 °F

### Flasks for cedar oil

- + with plastic cap and glass rod
- + with jointed neck
- + with ground-in, interchangeable amber pipette



Art.No.	Capacity (ml)	Total height (mm)	Flask height (mm)	Diameter (mm)
40920010	40	100	60	54

## All-purpose writing tape Shurtape® self-adhesive

### + Typical applications:

- for general purpose labeling, colour-coding, decorating and identification
- can also be used for packaging, bundling, binding and holding applications

### + Product features:

- good adhesion
- releases easily from a variety of surfaces
- available in a variety of colours
- meets LHAMA requirements for use in arts and crafts
- adhesive: Synthetic rubber-based
- made for labeling

### + Physical properties:

- tensile Strength: 35,0 N/10 mm
- adhesion to Stainless Steel: 3,72 N/10 mm
- thickness: 0,12 mm
- elongation: 9 %
- service Temperature Range: 16°C up to 66°C / 60.8°F up to 150.8°F

### + Storage and usage conditions:

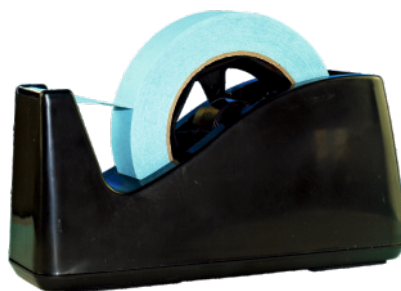
- store cool and dry
- use within 12 months of date of shipment
- surfaces clean, dry and free of grease and oil before use



Art.No.	Width (mm)	Length (m)	Thickness (mm)	Colour
41180003	24	55	0.12	green
41180006	24	55	0.12	yellow
41180009	24	55	0.12	white
41180012	24	55	0.12	blue
41180015	24	55	0.12	red

## Desktop tape dispensers

- + for adhesive tape max. 25.4 mm wide
- + for all-purpose writing tape



Art.No.	Colour
41180110	black

## Glass-writing diamond pens

- + for permanent marking of glass



Art.No.	Length (mm)	Material handle
41182010	150	Wood

## Signing pens

- + with clip
- + fine line, width: 1 mm
- + odor: mild

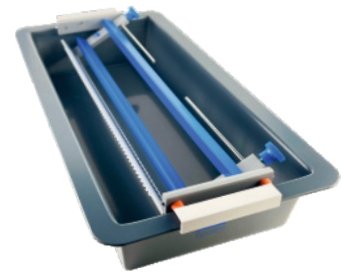
For labelling and marking laboratory glassware as well as plastics, foils and rubberised material Waterproof alcohol-based ink, smudge-proof and quick-drying



Art.No.	Colour
41181004	red
41181008	black
41181010	blue

### Staining bridges made of PVC extendable, with dyeing tub

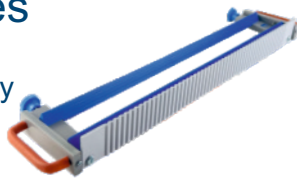
- + suitable for bowls and basins from 380 to 620 mm
- + with angled position and horizontal fixation
- + consists of staining bridge of PVC Art.No. 41186010 with two plexi retaining clips and staining tray of PVC Art.No. 41187010



Art.No.	Dimensions (mm)	Tensile strength	Elongation at break	E-Modulus	Temperature resistance	Heat resistance
41185010	380 x 170 x 80	30 N/mm <sup>2</sup>	33 %	3000 N/mm <sup>2</sup>	-15 to +60°C/ +5 to +140°F	+72°C/161.6°F

### Staining bridges made of PVC extendable, without tray

- + suitable for bowls and basins from 38 to 62 cm
- + with inclined position and horizontal fixation
- + 2 retaining clips



Art.No.	Material
41186010	PVC

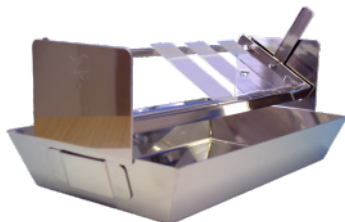
### Staining trays made of PVC

This staining tray is also suitable as a storage tray for pipettes etc.



Art.No.	Dimensions (mm)	Colour
41187010	380 x 170 x 80	dark grey

### Staining trays with tilting rack



- + slanted
- + swivelling

**Note:** Do not leave any staining liquids in the staining tray for a long period of time. This could cause corrosion.

Art.No.	Dimensions (mm)	Autoclavable	Material	Heat resistance
41192010	232 x 140 x 38	Unlimited	Stainless steel	190°C/374°F

### Staining stands made of Plexiglas®

- + rack made of Plexiglas®
- + with 3 Hellendahl boxes made of glass Art.No. 42460010

Art.No.	Dimensions (mm)	Opening (mm)
41218010	210 x 115 x 45	60 x 45

### Staining jars made of glass

- + rectangular
- + with cover



Art.No.	Dimensions (mm)
41230010	85 x 40 x 20
Material	
Soda-lime glass	

### Staining jars made of glass

- + round
- + with cover



Art.No.	Jar dimensions (mm)	Density (g/cm <sup>3</sup> )
41231010	85 x 40 Ø	2.49
Cover dimensions (mm)		Material
15 x 45 Ø; Wall 1.5		Soda-lime glass



### Staining jars according to Coplin made of glass, with cover



Holds 10 microscope slides 76 x 26 mm vertically

#### Cleaning instruction:

Tests with household dishwashers have shown that repeated cleaning at 55 - 60°C/131 - 140°F is not a problem for the glasses.

For dishwashers in laboratories or clinics that work at higher temperatures, it would be necessary to ensure slow heating and cooling with a temperature gradient of max. 40°C/104°F. In addition, the glasses should be firmly secured so they do not knock against each other.

Art.No.	Dimensions (mm)	Capacity (ml)	Material	Dimensional stability when heated slowly
42470010	113 x 62/74 Ø	75	Soda-lime glass	up to 180°C/356°F

### Glass boxes (staining dishes) with glass cover



#### \*Consisting of:

Temperature resistance up to 100°C/212°F

Glass box with cover and loose staining rack made of stainless steel, for simultaneous staining of 10 microscope slides

Art.No.	Dimensions (mm)	Material	Variant
41205001	9 x 7 x 6.5	Soda-lime glass	glass box with cover
41205002	9 x 7 x 6.5		glass box without cover
41205003	9 x 7 x 1		glass cover
41205004	8 x 6 x 5	Stainless steel	staining insert
41205010*	9 x 7 x 6.5	Soda-lime glass & stainless steel	glass box with staining insert, complete

### Staining dishes made of glass, with glass cover according to Schiefferdecker



#### Cleaning instructions:

Tests with household dishwashers have shown that repeated cleaning at 55 - 60°C/131 - 140 °F is not a problem for the glasses. For dishwashers in laboratories or clinics that work at higher temperatures, it would be necessary to ensure slow heating and cooling with a temperature gradient of max. 40°C/104°F. In addition, the glasses should be firmly secured so they do not knock against each other.

for 10 microscope slides 76 x 26 mm vertically  
or for 20 slides back-to-back

Art.No.	Dimensions (mm)	Material
42450010	85 x 70 x 50	Soda-lime glass

### Slide boxes made of heavy walled soda glass, with Hellendahl glass lids



for 8 slides  
76 x 26 mm or  
for 16 pieces  
standing back to back

#### Cleaning instruction:

Tests with household dishwashers have shown that repeated cleaning at 55 - 60°C/131 - 140°F is not a problem for the glasses.

For dishwashers in laboratories or clinics that work at higher temperatures, it would be necessary to ensure slow heating and cooling with a temperature gradient of max. 40°C/104°F. In addition, the glasses should be firmly secured so they do not knock against each other.

Art.No.	Dimensions (mm)	Capacity (ml)	for slides	Material	Dimensional stability when heated slowly
42460010	61 x 58 x 99	110	8	Soda-lime glass	up to 180°C/356°F

### Stainig dishes made of glass, with Hellendahl glass lids, without extension



for 8 slides  
76 x 26 mm or  
for 16 pieces  
standing back to back

#### Cleaning instruction:

Tests with household dishwashers have shown that repeated cleaning at 55 - 60°C/131 - 140°F is not a problem for the glasses.

For dishwashers in laboratories or clinics that work at higher temperatures, it would be necessary to ensure slow heating and cooling with a temperature gradient of max. 40°C/104°F. In addition, the glasses should be firmly secured so they do not knock against each other.

Art.No.	Dimensions (mm)	Capacity (ml)	for slides	Material	Dimensional stability when heated slowly
42461010	92 x 43 x 95	160	8	Soda-lime glass	up to 180°C/356°F

### Staining tray made of glass without lid

For 10 slides 76 x 26 mm or any width  
up to approx. 50 mm

Holds 10 slides horizontally or 20 slides back to back



#### Cleaning instruction:

Tests with household dishwashers have shown that repeated cleaning at 55 - 60°C/131 - 140°F is not a problem for the glasses.

For dishwashers in laboratories or clinics that work at higher temperatures, it would be necessary to ensure slow heating and cooling with a temperature gradient of max. 40°C/104°F. In addition, the glasses should be firmly secured so they do not knock against each other.

Art.No.	Dimensions (mm)	Material	Dimensional stability when heated slowly
42481010	91 x 74 x 49	Soda-lime glass	up to 180°C/356°F

### Wire hanger for Art.No. 42481010

+ for inserting the dyeing frame



Art.No.	Material
42482010	Wire

## Staining dishes made of heavy wall soda glass, with glass cover, without rack insert



Holds 10 slides.

Art.No.	Dimensions (mm)	Capacity (ml)	for Art.No.	Material	Dimensional stability when heated slowly
42480010	105 x 85 x 80	300	42481010	Soda-lime glass	up to 180°C/356°F

## Staining blocks clear glass with lid

Hydrolytic class 3

Acid resistance class 1

Alkali resistance class 2



With semicircular cavity and lid disc  
40 x 40 x 3 mm made of clear glass.

Art.No.	Dimensions (mm)	Material
42020010	40 x 40 x 16	Soda-lime glass
Recess Dimensions (mm)		Temperature change resistance
10 x 300 Ø		30 K

## Bottles for Canada balsam

- + made of glass
- + with ground cap made of glass
- + with rod made of glass



Art.No.	Capacity (g)	Rod length (mm)	Rod Ø (mm)
41710030	30	92	4
41710060	60	120	4

## Bottles for Canada balsam

- + made of glass
- + with loose cap made of glass
- + with rod made of glass



Art.No.	Capacity (g)	Rod length (mm)	Rod Ø (mm)
41720030	30	92	4
41720060	60	120	4

## Drigalski spatula

- + for uniform distribution of bacterial material on a solid culture



AR-Glas®

Art.No.	Total length (mm)	Side length (mm)	Spatula width (mm)	Rod Ø (mm)
41049010	140	35	40	5

## Dissecting needles straight made of chrome-nickel steel, stainless, with wooden handle



Art.No.	Total length (mm)	Handle length (mm)	Needle length (mm)
42712010	150	100	50



### Glass spot plates according to Börner



The Börner glass spot plate is an aid for flocculation tests and similar laboratory applications. It has 10 numbered cavities that allow tests to be carried out in a clear and structured manner. The overflow grooves prevent liquids from overflowing and ensure clean working conditions.

Two ledges at the bottom ensure stability during use.

Art.No.	Dimensions (mm)	Thickness (mm)	Cavities Ø (mm)	Cavities depth (mm)
40623010	107 x 57	4	14	2

### Glass spot plates



The glass spot plate is an aid for flocculation tests and similar laboratory applications. It has 12 numbered cavities that allow tests to be carried out in a clear and structured manner. The overflow grooves prevent liquids from overflowing and ensure clean working conditions.

Two ledges at the bottom ensure stability during use.

Art.No.	Dimensions (mm)	Thickness (mm)	Cavities Ø (mm)	Cavities depth (mm)
40624010	89 x 57	4.5	15	1.5

### Porcelain spot plates with 6 or 12 cavities



The glazed surface ensures easy cleaning and prevents the penetration of liquids, making it easier to work hygienically.

Art.No.	Dimensions (mm)	Cavities Ø (mm)	Cavities depth (mm)	Variant
40625008	112 x 81 x 25	25	2	6 cavities
40625010	115 x 91 x 12	17	2	12 cavities

### Drying racks made of Plexiglas® for 12 microscope slides

For the drying of coloured slides. The slides are placed diagonally on interchangeable flow paper. The mounting surface is numbered.

Two packs of blotting paper can be stored in the base of the drying rack. Two packs of blotting paper included.



Art.No.	41238010
Drying rack	
Heat resistance	up to 70°C/158°F
Density (g/m³)	1.19
Material	Plexiglas®
Colour	white
Blotting paper	
Dimensions (mm)	200 x 45
Material	100 % cotton
Colour	white
Surface	smooth
Surface weight (g/m²)	150
Thickness (mm)	0.32

### Spare blotting paper sheets (chromatography paper) pack of 25 sheets



Art.No.	41238020
Dimensions (mm)	200 x 45
Material	100 % cotton
Colour	white
Surface	smooth
Surface weight (g/m²)	150
Thickness (mm)	0.32

## Racks made of Plexiglas® for 12 microscope slides



with numbering from 1 to 12 and field for inscriptions

Resistance to acids and alkalis:

- + good resistance to diluted acids and alkalis
- + limited resistance to organic solvents

Art.No.	41240010
Plate thickness (mm)	3
Bulk density (g/m <sup>3</sup> )	1.19
Material	Plexiglas® XT
Slot depth (mm)	7
Dimensions (mm)	90 x 130 x 34

## Petri dishes

- + with lid
- + clear glass
- + heat resistant up to +60°C/140°F



Art.No.	Cover Ø (mm)	Height of base (mm)	Material
41042006	40	12	Soda-lime glass
41042012	60	15	
41042016	70	15	
41042018	80	15	
41042020	90	15	
41042022	90	15	
41042024	100	20	
41042030	120	20	
41042036	150	25	
41042038	180	30	
41042040	200	30	
41042042	200	50	

## Petri dishes with vents

- + disposable
- + with air vents
- + with cover



Art.No.	Diameter (mm)
41043010	90
Material	PU (pcs)
Polystyrene	480

## Petri dishes divided

- + clear glass
- + with cover
- + with white grid mesh



Art.No.	Grid size (mm)	Dimensions (mm)
41044010	10 x 10	20 x 100 Ø

## Petri dishes

- + divided
- + with cover



sterilisable up to +121°C/+249.8°F

Art.No.	Cover Ø (mm)	Base height (mm)	Base
41045002	100	20	divided into two (half division)
41045003	100	20	divided into three parts (thirds)
41045004	100	20	divided into four (quarter division)

Boro 3.3

### Petri dishes

BASIC Boro 3.3

- + with cover
- + white graduation
- + autoclavable



Art.No.	Dimensions approx. (mm)	PU (pcs)
51046062	60 x 20 Ø	10
51046082	80 x 20 Ø	10
51046101	100 x 15 Ø	10
51046102	100 x 20 Ø	10
51046122	120 x 20 Ø	5
51046152	150 x 25 Ø	2

### Eyelets

- + rust-proof
- + loose
- + made of nickel-chrome



Art.No.	Eyelet-Ø (mm)	Length (mm)	Wire diameter (mm)
40035010	3-4	50	0.5

### Eyelets with glass handle

- + rust-proof
- + loose
- + made of nickel-chrome



Art.No.	Eyelet-Ø (mm)	Length (mm)	Wire diameter (mm)
40036010	3-4	200	0.5

### Needles

- + made of nickel-chrome
- + rust-proof
- + acid-resistant



Art.No.	Length (mm)	Wire diameter (mm)
40037010	40	0.6

### Needles with glass handle

- + made of nickel-chrome
- + rust-proof
- + acid-resistant



Art.No.	Length (mm)	Wire diameter (mm)
40038010	200	0.6

### Needle holder according to Kolle

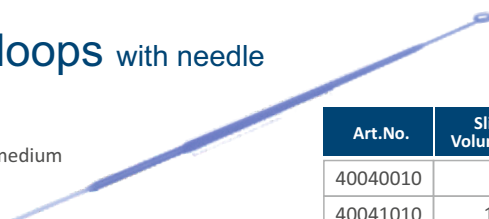
- + made of aluminium with plastic handle
- + sterilizable up to 140 °C/ 284 °F (handle only up to max. 80 °C/ 176 °F)



Art.No.	Diameter (mm)	Length (mm)
40039016	8.5	160
40039025	8.5	250

### Vaccination loops with needle

- + for single use
- + for inoculation of culture medium



Art.No.	Sling-Volume (µl)	Length (mm)	Colour	Material	PU (pcs)
40040010	1	195	white	Polystyrene	1000
40041010	10	200	blue	Polystyrene	

## Microscope slides „Elka“

cut edges,  
ready to use,  
pre-cleaned



Density: 2500 kg/m<sup>3</sup> Youngscher Modulus: 70 Gpa Poisson number: 0.23 Hardness (Mohs): 6

+ shelf life: up to 12 months

+ packed in pieces of 50/ 2,500 pieces per box

### ISO 8037/1

Art.No.	42400010
Dimensions (mm)	76 x 26 x 1
Material	Soda-lime glass

## Microscope slides „Elka“

ground edges at 90°,  
selected glass quality,  
non-corrosive,  
ready to use,  
pre-cleaned



Density: 2500 kg/m<sup>3</sup> Youngscher Modulus: 70 Gpa Poisson number: 0.23 Hardness (Mohs): 6

+ shelf life: up to 12 months

+ packed in pieces of 50/ 2,500 pieces per box

### ISO 8037/1

Art.No.	42401010
Dimensions (mm)	76 x 26 x 1
Material	Soda-lime glass

## Microscope slides with matt stripes

cut edges,  
selected glass quality,  
non-corrosive,  
ready to use,  
pre-cleaned



Density: 2500 kg/m<sup>3</sup> Youngscher Modulus: 70 Gpa Poisson number: 0.23 Hardness (Mohs): 6

+ packed in pieces of 50/ 2,500 pieces per box

### ISO 8037/1

Art.No.	42406010	42406020
Matt stripes	both sides 20 mm	one side 20 mm
Dimensions (mm)	76 x 26 x 1	76 x 26 x 1
Material	Soda-lime glass	Soda-lime glass

## Microscope slides with frosted end on both sides

ground edges at 90°, cut  
selected glass quality,  
non-corrosive,  
ready to use,  
pre-cleaned



+ packed in pieces of 50/ 2,500 pieces per box

### ISO 8037/1

Art.No.	42407010
Frosted end	both sides 20 mm
Dimensions (mm)	76 x 26 x 1
Material	Soda-lime glass

## Microscope slides Superfrost® Plus

ground edges at 90°,  
adhesive surface,  
with positive charge



A glass slide used for the collection, preservation, and/or transport of a clinical sample or smear for analysis and/or other examination. It is a disposable product.

+ packed in pieces of 72

### ISO 8037/1

Art.No.	42409110
Colour	white
Dimensions (mm)	75 x 25 x 1
Material	Soda-lime glass

### SuperFrost®-Microscope slides

with colour code,  
cut edges



Sophisticated labeling system for all preparations in medical and scientific laboratories. SuperFrost® slides have a coated labeling field in one of five standard colours.

Preparations can thus be identified or labeled according to urgency, examination method, staining technique, etc.

The coating of the labeling field is resistant to all common solvents.

+ packed in pieces of 50

+ 5000 pieces per box

ISO 8037/1

Art.No.	Colour
42408010	blue
42408020	yellow
42408030	green
42408050	pink
42408060	white
<b>Dimensions (mm)</b>	
76 x 26 x 1	
<b>Material</b>	
extra white glass	

### SuperFrost®-Microscope slides

with colour code,  
ground edges at 90°



Sophisticated labeling system for all preparations in medical and scientific laboratories. SuperFrost® slides have a coated labeling field in one of five standard colours.

Preparations can thus be identified or labeled according to urgency, examination method, staining technique, etc.

The coating of the labeling field is resistant to all common solvents.

+ packed in pieces of 50

+ 5000 pieces per box

ISO 8037/1



Art.No.	Colour
42409010	blue
42409020	yellow
42409030	green
42409040	orange
42409050	pink
42409060	white
<b>Dimensions (mm)</b>	
76 x 26 x 1	
<b>Material</b>	
extra white glass	

### Microscope slides Polysine®

ground edges at 90°



+ shelf life: up to 24 months

+ packed in pieces of 72

+ minimum order quantity: 20 packs

These slides come with a permanent adhesive. This provides superior cell and tissue adhesion. They save money and time by eliminating the need for expensive adhesives and time-consuming coating techniques. Test results can be obtained quickly with less effort.

Polysine® microscope slides are insensitive to the effects of enzymes or heating and are therefore ideal for immunocytochemical and molecular hybridisation assays on cell preparations or paraffin-embedded tissue sections. Cytological preparations resist the loss of cells during extended staining procedures.

Tissue loss during prolonged insitu-DNA-hybridisation techniques therefore no longer occur.

Polysine® microscope slides offer superior adhesion to slides treated with urea, protein or silane. Polysine® slides have not only been developed for research anatomists, cell immunologists and molecular biologists, but also for surgical molecular pathology.

The electrostatic and chemical attraction of Polysine® slides is effective in:

- + fresh frozen tissue sections
- + cytocentrifuge preparations and cytology smears
- + alcohol fixed, paraffin embedded tissues, Bouin's or non-crosslinking fixed, paraffin embedded tissue sections

ISO 8037/1

<b>Art.No.</b>	42409210
<b>Dimensions (mm)</b>	75 x 25 x 1
<b>Colour</b>	white

## Microscope slides

with one cavity

clear glass, ground edges at 90°



Lin. Coefficient of expansion:  $9.6 \cdot 10^{-7} \text{ K}^{-1}$

Density: 2.479 g/cm<sup>3</sup>

Upper cooling temperature: 513°C

Softening temperature: 720°C

+ pre cleaned

+ made of soda lime glass of third hydrolytic class

+ packed in pieces of 20

+ ready for use

Art.No.	42415010
Cavities (mm)	1.75 x 18-22 Ø
Dimensions (mm)	76 x 26 x 3
Material	Soda-lime glass

## Microscope slides

with one cavity

clear glass, ground edges at 90°



Lin. Coefficient of expansion:  $9.6 \cdot 10^{-7} \text{ K}^{-1}$

Density: 2.479 g/cm<sup>3</sup>

Upper cooling temperature: 513°C

Softening temperature: 720°C

+ packed in pieces of 50

Art.No.	42410010
Cavities (mm)	0.7 x 16 Ø
Dimensions (mm)	76 x 26 x 1.5
Material	Soda-lime glass

## Microscope slides

with two cavities

clear glass, ground edges at 90°



Lin. Coefficient of expansion:  $9.6 \cdot 10^{-7} \text{ K}^{-1}$

Density: 2.479 g/cm<sup>3</sup>

Upper cooling temperature: 513°C

Softening temperature: 720°C

+ packaged in pieces of 50

Art.No.	42411010
Cavities (mm)	0.7 x 16 Ø
Dimensions (mm)	76 x 26 x 1.5
Material	Soda-lime glass

## Microscope slides

with three cavities

clear glass, ground edges at 90°



Lin. Coefficient of expansion:  $9.6 \cdot 10^{-7} \text{ K}^{-1}$

Density: 2.479 g/cm<sup>3</sup>

Upper cooling temperature: 513°C

Softening temperature: 720°C

+ packaged in pieces of 50

Art.No.	42412010
Cavities (mm)	0.7 x 16 Ø
Dimensions (mm)	76 x 26 x 1,5
Material	Soda-lime glass

## Glass plates with 12 cavities

frosted surface, rounded corners, individually packaged



Lin. Coefficient of expansion:  $9.6 \cdot 10^{-7} \text{ K}^{-1}$

Density: 2.479 g/cm<sup>3</sup>

Upper cooling temperature: 513°C

Softening temperature: 720°C

Art.No.	42417010
Cavities (mm)	2 x 16 Ø
Cavities capacity (ml)	0.2
Dimensions (mm)	76 x 60 x 4
Material	Soda-lime glass

### Glass plates with 24 cavities

frosted surface, rounded corners, individually packaged

Lin. Coefficient of expansion:  $9.1 \cdot 10^{-6} \text{ K}^{-1}$

Density:  $2.49 \text{ g/cm}^3$

Upper cooling temperature:  $520^\circ\text{C}$

Softening temperature:  $710^\circ\text{C}$

Tolerances:  $\pm 1 \text{ mm}$  for length and width;  $\pm 0.5 \text{ mm}$  for height



- + production: hand-pressed, edge finely ground and seamed
- + REACH and ROHS conform

Art.No.	42418010
Cavities (mm)	1.75 x 16 Ø
Cavities capacity (ml)	0.07
Dimensions (mm)	140 x 85 x 3
Material	Soda-lime glass

### Microscope slides

without matt strips  
cut edges



Recommended for use with  
the conventional labeling system.  
Not suitable for direct printing or labelling.

ISO 8037/1

BASIC

Art.No.	52400010
Dimensions (mm)	75 x 25
Thickness (mm)	1
PU (pcs/box)	50
PU (pcs/carton)*	2,500

\*equals minimum order quantity

### Microscope slides

without matt strips  
ground edges



Recommended for use with  
the conventional labeling system.  
Not suitable for direct printing or labelling.

ISO 8037/1

BASIC

Art.No.	52401010
Dimensions (mm)	75 x 25
Thickness (mm)	1
PU (pcs/box)	50
PU (pcs/carton)*	2,500

\*equals minimum order quantity

### Microscope slides

with frosted edges  
on both sides  
cut



The slides have a matt surface on both sides at one end.  
Both matt surfaces are resistant to all common laboratory  
chemicals and dyes.

Recommended for use with the conventional labeling system  
and labeling with pencils or marker pens. Simplifies work and  
increases efficiency compared to one-sided frosted slides, as  
they allow for a more flexible way of working.

ISO 8037/1

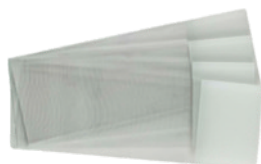
BASIC

Art.No.	52406010
Dimensions (mm)	75 x 25
Thickness (mm)	1
PU (pcs/box)	50
PU (pcs/carton)*	2,500

\*equals minimum order quantity

### Microscope slides

with white colour code  
cut



The slides are equipped with 1 silky frosted surface at one end;  
the frosted surface is 20 mm deep and resistant to all common  
chemicals and routine stains used in the laboratory.

Recommended for labeling with the conventional labeling system  
and labeling with pencils or marking pens.

ISO 8037/1

BASIC

Art.No.	52408060
Dimensions (mm)	75 x 25
Thickness (mm)	1
PU (pcs/box)	50
PU (pcs/carton)*	2,000

\*equals minimum order quantity



## Diagnostic microscope slides

1 counting field,  
with blue epoxy coating,  
ground edges at 90°

- + shelf life up to 24 months
- + packed in pieces of 100



### ISO 8037/1

Art.No.	42424010
Counting field (mm)	8 Ø
Dimensions (mm)	75 x 25
Thickness (mm)	1
Colour	blue

## Diagnostic microscope slides

3 numbered counting fields,  
with black epoxy coating,  
ground edges at 90°

- + shelf life: up to 24 months
- + packed in pieces of 100



### ISO 8037/1

Art.No.	42422010
Counting field (mm)	10 Ø
Dimensions (mm)	75 x 25
Thickness (mm)	1
Colour	black

## Diagnostic microscope slides

3 counting fields,  
with black epoxy coating,  
ground edges at 90°

- + shelf life: up to 24 months
- + packed in pieces of 100



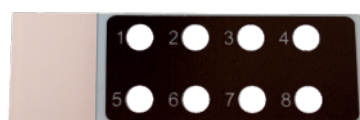
### ISO 8037/1

Art.No.	42421010
Counting field (mm)	14 Ø
Dimensions (mm)	75 x 25
Thickness (mm)	1
Colour	black

## Diagnostic microscope slides

8 numbered counting fields,  
with black epoxy coating,  
ground edges at 90°

- + shelf life: up to 24 months
- + packed in pieces of 100



### ISO 8037/1

Art.No.	42420010
Counting field (mm)	6 Ø
Dimensions (mm)	75 x 25
Thickness (mm)	1
Colour	black

## Diagnostic microscope slides

10 counting fields,  
with black epoxy coating,  
ground edges at 90°

- + shelf life: up to 24 months
- + packed in pieces of 100



### ISO 8037/1

Art.No.	42423010
Counting field (mm)	6 Ø
Dimensions (mm)	75 x 25
Thickness (mm)	1
Colour	black



### Slide folders

without lid,  
for 20 microscope slides,  
with grey paper,  
made of sturdy cardboard



Made from recycled cardboard,  
approx. 2 mm thick, this slide  
folder is also recyclable.

Art.No.	Dimensions (mm)	for slides (mm)
42698010	340 x 200 x 5	76 x 26 x 1

### Slide folders

with lid and back reinforcement



Made from recycled cardboard,  
approx. 2 mm thick, this slide  
folder is also recyclable.

Art.No.	Dimensions (mm)	for slides (mm)	Number of slides
42700001	95 x 46 x 5	76 x 26 x 1	1
42700002	100 x 88 x 6	76 x 26 x 1	2
42700003	120 x 100 x 6	76 x 26 x 1	3
42700005	185 x 106 x 6	76 x 26 x 1	5
42700010	342 x 100 x 7	76 x 26 x 1	10
42700020	342 x 200 x 6	76 x 26 x 1	20

### Slide cases with wooden frame for 100 microscope slides

Antistatic, covered with black paper, bottom part and lid connected by 2 metal hinges and clasps, numbered plastic dividers (antistatic, xylene-resistant) with numbered index on the inside, hinge side protected by corrugated cardboard.

The microscope slide storage boxes are  
suitable for storing in the freezer.

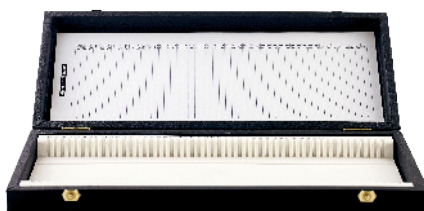
#### Frame material:

MDF (medium density fibreboard)

Material base and lid: Cardboard

Cover material: Paper

Lock and hinge material: Brass



Art.No.	Dimensions (mm)	for slides (mm)	Colour	Weight (g)
42701010	275 x 195 x 35	76 x 26 x 1	black	400

### Slide cases made of polypropylene for 100 microscope slides



with numbered plastic dividers from  
1 to 100, (antistatic, xylene-resistant),  
stackable

Art.No.	Colour	Weight (g)
42701020	black	228
Dimensions (mm)	for slides (mm)	
265 x 185 x 33	76 x 26 x 1	

### Slide cases with wooden frame, for 50 microscope slides



Antistatic, covered with black paper, bottom part and lid connected by 2 metal hinges and clasps, numbered plastic dividers (antistatic, xylene-resistant) with numbered index on the inside, hinge side protected by corrugated cardboard.

The microscope slide storage boxes are  
suitable for storing in the freezer.

Art.No.	Dimensions (mm)	for slides (mm)	Colour
42702010	275 x 115 x 35	76 x 26 x 1	black

## Slide cases

for 25 microscope slides  
with wooden frame

Antistatic, covered with black paper, bottom part and lid connected by 2 metal hinges and clasps, numbered plastic dividers (antistatic, xylene-resistant) with numbered index on the inside, hinge side protected by corrugated cardboard.

The microscope slide storage boxes are suitable for storing in the freezer.



Art.No.	Dimensions (mm)	for slides (mm)	Colour
42703010	150 x 100 x 35	76 x 26 x 1	black

## Slide cases

for 100 microscope slides, stackable,  
made of polypropylene, with hinged lid

Our standard slide boxes are perfect for storing or transporting slides in standard format. The moulded, rigid boxes hold the slides securely in their grooved slots.

Durable PP plastic boxes. The slots are numbered and correspond to the slide inventory sheet.



Art.No.	Dimensions (mm)	for slides (mm)	Colour
42704001	210 x 169 x 33/34	76 x 26 x 1	white
42704002	210 x 169 x 33/34	76 x 26 x 1	blue
42704003	210 x 169 x 33/34	76 x 26 x 1	red

## Microslide boxes

for 50 slides, made of polystyrene



- + with tight-fitting lid
- + removable index card in the lid
- + numbered bottom
- + stackable

Art.No.	Dimensions (mm)	for slides (mm)	Colour
42705002	172 x 83 x 30	76 x 26 x 1	blue
42705003	172 x 83 x 30	76 x 26 x 1	red
42705010	172 x 83 x 30	76 x 26 x 1	white

# Life Science

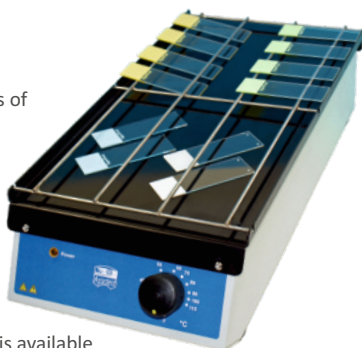
## Microscope slide- & cover glass accessories

### Slide drying bench electric 230 V

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 the bars
- + leaning against the bars
- + laying flat on the heating foil
- + with power connection 230 VAC
- + upon request 115 VAC power connection is available



+ the case and top are painted aluminium



Art.No.	Dimensions (mm)	Heating element	Weight (kg)
42395010	400 x 186 x 105	Heating foil	1.5
Heating temperature		Case	Max. capacity
room temperature up to +100°C/+212°F		painted aluminium	150W, 230V, 50/60Hz



### Slide dispenser for 72 standard size slides 76 x 26 mm

- + cleaned and dust free
- + no fingerprints as slides are only removed from the sides
- + dispenses one slide at a time

The delivery does not include microscope slides.

Art.No.	42440010
Material	ABS
Dimensions (mm)	120 x 100 x 165

### Lens tissue paper



For cleaning sensitive surfaces such as lenses, slides, cover glasses.

The surfaces are cleaned without scratching and remain free of dust and fibres.

Art.No.	Dimensions (mm)	Sheets
41019010	90 x 72	500/box

### Cover glass forceps nickel-plated, curved, grooved



Art.No.	Length (mm)
41020010	105

### Cover glasses - square in boxes of 100 – thickness 1 (0.13 - 0.16 mm)

- + in plastic boxes, 10 boxes/1000 glasses per carton
- + made from chemically resistant borosilicate glass D 263® M of the first hydrolytic class
- + DIN ISO 8255
- + colourless, perfectly clear



Art.No.	Dimensions (mm)	Art.No.	Dimensions (mm)
40990101	10 x 10	40990130	32 x 22
40990103	12 x 12	40990133	32 x 24
40990106	15 x 15	40990136	36 x 24
40990109	18 x 18	40990139	40 x 22
40990112	20 x 20	40990142	40 x 24
40990115	22 x 22	40990148	46 x 24
40990118	24 x 18	40990151	50 x 24
40990121	24 x 24	40990157	55 x 24
40990124	26 x 21	40990160	55 x 25
40990127	30 x 24	40990166	60 x 24

### Cover glasses - square

in boxes of 50 – thickness 1 (0.13 - 0.16 mm)

- + in plastic boxes, 20 boxes/1000 glasses per carton
- + made from chemically resistant borosilicate glass D 263® M
- + DIN ISO 8255



Art.No.	Dimensions (mm)
41000109	18 x 18
41000112	20 x 20
41000115	22 x 22
41000121	24 x 24
41000124	26 x 21
41000133	32 x 24
41000142	40 x 24
41000166	60 x 24

### Cover glasses - circular

in boxes of 100 – thickness 1 (0.13 - 0.16 mm)

- + in plastic boxes, 10 boxes/1000 glasses per carton
- + made from chemically resistant borosilicate glass D 263® M
- + DIN ISO 8255



Art.No.	Diameter (mm)	Art.No.	Diameter (mm)
41001103	3	41001117	17
41001105	5	41001118	18
41001108	8	41001120	20
41001110	10	41001122	22
41001112	12	41001124	24
41001113	13	41001125	25
41001114	14	41001130	30
41001115	15		

### Cover glasses - rectangular

in boxes of 50 – selected thickness 0.17 ± 0.01 mm

- + in plastic boxes of 50, except for 41014524 and 41014533: in boxes of 100
- + 20 or 10 boxes/1000 glasses per carton



Art.No.	Dimensions (mm)
41014509	18 x 18
41014512	20 x 20
41014515	22 x 22
41014521	24 x 24
41014524	26 x 21
41014533	32 x 24
41014542	40 x 24
41014551	50 x 24

### Cover glasses - square

BASIC



- + thickness 1 = 0.13 - 0.16 mm
- + DIN ISO 8255
- + packed in 200 pieces/box: 1.000 pieces

Art.No.	Dimensions (mm)	Material
50990109	18 x 18	Soda-lime glass
50990112	20 x 20	Soda-lime glass
50990115	22 x 22	Soda-lime glass
50990151	50 x 24	Soda-lime glass
50990166	60 x 24	Soda-lime glass

### Cover glasses - circular

BASIC



- + thickness 1 = 0.13 - 0.16 mm
- + DIN ISO 8255
- + packed in 100 pieces/box: 1.000 pieces

Art.No.	Diameter (mm)	Material
51001112	12	Soda-lime glass
51001118	18	Soda-lime glass



## Assistant Counting Chambers



Assistant counting chambers are precise measuring instruments to determine the number of particles in liquids. They are made of special optical glass.

For applications in accordance with Regulation (EU) 2017/746 on in vitro diagnostic medical devices (IVDR), counting chambers with CE marking have to be used, outside the EU, it is also possible to use without this labelling.

With a format of approx. 76 x 32 mm and special chamber structures, they offer precise quantification of cell populations in a defined area.

These counting chambers are frequently used in haematology for the determination of blood cells and in microbiology for the analysis of bacteria or yeasts.

Customised designs with individual depths are available on request. Each counting chamber is supplied with 2 optically flat cover glasses in a transparent plastic box.

### Bright-line counting chambers:

The grid is created by electroplated chromium coating. The bright chromium lines provide high contrast under the microscope, enabling easy and precise evaluation.

## Cover glasses for hemocytometers

These cover glasses are used to cover cell suspensions in counting chambers. The cover glass is placed on the bars of the counting chamber and adheres there due to the flatness of the contact surfaces. It thus precisely limits the height of the capillary gap between the chamber base and the underside of the cover glass and defines the volume of the cell suspension above the counting grid.

### Additional benefit:

The excellent grinding quality of the edges of our hemocytometer cover glasses makes blood smears particularly successful.

- + made from special optical glass
- + ready for use
- + edges ground and polished
- + for in-vitro diagnostic applications in accordance with guideline (EU) 2017/746, with batch number for comprehensive information and traceability
- + packed in pieces of 10



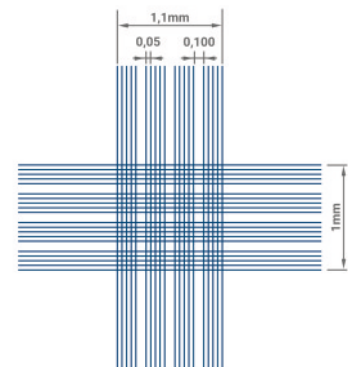
Art.No.	Dimensions (mm)	Thickness (mm)
40412710	30 x 30	0.4
40415710	20 x 26	0.4
40416710	22 x 22	0.4
40417710	24 x 24	0.4

## Counting chambers Thoma new

Ruling: Total surface area:  $1.21 \text{ mm}^2$  / divided into 16 groups of squares like Thoma ruling, but without marginal squares, where the erythrocytes easily agglomerate at the triple lines.

### CE-Version

Art.No.	Variant	Chamber depth (mm)
40447702	double ruling, without clamps	0.1



## Counting chambers Neubauer

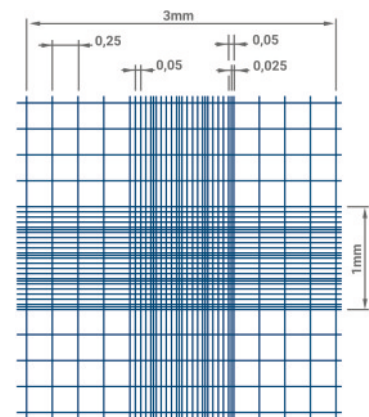
Ruling: 9 large squares of  $1 \text{ mm}^2$  each =  $9.0 \text{ mm}^2$

Ruling like Thoma - additionally 4 squares in the corners each divided into 16 equal squares

Art.No.	Variant	Chamber depth (mm)
40441001	single ruling, without clamps	0.1
40441002	double ruling, without clamps	0.1
40441003	double ruling, with clamps	0.1
40441012	double ruling, bright-line, with clamps	0.1

### CE-Version

Art.No.	Variant	Chamber depth (mm)
40441701	single ruling, without clamps	0.1
40441702	double ruling, without clamps	0.1
40441703	double ruling, with clamps	0.1
40441712	double ruling, bright-line, with clamps	0.1



for counting erythrocytes  
and leucocytes

## Counting chambers Neubauer improved

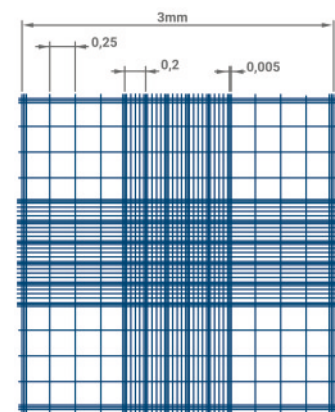
Ruling: 9 large squares of  $1 \text{ mm}^2$  =  $9 \text{ mm}^2$

The central square of  $1 \text{ mm}^2$  contains 25 groups of squares divided into 16 mini squares of  $0.05 \times 0.05 \text{ mm}$  each. The unique feature of the Neubauer improved counting grid are the triple marginal lines on all sides of the group squares. The middle line is decisive for the counting.

Art.No.	Variant	Chamber depth (mm)
40442002	double ruling, without clamps	0.1
40442012	double ruling, bright-line, without clamps	0.1

### CE-Version

Art.No.	Variant	Chamber depth (mm)
40442702	double ruling, without clamps	0.1
40442712	double ruling, bright-line, without clamps	0.1



for counting  
erythrocytes and leucocytes

## Counting chambers Bürker

for counting thrombocytes or erythrocytes

Ruling: 9 large squares – surface area: 1 mm<sup>2</sup> each = 9 mm<sup>2</sup>

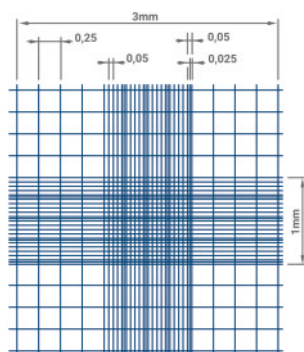
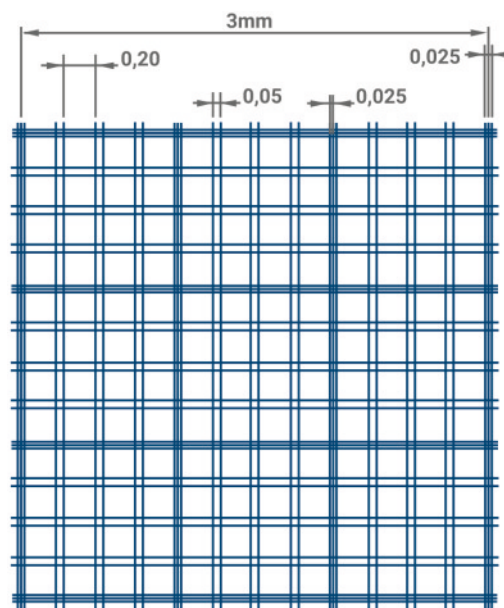
Each large square is divided into 16 groups of squares 0.2 x 0.2 mm by double lines.

Additionally, there are small squares of a surface area of 0.0025 mm<sup>2</sup> each.

Art.No.	Variant	Chamber depth (mm)
40443003	double ruling, with clamps	0.1

CE-Version

Art.Nr.	Variant	Chamber depth (mm)
40443701	single ruling, without clamps	0.1
40443702	double ruling, without clamps	0.1
40443703	double ruling, with clamps	0.1



## Counting chambers Türk

Ruling:

Total surface area: 9 mm<sup>2</sup>

The overall size and the central square correspond to the Neubauer ruling.

The groups of squares in the corners are divided by double lines.

CE-Version

Art.No.	Variant	Chamber depth (mm)
40444702	double ruling, without clamps	0.1

## Counting chambers Bürker-Türk

Ruling: combination of Bürker and Thoma

9 large squares of 1 mm<sup>2</sup> each

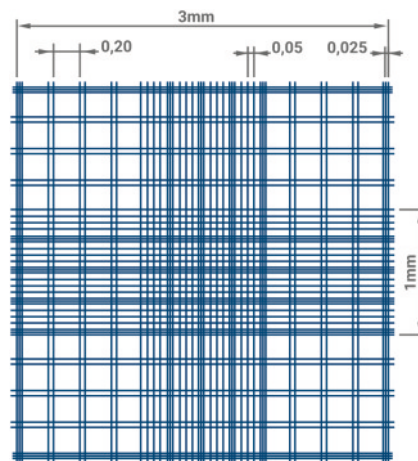
consisting of 16 groups of squares of 0.2 x 0.2 mm

Large central square: 16 small squares of 0.05 x 0.05 mm – surface area of 0,0025 mm<sup>2</sup> each

Art.No.	Variant	Chamber depth (mm)
40445002	double ruling, without clamps	0.1

CE-Version

Art.No.	Variant	Chamber depth (mm)
40445702	double ruling, without clamps	0.1
40445703	double ruling, with clamps	0.1



## Counting chambers Fuchs-Rosenthal

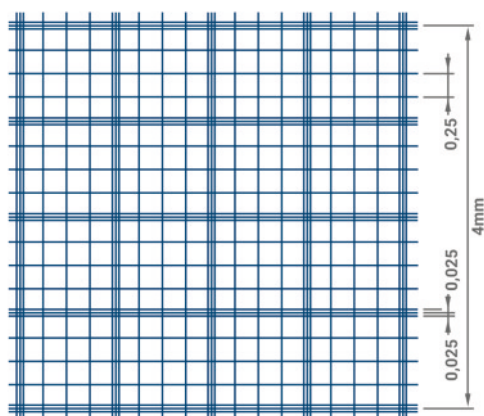
Area: 0.0625 mm<sup>2</sup> each

Total counting grid area: 16 mm<sup>2</sup> 16 large squares,

each measuring 1 mm<sup>2</sup>

each divided into 16 small squares measuring 0.25 x 0.25 mm –

**for cell counting in cerebrospinal fluid (brain and spinal cord fluid)**



Art.No.	Variant	Chamber depth (mm)
40449001	single ruling, without clamps	0.2
40449012	double ruling, bright line, without clamps	0.2

### CE-Version

Art.No.	Variant	Chamber depth (mm)
40449701	single ruling, without clamps	0.2
40449702	double ruling, without clamps	0.2
40449703	double ruling, with clamps	0.2
40449712	double ruling, bright line, without clamps	0.2

## Counting chambers Nageotte

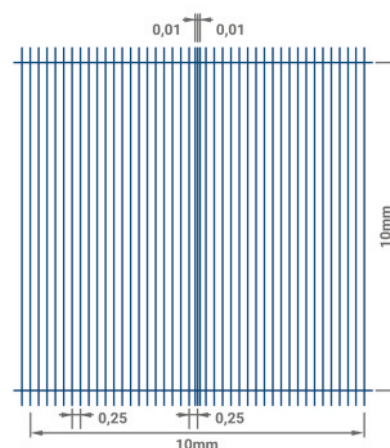
chamber depth 0.5 mm

**for the examination of lumbar fluid**

Ruling: Total area: 100 mm<sup>2</sup>

divided into 40 rectangles of 10 x 0.25 mm each = 2.5 mm<sup>2</sup>

The middle of the ruling is marked by a double line.



Art.Nr.	Variant
40446001	single ruling, without clamps
40446002	double ruling, without clamps

### CE-Version

Art.Nr.	Variant
40446701	single ruling, without clamps
40446702	double ruling, without clamps

## Counting chambers Thoma

**for thrombo and erythrocyte counting**

Counting net large square (middle) – area: 1 mm<sup>2</sup>

consisting of: 16 group squares 0.2 x 0.2 mm - area: 0.04 mm<sup>2</sup>

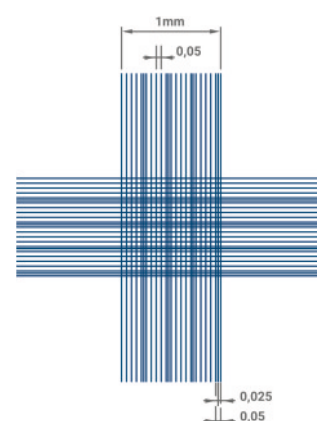
(resulting from the intermediate line at every 1st, 6th, 11th, and 16th square)

divided into 400 small squares 0.05 x 0.05 mm - area: 0.0025 mm<sup>2</sup>

Art.No.	Variant	Chamber depth (mm)
40440001	single ruling, without clamps	0.1
40440002	double ruling, without clamps	0.1
40440003	double ruling, with clamps	0.1

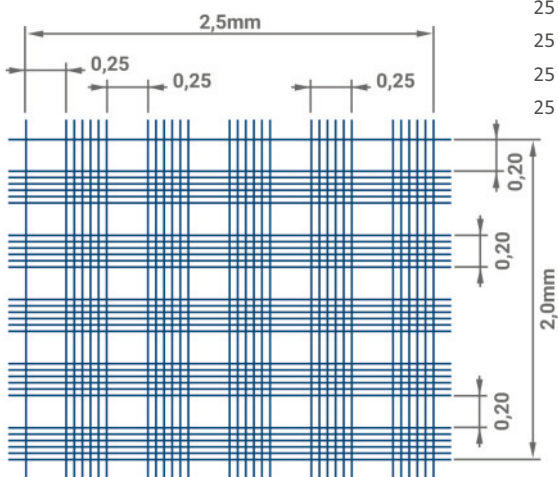
### CE-Version

Art.No.	Variant	Chamber depth (mm)
40440701	single ruling, without clamps	0.1
40440702	double ruling, without clamps	0.1
40440703	double ruling, with clamps	0.1





### Counting chambers Malassez



**Ruling: Total surface area:** 5 mm<sup>2</sup> (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 mm<sup>2</sup> each

25 fields divided into 5 rectangles of 0.20 x 0.05 mm – surface area 0.01 mm<sup>2</sup> each

25 fields divided into 4 rectangles of 0.25 x 0.05 mm – surface area 0.0125 mm<sup>2</sup> each

25 fields of 0.20 x 0.25 mm – surface area 0.05 mm<sup>2</sup> each – without division

Art.No.	Variant	Chamber depth (mm)
40453001	single ruling, without clamps	0.2
40453002	double ruling, without clamps	0.2

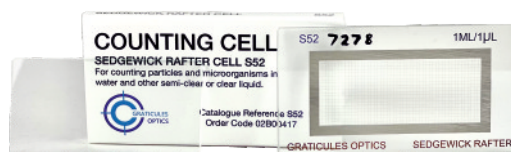
CE-Version

Art.No.	Variant	Chamber depth (mm)
40453701	single ruling, without clamps	0.2
40453702	double ruling, without clamps	0.2

### Counting chambers Sedgewick Rafter

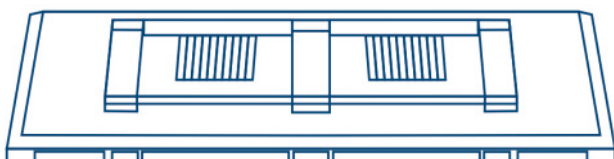
Sedgewick Rafter counting chambers are used for counting particles and microorganisms in 1 ml of water or other transparent liquids, e.g. for analysing drinking water. The counting chambers are made of high-quality optical glass with a chrome grid (counting net).

The cell = 1 cm<sup>3</sup> is graduated with a 1 mm grid that divides 1 ml into 1000 µ.



Art.No.	Variant
40430010	Glass counting chamber with chrome grid for phase contrast with ground and bevelled edges, incl. cover glass
40430110	Replacement cover glass for Sedgewick Rafter counting chamber, approx. 60 x 30 x 1 mm

### 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

Art.No.	Variant	Counting area (mm)	Chamber depth (mm)
40454010	with 2 counting areas	10 x 10 x 1.5	0.2

EVEN  
MORE

## NEW TO THE RANGE

expanded selection of Life Science products



In our separate catalogue for healthcare products, you will find many more high-quality medical technology solutions for your needs:

These include an expanded selection of capillaries, pipettes, lancets, as well as needles and serum tubes for blood collection and testing.

We also offer aids specifically for diabetics. From blood measurement and antiseptic disinfectant wipes to insulin syringes, we offer a range of solutions for maximum and individual patient well-being.

Furthermore, the range of medication administration products in the medical field is expanded to include syringes with or without needles, infusion and transfusion sets, as well as latex gloves, face masks and much more. The aim is to prevent, diagnose or treat diseases in order to improve the quality of life of patients.

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[info@assistent.eu](mailto:info@assistent.eu)

# LIQUID HANDLING.

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# Precision in motion – for reliable laboratory processes

**Aqueous solutions:**

Routinely used biological buffer solutions and detergents, antifoaming agents, culture media, vitamines solutions, hydrogen peroxide can be dispensed.

**Alkaline solutions:**

The components of our instruments are compatible with alkaline solutions.

**Polar solvents:**

Polar solutions such as ethanol, methanol, acetylacetone etc. can be processed.

**Liquids that should not be dispensed include:**

Concentrated or strongly oxidising acids and non-polar solvents, such as hydrocarbons and halogenated hydrocarbons .





## Seripettor®

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 substances.

### Limitations of use:

Liquids that do not affect the materials of the appliance can be dispensed in compliance with the following limits:

- + Vapour pressure up to 500 mbar
- + Density up to 13.6 g/cm<sup>3</sup>
- + 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  $\leq \pm 1.2 \%$ , Coefficient of variation  $\leq 0.2 \%$

\*The final test values refer to the nominal volume (= max. volume),

which is imprinted on the device, at consistent temperature (+20 °C/+68 °F)

of the device, surrounding area and the distilled water as well as at a smooth, jerk-free operation.

### Advantages:

- + economical dispensing of non-aggressive liquids
- + easy cleaning and maintenance
- + all parts, incl. flasks and cylinders, are easily replaceable
- + faultless volume adjustment thanks to snap-in gear strip, easy to read
- + replaceable dispensing cartridge
- + 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



Art.No.	Division (ml)	Capacity (ml)
40163010	0.2	1.0 - 10
40163025	0.5	2.5 - 25

### Items supplied

- + 1 Seripettor Art.No. 40163... (without bottle)
- + 2 dispensing cartridges Art.No. 40164...
- + 1 discharge tube Art.No. 40165001
- + 1 filling tube Art.No. 40165...
- + 2 PP adapters (GL 45/32 and GL 45/S 40)
- + instructions for use

## Seripettor®-accessories & spare parts

### Valve sets

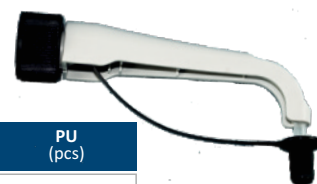
Art.No.	Consisting of
40165004	1x intake valve 1x discharge valve 2x seals



### Discharge tubes

made of  
polypropylene

Art.No.	for capacity (ml)	PU (pcs)
40165001	10 and 25	1



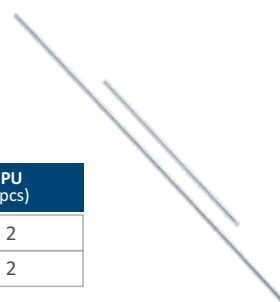
### Dispensing cartridges consisting of a piston (PE) and cylinder (PP)

Art.No.	for capacity (ml)	PU (pcs)
40164010	10	3
40164025	25	3



### Filling tubes made of polypropylene

Art.No.	Length (mm)	PU (pcs)
40165002	250	2
40165003	500	2



## Dispensette® S digital DE-M labelled

### Product Features:

- + new dosing cannula, without recirculation valve
- + new valve system - all valves seal without additional sealing rings, which makes cleaning and preparation for autoclaving easier
- + faster venting thanks to improved flow technology
- + less force required for dispensing - especially with large-volume appliances
- + secure volume fixation due to internal gear strip for analogue devices
- + swivelling screw cap - does not interfere with dosing

### Reliable technology:

- + autoclavable at 121°C/249.8°F
- + adjustable within the scope of test equipment monitoring according to ISO 9001 and GLP
- + easy to dismantle for cleaning
- + replaceable filling and discharge valve with safety ball  
(closes when dosing cannula is not fitted)
- + bottle label always visible thanks to 360° rotatable valve block
- + telescopic filling tube can be adjusted to different bottle heights
- + DE-M labelled
- + Operating temperature from +15°C to +40°C of instrument and reagent

Particularly easy to read digital display via mechanical counter. The selected dosing volume can be set precisely and reproducibly. Easy Calibration Technology for adjustment within seconds without tools. Automatic labelling when the factory setting is changed.

### Scope of delivery:

Bottle-top dispenser Dispensette®S,  
DE-M labelled, with quality certificate,  
telescopic filling tube, recirculation valve and  
recirculation tube (optional), mounting wrench  
and polypropylene adapter.

### Areas of application:

Colour code red. Ideal for dispensing aggressive reagents,  
e.g. concentrated alkalis, bases and acids such as  $\text{H}_3\text{PO}_4$ ,  
 $\text{H}_2\text{SO}_4$  (except e.g.  $\text{HCl}$ ,  $\text{HNO}_3$  and  $\text{HF}$ ), saline solutions  
and many of organic solvents.



Art.No.	Division (ml)	Capacity (ml)	Accuracy $\leq \pm \%$	Coefficient of variation $\leq \pm \%$
40172001	0.005	0.1 - 1	0.5	0.1
40172002	0.01	0.2 - 2	0.5	0.1
40172005	0.02	0.5 - 5	0.5	0.1
40172010	0.05	1 - 10	0.5	0.1
40172025	0.1	2.5 - 25	0.5	0.1
40172050	0.2	5 - 50	0.5	0.1

## Dispensette® S analogue

### DE-M labelled

#### Areas of application:

Colour code red.

Ideal for dosing aggressive reagents, including concentrated bases and acids such as  $H_3PO_4$ ,  $H_2SO_4$  (except e.g.  $HCl$ ,  $HNO_3$  and  $HF$ ), saline solutions and many organic solvents.

#### Product Features:

- + new dosing cannula, without recirculation valve
- + new valve system - all valves seal without additional sealing rings, which makes cleaning and preparation for autoclaving easier
- + faster venting thanks to improved flow technology
- + less force required for dispensing - especially with large-volume appliances
- + secure volume fixation due to internal gear strip for analogue devices
- + swivelling screw cap - does not interfere with dosing

#### Reliable technology:

- + autoclavable at  $121^\circ C/249.8^\circ F$
- + adjustable within the scope of test equipment monitoring according to ISO 9001 and GLP
- + easy to dismantle for cleaning
- + replaceable filling and discharge valve with safety ball (closes when dosing cannula is not fitted)
- + bottle label always visible thanks to  $360^\circ$  rotatable valve block
- + telescopic filling tube can be adjusted to different bottle heights
- + DE-M labelled

Analogue volume display, quickly adjustable dosing volume, securely fixed by internal gear strip. Simple adjustment with mounting wrench.



#### Scope of delivery:

Bottle-top dispenser Dispensette®S, DE-M labelled, with quality certificate, telescopic filling tube, recirculation valve and recirculation tube (optional), mounting wrench and polypropylene adapter.

Art.No.	Division (ml)	Capacity (ml)	Accuracy $\leq \pm \%$	Coefficient of variation $\leq \pm \%$
40182001	0.02	0.1 - 1	0.5	0.1
40182002	0.05	0.2 - 2	0.5	0.1
40182005	0.1	0.5 - 5	0.5	0.1
40182010	0.2	1 - 10	0.5	0.1
40182025	0.5	2.5 - 25	0.5	0.1
40182050	1.0	5 - 50	0.5	0.1
40182100	1.0	10 - 100	0.5	0.1

## Disposable pipette tips



+ produces under cleanroom conditions

- + packed in pieces of 200
- + raw materials free from DIHEMDA and Oleamid

Art.No.	for capacity (µl)	Colour
40112010	5 - 5000	colourless

## Disposable pipette tips



- + made from selected, hydrophobic PP
- + packed in pieces of 1000
- + optimal surface quality



Art.No.	for capacity (µl)	Colour
40110010	2 - 200	yellow
40111010	101 - 1000	blue



## Discharging tubes for Dispensette® S

without recirculation valve, PP screw cap



Art.No.	Nominal value (ml)	Length (mm)	Variant	PU (pcs)
40182101	1, 2, 5, 10	105	fine tip	1
40182102	5, 10	105	standard	1
40182103	25, 50, 100	135	standard	1
40182104	25, 50, 100	135	fine tip	1

## Telescope filling tubes

for Dispensette® S

individually adjustable length



Art.No.	Nominal value (ml)	Length (mm)	Outer Ø (mm)	PU (pcs)
40182301	1, 2, 5, 10	70 - 140	6	1
40182302	1, 2, 5, 10	125 - 240	6	1
40182303	1, 2, 5, 10	195 - 350	6	1
40182304	1, 2, 5, 10	250 - 480	6	1
40182305	25, 50, 100	170 - 330	7.6	1
40182306	25, 50, 100	240 - 480	7.6	1

## Threaded bottles

amber glass

- + with transparent pouring ring
- + with screw cap made of polypropylene
- + steam sterilisable up to +121 °C/+249.8 °F



Art.No.	Capacity (ml)	Thread (mm)	Variant	DIN
40190018	250	A32	square	DIN 32
40190024	500	A32	square	DIN 32
40190030	1000	A32	square	DIN 32
40190036	2500	A32	round	DIN 32

## Threaded adapters



Art.No.	Outside thread (mm)	Material	for bottle thread
40193004	32	Polypropylene	A22
40193008	32	Polypropylene	A25
40193012	32	Polypropylene	A28
40193016	32	Polypropylene	A30
40193020	45	Polypropylene	A38
40193024	45	Polypropylene	A40
40193028	32	Polypropylene	A45
40193052	45	Polypropylene	S40



## Discharge tube

coiled,  
with safety handle

With interchangeable coloured valve knobs

(colour code red, yellow or grey)

Not suitable for HF (hydrofluoric acid)

Art.No.	Hose inner Ø (mm)	Hose outer Ø (mm)	Hose length (mm)	Nominal value (ml)	Material	PU (pcs)
40182201	2	3	800	2, 5, 10	PTFE	1
40182202	3	4.5	800	25, 50, 100	PTFE	1

## Digital burettes „Contibürette µ 10"

conformity certified, without bottle  
with thread connection A 32



Continuous supply and measurement in the 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.



### Complete with:

- + discharge tube, curved Art.No. 40210020
- + suction tube
- + 2 additional thread adapters A 45 and A 40
- + directions for use

### Features:

- + can be calibrated
- + electronic measuring system
- + liquid supplied is indicated to two decimal places
- + smallest setting units 10 µl
- + no glass piston, no valves, minimal dead volume
- + self-venting, measurement errors due to trapped gas or air bubbles are avoided
- + mechanics made of largely acid-resistant aluminium oxide (99,7 % Al<sub>2</sub>O<sub>3</sub>)
- + freely rotatable on the bottle
- + includes 2 AA 1.5 V batteries for approx. 500 operating hours

Art.No.	40210010
Min. dosing capacity (µl)	10
Max. dosing capacity (ml)	500
Dosing accuracy (%)	< ± 0.2
Manual drive type	Manual
Coefficient of variation (%)	< ± 0.1
Temperature range	+10 to +40 °C / +50 to +104 °F
Calibration by the user	Yes
Pump head material	Al <sub>2</sub> O <sub>3</sub> , ETFE / FEP
Power supply (V)	3VDC (2 batteries AA)
Weight (g)	390
Dimensions (mm)	175 x 93 x 60
Safety class	Ip43

## Discharge tube for digital burette

- + curved
- + with finely drawn-out tip
- + cannula holder with safety thread



Art.No.	40210020
Material	PTFE

# VOLUMETRIC INSTRUMENTS.

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# Volumetric instruments

## Volumetric flasks

### Volumetric flasks Class A

PREMIUM

Boro  
3.3

- + with interchangeable  
NS stopper made of polyethylene
- + DE-M, ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + amber graduation
- + with ISO batch certificate

Available on request with individual  
certificate, USP batch certificate &  
DAkkS calibration certificate at  
an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS
42095004	5	0.025	7/16
42095008	5	0.040	10/19
42095012	10	0.025	7/16
42095016	10	0.040	10/19
42095020	20	0.040	10/19
42095024	20	0.060	12/21
42095028	25	0.040	10/19
42095032	25	0.060	12/21
42095040	50	0.060	12/21
42095044	50	0.100	14/23
42095048	100	0.100	12/21
42095052	100	0.100	14/23
42095060	200	0.150	14/23
42095064	250	0.150	14/23
42095076	500	0.250	19/26
42095080	1000	0.400	24/29
42095084	1000	0.600	29/32
42095088	2000	0.600	29/32

### Volumetric flasks Class A

PREMIUM

Boro  
3.3

- + with interchangeable  
NS stopper made of polyethylene
- + DE-M, ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + blue graduation
- + with ISO batch certificate

Available on request with individual  
certificate, USP batch certificate &  
DAkkS calibration certificate at  
an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS
42096004	5	0.025	7/16
42096008	5	0.040	10/19
42096012	10	0.025	7/16
42096016	10	0.040	10/19
42096020	20	0.040	10/19
42096024	20	0.060	12/21
42096028	25	0.040	10/19
42096032	25	0.060	12/21
42096040	50	0.060	12/21
42096044	50	0.100	14/23
42096048	100	0.100	12/21
42096052	100	0.100	14/23
42096060	200	0.150	14/23
42096064	250	0.150	14/23
42096076	500	0.250	19/26
42096079	900	0.400	24/29
42096080	1000	0.400	24/29
42096084	1000	0.600	29/32
42096088	2000	0.600	29/32

# Volumetric instruments

## Volumetric flasks



### Volumetric flasks

Class A

without stopper

PREMIUM

Boro 3.3

- + DE-M, ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + blue graduation
- + with ISO batch certificate

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS
42097004	5	0.025	7/16
42097008	5	0.040	10/19
42097012	10	0.025	7/16
42097016	10	0.040	10/19
42097020	20	0.040	10/19
42097024	20	0.060	12/21
42097028	25	0.040	10/19
42097032	25	0.060	12/21
42097040	50	0.060	12/21
42097044	50	0.100	14/23
42097048	100	0.100	12/21
42097052	100	0.100	14/23
42097060	200	0.150	14/23
42097064	250	0.150	14/23
42097076	500	0.250	19/26
42097080	1000	0.400	24/29
42097084	1000	0.600	29/32
42097088	2000	0.600	29/32

### Volumetric flasks

Class A

amber glass

PREMIUM

Boro 3.3

- + with interchangeable NS stopper made of polyethylene
- + ideal for handling light-sensitive solutions
- + DE-M, DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + white graduation
- + with ISO batch certificate

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS
42102008	5	0.04	10/19
42102016	10	0.04	10/19
42102020	20	0.04	10/19
42102028	25	0.04	10/19
42102040	50	0.06	12/21
42102044	50	0.10	14/23
42102048	100	0.10	12/21
42102052	100	0.10	14/23
42102060	200	0.15	14/23
42102064	250	0.15	14/23
42102076	500	0.25	19/26
42102080	1000	0.40	24/29

# Volumetric instruments

## Volumetric flasks

### Volumetric flasks

#### Class A

BASIC

Boro 3.3



- + with interchangeable NS stopper made of polyethylene
- + DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + amber graduation

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS	Dimensions approx. (mm)	PU (pcs)
52095004	5	0.025	7/16	70 x 22 Ø	2
52095008	5	0.040	10/19	70 x 22 Ø	2
52095016	10	0.040	10/19	90 x 27 Ø	2
52095020	20	0.040	10/19	110 x 39 Ø	2
52095024	20	0.060	12/21	110 x 39 Ø	2
52095028	25	0.040	10/19	110 x 40 Ø	2
52095032	25	0.060	12/21	110 x 40 Ø	2
52095040	50	0.060	12/21	140 x 50 Ø	2
52095044	50	0.100	14/23	140 x 50 Ø	2
52095048	100	0.100	12/21	170 x 60 Ø	2
52095052	100	0.100	14/23	170 x 60 Ø	2
52095056	150	0.100	14/23	200 x 67 Ø	2
52095060	200	0.150	14/23	210 x 75 Ø	2
52095064	250	0.150	14/23	220 x 80 Ø	2
52095068	300	0.150	14/23	230 x 87 Ø	2
52095072	400	0.250	19/26	240 x 97 Ø	2
52095076	500	0.250	19/26	260 x 100 Ø	2
52095080	1000	0.400	24/29	300 x 125 Ø	2
52095088	2000	0.600	29/32	370 x 160 Ø	1
52095096	5000	1.200	34/35	475 x 215 Ø	1

### Volumetric flasks

#### Class A

BASIC

Boro 3.3



- + with interchangeable NS stopper made of polyethylene
- + DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + blue graduation

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS	Dimensions approx. (mm)	PU (pcs)
52096004	5	0.025	7/16	70 x 22 Ø	2
52096008	5	0.040	10/19	70 x 22 Ø	2
52096016	10	0.040	10/19	90 x 27 Ø	2
52096020	20	0.040	10/19	110 x 39 Ø	2
52096024	20	0.060	12/21	110 x 39 Ø	2
52096028	25	0.040	10/19	110 x 40 Ø	2
52096032	25	0.060	12/21	110 x 40 Ø	2
52096040	50	0.060	12/21	140 x 50 Ø	2
52096044	50	0.100	14/23	140 x 50 Ø	2
52096048	100	0.100	12/21	170 x 60 Ø	2
52096052	100	0.100	14/23	170 x 60 Ø	2
52096056	150	0.100	14/23	200 x 67 Ø	2
52096060	200	0.150	14/23	210 x 75 Ø	2
52096064	250	0.150	14/23	220 x 80 Ø	2
52096068	300	0.150	14/23	230 x 87 Ø	2
52096072	400	0.250	19/26	240 x 97 Ø	2
52096076	500	0.250	19/26	260 x 100 Ø	2
52096080	1000	0.400	24/29	300 x 125 Ø	2
52096088	2000	0.600	29/32	370 x 160 Ø	1
52096096	5000	1.200	34/35	475 x 215 Ø	1



# Volumetric instruments

## Volumetric flasks

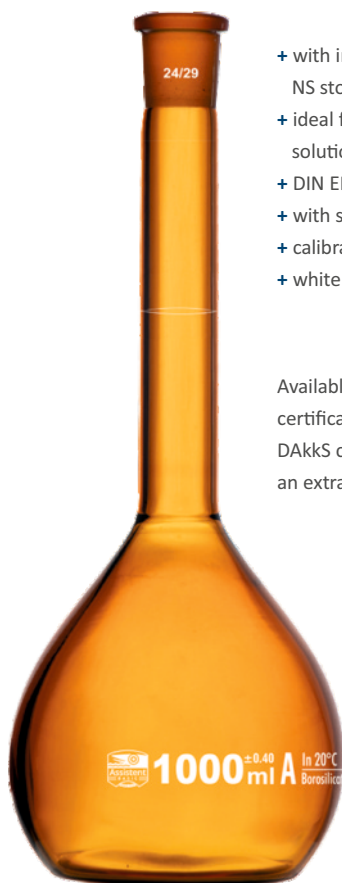


### Volumetric flasks

Class A  
amber glass

BASIC

Boro  
3.3



- + with interchangeable NS stopper made of polyethylene
- + ideal for handling light-sensitive solutions
- + DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + white graduation

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.



Art.No.	Capacity (ml)	Tolerance (± ml)	NS	Dimensions approx. (mm)	PU (pcs)
52102008	5	0.04	10/19	70 x 22 Ø	2
52102016	10	0.04	10/19	90 x 27 Ø	2
52102020	20	0.04	10/19	110 x 39 Ø	2
52102028	25	0.04	10/19	110 x 40 Ø	2
52102029	25	0.06	12/21	110 x 40 Ø	2
52102040	50	0.06	12/21	140 x 50 Ø	2
52102044	50	0.10	14/23	140 x 50 Ø	2
52102048	100	0.10	12/21	170 x 60 Ø	2
52102052	100	0.10	14/23	170 x 60 Ø	2
52102060	200	0.15	14/23	210 x 75 Ø	2
52102064	250	0.15	14/23	220 x 80 Ø	2
52102076	500	0.25	19/26	260 x 100 Ø	2
52102080	1000	0.40	24/29	300 x 125 Ø	2
52102088	2000	0.60	29/32	370 x 160 Ø	1

### Volumetric flasks

with rim, Class B

PREMIUM

Boro  
3.3



- + ISO 1042
- + without ground, without stopper
- + calibrated to contain "In"
- + blue graduation

Art.Nr.	Capacity (ml)	Tolerance (± ml)
42089092	3000	1.2

### Overflow volumetric flasks

PREMIUM

Boro  
3.3



- + calibrated to „Ex“
- + white graduation
- + for water analysis

Art.No.	Capacity (ml)	Height approx. (mm)	Tolerance (± ml)
42115012	43.5	80	0.120
42115024	97	95	0.200
42115030	157	110	0.300
42115042	164	110	0.300
42115048	250	140	0.300
42115072	428	165	0.500
42115078	432	150	0.500

# Volumetric instruments

## Volumetric flasks

### Volumetric flasks

Class A  
trapezoidal, clear glass

- + with interchangeable NS stopper made of polyethylene
- + DE-M, ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + blue graduation
- + with ISO batch certificate

Available on request with individual certificate,  
USP batch certificate & DAkkS calibration certificate



PREMIUM

Boro 3.3

Art.No.	Capacity (ml)	Tolerance (± ml)	NS
42110006	1	0.025	7/16
42110012	2	0.025	7/16
42110018	5	0.025	7/16
42110024	10	0.025	7/16
42110030	20	0.040	10/19
42110036	25	0.040	10/19
42110042	50	0.060	12/21

### Volumetric flasks

Class A  
trapezoidal, clear glass

- + with interchangeable NS stopper made of polyethylene
- + DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + blue graduation
- + with ISO batch certificate

Available on request with individual certificate,  
USP batch certificate & DAkkS calibration certificate  
at an extra charge.



BASIC

Boro 3.3

Art.No.	Capacity (ml)	Tolerance (± ml)	NS	PU (pcs)
52110006	1	0.025	7/16	2
52110012	2	0.025	7/16	2
52110014	3	0.025	7/16	2
52110016	4	0.025	7/16	2
52110018	5	0.025	7/16	2
52110024	10	0.025	10/19	2
52110030	20	0.040	10/19	2
52110036	25	0.040	10/19	2
52110042	50	0.060	12/21	2

### Volumetric flasks

Class A  
trapezoidal, amber glass

- + with interchangeable NS stopper made of polyethylene
- + DIN EN ISO 1042
- + with standard ground joint
- + calibrated to contain "In"
- + white graduation
- + with ISO batch certificate

Available on request with individual certificate,  
USP batch certificate & DAkkS calibration certificate  
at an extra charge.



BASIC

Boro 3.3

Art.No.	Capacity (ml)	Tolerance (± ml)	NS	PU (pcs)
52112006	1	0.025	7/16	2
52112012	2	0.025	7/16	2
52112014	3	0.025	7/16	2
52112016	4	0.025	7/16	2
52112018	5	0.025	7/16	2
52112024	10	0.025	10/19	2
52112030	20	0.040	10/19	2
52112036	25	0.040	10/19	2
52112042	50	0.060	12/21	2

## Measuring cylinders in accordance with DIN EN ISO 4788

Our measuring cylinders stand for precise volume measurement and high chemical resistance. Made from high-quality glass or durable plastic, they meet all requirements for accuracy, stability and easy readability.

Ideal for daily use in laboratories, research and industry.

### Accuracy classifications:

#### Class A

- + ring graduation
- + DE-M
- + with batch number
- + with ISO batch certificate
- + calibrated to contain "In"

#### Class B

- + for lower accuracy
- + line graduation
- + calibrated to contain "In"

Class A measuring cylinders are supplied with a batch number and an ISO batch certificate per original packaging.

Also available on request with individual certificate, DAkkS calibration certificate or USP version.

## Mixing cylinders

### Class A tall form

BASIC

Boro  
3.3

- + with interchangeable stopper made of polyethylene
- + hexagonal base does not allow roll-over and offers more stability
- + DIN EN ISO 4788
- + with standard ground joint
- + with batch certificate
- + calibrated to contain "In"
- + blue graduation



Art.No.	Capacity (ml)	Division (ml)	Tolerance (± ml)	NS	PU (pcs)
52215012	10	0.2	0.10	10/19	2
52215018	25	0.5	0.25	14/23	2
52215024	50	1.0	0.50	19/26	2
52215030	100	1.0	0.50	24/29	2
52215048	250	2.0	1.00	29/32	2
52215060	500	5.0	2.50	34/35	2
52215066	1000	10.0	5.00	45/40	1
52215072	2000	20.0	10.0	45/40	1

## Measuring cylinders made of polypropylene, Class B low form

PREMIUM

- + round base
- + calibrated to contain "In"
- + with molded graduations
- + transparent
- + thermal stress up to 80 °C does not cause tolerance limits to be permanently exceeded.
- + suitable for contact with foodstuffs acc. to regulation (EU) No. 10/2011



Art.No.	Capacity (ml)	Division (ml)	Tolerance (± ml)	Height (mm)	Diameter (mm)
42208018	25	0.5	0.5	120	25
42208024	50	1.0	1.0	140	29
42208030	100	2.0	2.0	163	37
42208048	250	5.0	5.0	192	51
42208060	500	10.0	10.0	218	67
42208066	1000	20.0	20.0	285	78

# Volumetric instruments

## Measuring cylinders

### Measuring cylinders

made of polypropylene,  
Class B, tall form

PREMIUM

- + hexagonal base
- + DIN 12681
- + ISO 6706
- + calibrated to contain "In"
- + embossed blue scale
- + highly transparent
- + thermal stress of graduation up to 125°C/257°F
- + food-safe acc. to (EU) No. 10/2011



Art.No.	Capacity (ml)	Division (ml)	Tolerance (± ml)	Height approx. (mm)	Diameter approx. (mm)
42194012	10	0.2	0.2	145	14
42194018	25	0.5	0.5	170	20
42194024	50	1.0	1.0	200	26
42194030	100	1.0	1.0	250	31
42194048	250	2.0	2.0	315	42
42194060	500	5.0	5.0	360	54
42194066	1000	10.0	10.0	440	65
42194072	2000	20.0	20.0	535	85

### Measuring cylinders

made of polypropylene,  
Class B, tall form

PREMIUM

- + hexagonal base
- + DIN 12681
- + ISO 6706
- + calibrated to contain "In"
- + embossed scale
- + highly transparent
- + thermal stress up to 80°C/176°F
- + food-safe acc. to (EU) No. 10/2011



Art.No.	Capacity (ml)	Division (ml)	Tolerance (± ml)	Height approx. (mm)
42195012	10	0.2	0.2	145
42195018	25	0.5	0.5	170
42195024	50	1.0	1.0	200
42195030	100	1.0	1.0	250
42195048	250	2.0	2.0	315
42195060	500	5.0	5.0	360
42195066	1000	10.0	10.0	440
42195072	2000	20.0	20.0	535

### Measuring cylinders

made of PMP,  
Class A, tall form

PREMIUM

- + hexagonal base
- + DIN 12681
- + ISO 6706
- + calibrated to contain "In"
- + moulded graduation
- + with division and ring marks
- + thermal stress up to +121 °C/+249.8 °F



Class A measuring cylinders are supplied with a batch number and an ISO batch certificate per original packaging.  
Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.

Art.No.	Capacity (ml)	Division (ml)	Tolerance (± ml)	Height approx. (mm)
42196012	10	0.2	0.2	145
42196024	50	1.0	1.0	200
42196030	100	1.0	1.0	250
42196048	250	2.0	2.0	315
42196060	500	5.0	5.0	360
42196066	1000	10.0	10.0	440
42196072	2000	20.0	20.0	535

## Measuring cylinders

Class B  
low form

PREMIUM



- + round base
- + with spout
- + DIN ISO 4788
- + calibrated to contain "In"
- + amber graduation
- + tolerance 1,5 times the error limit of Class A

Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)	Height (mm)	Material
42205006	5	0.5	0.2	80	Borosilicate glass 3.3
42205012	10	1	0.3	100	AR-Glas®
42205018	25	1	0.5	125	Borosilicate glass 3.3
42205024	50	2	1.0	150	AR-Glas®
42205030	100	2	1.0	170	Borosilicate glass 3.3
42205036	150	5	2.0	170	AR-Glas®
42205042	200	5	2.0	200	AR-Glas®
42205048	250	5	2.0	220	AR-Glas®
42205060	500	10	5.0	255	Borosilicate glass 3.3
42205066	1000	20	10.0	295	Borosilicate glass 3.3
42205072	2000	50	20.0	345	Borosilicate glass 3.3

## Measuring cylinders

Class B  
tall form

PREMIUM



- + round base
- + with spout
- + DIN ISO 4788
- + calibrated to contain "In"
- + amber graduation
- + tolerance 1,5 times the error limit of Class A

Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)	Height (mm)	Material
42200006	5	0.1	0.075	115	AR-Glas®
42200012	10	0.2	0.150	140	AR-Glas®
42200018	25	0.5	0.375	170	AR-Glas®
42200024	50	1.0	0.750	200	AR-Glas®
42200030	100	1.0	1.000	260	Borosilicate glass 3.3
42200048	250	2.0	1.500	335	AR-Glas®
42200060	500	5.0	3.750	390	Borosilicate glass 3.3
42200066	1000	10.0	10.00	470	Borosilicate glass 3.3
42200072	2000	20.0	15.00	570	Borosilicate glass 3.3

# Volumetric instruments

## Measuring cylinders

### Measuring cylinders

Class B  
tall form

PREMIUM

Boro  
3.3

- + hexagonal base
- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + blue graduation
- + tolerance 1,5 times the error limit of Class A



Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)	Height (mm)
42170006	5	0.1	0.075	115
42170012	10	0.2	0.150	145
42170018	25	0.5	0.375	205
42170024	50	1.0	0.750	195
42170030	100	1.0	0.750	262
42170048	250	2.0	1.500	310
42170060	500	5.0	3.750	360
42170066	1000	10.0	7.500	465
42170072	2000	20.0	15.00	500

### Measuring cylinders

Class A  
tall form

PREMIUM

Boro  
3.3

Class A measuring cylinders are supplied with a batch number or ISO batch certificate enclosed per packing unit.  
Available on request with individual certificate, USP batch certificate & DAKS calibration certificate at an extra charge.

- + hexagonal base
- + with spout
- + DE-M, DIN EN ISO 4788
- + calibrated to contain "In"
- + blue graduation
- + with ISO batch certificate



Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)
42172006	5	0.1	0.05
42172012	10	0.2	0.10
42172018	25	0.5	0.25
42172024	50	1.0	0.50
42172030	100	1.0	0.50
42172048	250	2.0	1.00
42172060	500	5.0	2.50
42172066	1000	10.0	5.00
42172072	2000	20.0	10.0

### Measuring cylinders

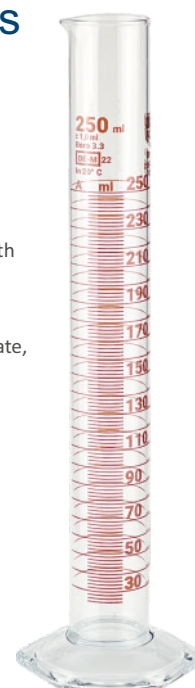
Class A  
tall form

PREMIUM

Boro  
3.3

Class A measuring cylinders are supplied with a batch number or ISO batch certificate enclosed per packing unit.  
Available on request with individual certificate, USP batch certificate & DAKS calibration certificate at an extra charge.

- + hexagonal base
- + with spout
- + DE-M, DIN EN ISO 4788
- + calibrated to contain "In"
- + amber graduation
- + with ISO batch certificate



Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)
42182006	5	0.1	0.05
42182012	10	0.2	0.10
42182018	25	0.5	0.25
42182024	50	1.0	0.50
42182030	100	1.0	0.50
42182048	250	2.0	1.00
42182060	500	5.0	2.50
42182066	1000	10.0	5.00
42182072	2000	20.0	10.0

# Volumetric instruments

## Measuring cylinders



### Measuring cylinders

Class B  
tall form

PREMIUM

Boro 3.3

- + hexagonal base
- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + amber graduation
- + tolerance 1,5 times the error limit of Class A



Art.No.	Capacity (ml)	Divison (ml)	Tolerance ( $\pm$ ml)	Height (mm)	Outer- $\phi$ approx. (mm)
42180006	5	0.1	0.075	115	13
42180012	10	0.2	0.150	145	14.5
42180018	25	0.5	0.375	205	18.5
42180024	50	1.0	0.750	195	25
42180030	100	1.0	0.750	262	29
42180048	250	2.0	1.500	310	39
42180060	500	5.0	3.750	360	54
42180066	1000	10.0	7.500	465	65
42180072	2000	20.0	15.00	500	85

### Measuring cylinders

Class B  
tall form

- + with interchangeable hexagonal base and protecting ring made of PE-HD

PREMIUM

- + base and protective ring resistant to alkalis and acids
- + temperature resistant up to +120 °C/+248 °F

- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + amber graduation



Art.No.	Capacity (ml)	Divison (ml)	Tolerance ( $\pm$ ml)	Height (mm)	Outer- $\phi$ (mm)	Material
42190012	10	0.2	0.150	130	14	AR-Glas®
42190018	25	0.5	0.375	195	19	AR-Glas®
42190024	50	1.0	0.750	210	24	AR-Glas®
42190030	100	1.0	0.750	250	28.5	AR-Glas®
42190048	250	2.0	1.500	330	38.5	AR-Glas®
42190060	500	5.0	3.750	360	52.8	AR-Glas®
42190066	1000	10.0	7.500	440	64	Borosilicate glass 3.3

### Measuring cylinders

Class B  
tall form

BASIC

Boro 3.3

- + with interchangeable hexagonal base and protecting ring made of PE-HD
- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + blue graduation



Art.No.	Capacity (ml)	Divison (ml)	Tolerance ( $\pm$ ml)	PU (pcs)
52189012	10	0.2	0.2	10
52189018	25	0.5	0.5	10
52189024	50	1.0	1.0	10
52189030	100	1.0	1.0	10
52189048	250	2.0	2.0	10
52189060	500	5.0	5.0	2
52189066	1000	10.0	10.0	1



# Volumetric instruments

## Measuring cylinders & measures

### Measuring cylinders

Class A  
tall form

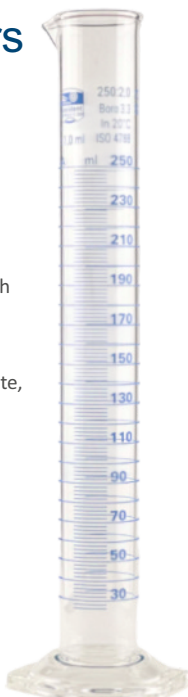
BASIC

Boro  
3.3

Class A measuring cylinders are supplied with ISO batch certificate in original packaging.

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.

- + hexagonal base
- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + blue graduation



Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)	PU (pcs)
52172006	5	0.1	0.05	2
52172012	10	0.2	0.10	2
52172018	25	0.5	0.25	2
52172024	50	1.0	0.50	2
52172030	100	1.0	0.50	2
52172048	250	2.0	1.00	2
52172060	500	5.0	2.50	2
52172066	1000	10.0	5.00	1
52172072	2000	20.0	10.0	1

### Measuring cylinders

Class A  
tall form

BASIC

Boro  
3.3

Class A measuring cylinders are supplied with ISO batch certificate in original packaging.

Available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.

- + hexagonal base
- + with spout
- + DIN EN ISO 4788
- + calibrated to contain "In"
- + amber graduation



Art.No.	Capacity (ml)	Divison (ml)	Tolerance (± ml)	PU (pcs)
52182006	5	0.1	0.05	2
52182012	10	0.2	0.10	2
52182018	25	0.5	0.25	2
52182024	50	1.0	0.50	2
52182030	100	1.0	0.50	2
52182048	250	2.0	1.00	2
52182060	500	5.0	2.50	2
52182066	1000	10.0	5.00	1
52182072	2000	20.0	10.0	1

### Measures

bell shape, clear glass

- + blue graduation
- + with round base

Measures are used to measure specific volumes of liquids or bulk materials. Can be used universally in the laboratory.



Art.No.	Capacity (ml)	Divison (ml)
42260006	5	1
42260012	10	1
42260018	15	1
42260024	25	1
42260030	30	1
42260036	50	2
42260042	100	5
42260048	250	10

### Pycnometers according to Gay-Lussac with ground-in stopper

Boro 3.3

- + calibrated
- + nominal capacity printed on the bottom



Art.No.	Capacity (cm³)	Variant
42571008	5	precisely adjusted
42571016	10	precisely adjusted
42571024	25	precisely adjusted
42571032	50	precisely adjusted
42571040	100	precisely adjusted
42571308	5	adjusted up to 3 decimal places
42571316	10	adjusted up to 3 decimal places
42571324	25	adjusted up to 3 decimal places
42571332	50	adjusted up to 3 decimal places
42571340	100	adjusted up to 3 decimal places

### Pycnometers according to Gay-Lussac with thermometer side capillary with ground-in cap

Boro 3.3

- + Thermometer with blue filling
- + from +10 °C to +35 °C: 0.2
- + according to DIN/ISO 3507



Art.No.	Capacity (cm³)	Variant	Thermometer socket size	Cap socket size
42572016	10	precisely adjusted	10/19	7,5
42572024	25	precisely adjusted	10/19	7,5
42572032	50	precisely adjusted	10/19	7,5
42572040	100	precisely adjusted	10/19	7,5
42572308*	5	adjusted up to 3 decimal places	10/19	7,5
42572316*	10	adjusted up to 3 decimal places	10/19	7,5
42572324*	25	adjusted up to 3 decimal places	10/19	7,5
42572332*	50	adjusted up to 3 decimal places	10/19	7,5
42572340*	100	adjusted up to 3 decimal places	10/19	7,5

\*Pycnometers are also available in other designs, prices on request

### Pycnometers according to Gay-Lussac not calibrated

Boro 3.3

- + in compliance with DIN/ISO 3507



Art.No.	Capacity (cm³)
42570008	5
42570016	10
42570024	25
42570032	50
42570040	100

### Pycnometers according to Gay-Lussac with Teflon stopper, precisely adjusted

BASIC

Boro 3.3

- + DIN ISO 3507 and ISO 9001
- + with replaceable Teflon stopper



Art.No.	Capacity (cm³)	PU (pcs)
52570316	10	1
52570324	25	1
52570332	50	1
52570340	100	1

### Burettes in accordance with DIN EN ISO 385

Our burettes in compliance with DIN EN ISO 385 guarantee maximum precision and reliability in volumetric measurements. Manufactured from high-quality, chemically resistant borosilicate glass 3.3, they meet all standards for accuracy, traceability, and calibration. Perfect for precise titration work in daily laboratory use.

#### Accuracy classifications:

##### Class AS

- + for higher accuracy
- + short run-out time with waiting time
- + ring graduation
- + Boro 3.3
- + DE-M
- + with batch number
- + ISO batch certificate per packaging unit
- + calibrated to deliver (TD, Ex)

##### Class B

- + for lower accuracy
- + no waiting time
- + line graduation
- + calibrated to deliver (TD, Ex)

#### Stopcocks:

- + straight and laterally reinforced tap sleeves and connections
- + calibrated, faceted spouts
- + with interchangeable plugs
- + reliable stopcock locking device

Class AS burettes are also available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.

The conformity label and batch number are printed on each burette. A batch certificate is enclosed with each original packing unit.

### Burettes - clear glass

#### Class AS

Boro  
3.3

- + DE-M
- + with straight glass stopcock
- + with ISO batch certificate
- + with Schellbach stripe
- + with ring division at the main points



Art.No.	40791715	40791722	40791750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

### Burettes - clear glass

#### Class AS

Boro  
3.3

- + DE-M
- + with lateral glass stopcock
- + with ISO batch certificate
- + with Schellbach stripe
- + with ring division at the main points



Art.No.	40792715	40792722	40792750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

# Volumetric instruments

## Burettes



### Burettes - clear glass

#### Class AS

Boro  
3.3

- + DE-M
- + with straight PTFE stopcock
- + with ISO batch certificate
- + with Schellbach stripe
- + with ring division at the main points



Art.No.	40793715	40793722	40793750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

### Burettes - clear glass

#### Class AS

Boro  
3.3

- + DE-M
- + with PTFE stopcock
- + with ISO batch certificate
- + with Schellbach strip
- + with ring division at the main points



Art.No.	40795715	40795722	40795750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

### Burettes - clear glass

#### Class AS

Boro  
3.3

- + DE-M
- + with straight NS stopcock
- + with ISO batch certificate
- + clear glass



Art.No.	40799715	40799722	40799750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

### Burettes - amber

#### Class AS

Boro  
3.3

- + DE-M
- + with straight PTFE stopcock
- + with ISO batch certificate
- + amber glass



Art.No.	40813715	40813722	40813750
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	white		

# Volumetric instruments

## Burettes & accessories

### Automatic burettes

#### clear glass, Class AS

- + DE-M
- + with lateral fine dosing valve tap with PTFE spindle
- + with intermediate tap with replaceable PTFE plug
- + with ISO batch certificate
- + with Schellbach stripe
- + blue graduated



Consisting of:

- automatic burette
- bottle, 2 liters, with standard ground 29/32
- rubber bulb

Boro  
3.3

Art.No.	48415315	48415322	48415350
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	blue		

### Automatic burettes

#### amberglass, Class AS

- + DE-M
- + with lateral fine dosing valve tap with PTFE spindle
- + with intermediate tap with replaceable PTFE plug
- + with ISO batch certificate
- + without Schellbach stripe
- + white graduated



Consisting of:

- automatic burette
- bottle, 2 liters, with standard ground 29/32
- rubber bulb

Boro  
3.3

Art.No.	48455315	48455322	48455350
Capacity (ml)	10	25	50
Division (ml)	0.020	0.050	0.100
Tolerance (± ml)	0.020	0.030	0.050
Graduation	white		

### Brushes

#### for burettes and tubes

- + excellent tool for cleaning burettes and tubes
- + Stem is manufactured from twisted steel wire



Art.No.	Total length (mm)	Brush Ø (mm)	Brush length (mm)	Material
40830010	1000	25	100	Natural bristles

### Suction bulbs

#### for titration apparatus



- + single: with 2 valves – made of soft PVC (cadmium-free)
- + double: with valve – made of soft PVC (cadmium-free), bulb made of latex

Art.No.	Tube outer Ø (mm)	Tube inner Ø (mm)	Tube length (mm)	Capacity (ml)	Variant	Colour
40850001	8 - 9	4	250	65	single	red
40850002	8 - 9	4	250	102	double	red

## Schilling automatic burettes

Class B  
Standard type

- + improved special pinch cock with titration screw for precise dosing
- + plastic burette clamp, chemical-resistant, allows discharge drop by drop by light finger pressure
- + storage bottles made of polyethylene, with plastic base; burette is filled by gently applying pressure to the bottle, with automatic zero-point adjustment
- + plastic tubing as rising pipe
- + upper part of the burette is closed, design like the Pellet titration burette; this prevents contamination
- + burette with Schellbach stripe and calibrated, faceted outlet tip



### Consisting of:

- + discharge tubing, natural rubber
- + burette Art.No. 40821...
- + bottle made of PE-LD
- + filling tubing made of PVC
- + clamp
- + base Art.No. 40823001 or 40823002 made of PE-HD

Art.No.	Capacity (ml)	Bottle capacity (ml)	Division (ml)	Tolerance ( $\pm$ ml)	Graduation
40820005	5	500	0.05	0.05	amber
40820010	10	500	0.05	0.05	amber
40820015	15	500	0.10	0.10	amber
40820025	25	1000	0.10	0.10	amber
40820050	50	1000	0.10	0.10	amber

## Spare parts & accessories

### Plastic base for Schilling burettes



Art.No.	Material	suitable for
40823001	Polyethylene (PE-HD)	for bottles of 0.5l
40823002		for bottles of 1l

### Spare burettes for automatic burettes Schilling Class B, with Schellbach stripe

Boro  
3.3



Art.No.	Capacity (ml)	Division (ml)	Tolerance ( $\pm$ ml)	Graduation
40821005	5	0.05	0.05	amber
40821010	10	0.05	0.05	amber
40821015	15	0.10	0.10	amber
40821025	25	0.10	0.10	amber
40821050	50	0.10	0.10	amber

### Bossheads double



Art.No.	Clamping range (mm)
40862010	16

- + for rods up to 16 mm  $\varnothing$
- + brass screws
- + nickel-plated, powder-coated
- + made of die-cast zinc

### Universal bossheads double, rotatable



Art.No.	Clamping range (mm)
40863010	16

- + for rods up to 16 mm  $\varnothing$
- + brass screws
- + nickel-plated, powder-coated
- + made of die-cast zinc

# Volumetric instruments

## Accessories for burettes

### Burette tips

with rubber tubing,  
for burettes with tubing connection



Art.No.	Length (mm)	Material
40780009	60	AR-Glas® (soda glass)

### Burette stands

with M10 thread  
(stainless steel thread)

Art.No.	Base dimensions (mm)	Rod (mm)
40860010	175 x 100	450 x 10 Ø
40861010	210 x 130	750 x 12 Ø
40861020	210 x 130	1000 x 12 Ø



**Clamps** made of die-cast zinc,  
without bosshead, with round jaws  
and cork lining



Art.No.	Clamping range (mm)	Handle (mm)	Total length (mm)
40865010	12-25	150 x 12 Ø	240
40865040	20-40	150 x 12 Ø	240
40866010	38-60	150 x 12 Ø	260

### Ring with bosshead

- + for rods up to 16 mm Ø
- + three-point support
- + nickel-plated brass screw, powder-coated
- + made of die-cast zinc

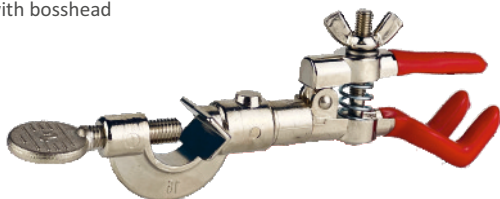


Art.No.	Inner Ø (mm)	Outer Ø (mm)	Material
40869007	50	70	Malleable iron
40869010	80	100	
40869013	110	130	

### Burette clamps

- + with PVC coating
- + for rods up to 13 mm Ø
- + with bosshead

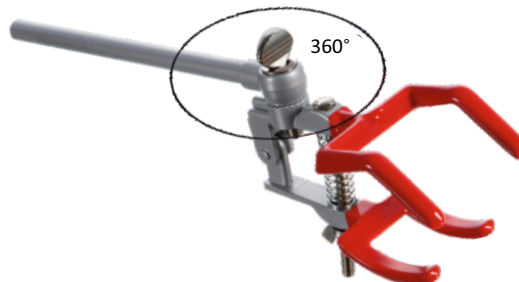
single: for one burette  
double: for two burettes



Art.No.	Clamping range (mm)	Variant	Material
40870010	0-20	single	Die-cast zinc
40871010	0-20	double	

### Condenser clamps

without bosshead, revolving 360°



Art.Nr.	Clamping range (mm)	Material
40875010	30-80	Die-cast zinc



## Pipettes according to DIN EN ISO 835 or 648

Our pipettes in compliance with DIN EN ISO 835 and DIN EN ISO 648 ensure maximum accuracy and reproducibility in all volumetric operations. Manufactured from high-quality, chemically resistant glass, they meet all standards for dimensional accuracy, calibration, and ease of use. Ideal for precise dispensing and analytical laboratory applications..

### Accuracy classifications:

#### Class AS

- + for higher accuracy
- + short run-out time with fixed waiting time of 5 seconds
- + measuring pipettes with ring graduation
- + soda-lime glass
- + DE-M
- + with batch number
- + ISO batch certificate per packaging unit
- + calibrated to expiry (TD, Ex)

Class AS measuring pipettes and volumetric pipettes are also available on request with individual certificate, USP batch certificate & DAkkS calibration certificate at an extra charge.

Please indicate when ordering.

#### Class B

- + for lower accuracy
- + no waiting time
- + measuring pipettes with line graduation
- + soda-lime glass
- + calibrated to expiry „Ex“

### Measuring pipettes Type 3 clear glass, Class AS, total delivery

- + DIN EN ISO 835
- + Type 3 (zero on top)
- + amber graduated
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass



Art.No.	Division	Tolerance (± ml)
42541016	0.5ml : 0.01	0.005
42541020	1ml : 0.01	0.007
42541036	2ml : 0.02	0.010
42541040	5ml : 0.10	0.030
42541048	10ml : 0.10	0.050
42541052	20ml : 0.10	0.100
42541056	25ml : 0.10	0.100
42541060*	50ml : 0.20	0.200

\*in addition to the norm

### Measuring pipettes Type 3 clear glass, Class AS, total delivery

- + DIN EN ISO 835
- + Type 3 (zero on top)
- + blue graduated
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass



Art.No.	Division	Tolerance (± ml)
42544016	0.5ml : 0.01	0.005
42544020	1ml : 0.01	0.007
42544024	1ml : 0.01	0.007
42544036	2ml : 0.02	0.010
42544040	5ml : 0.10	0.030
42544048	10ml : 0.10	0.050
42544052	20ml : 0.10	0.100
42544056	25ml : 0.10	0.100
42544060*	50ml : 0.20	0.200

\*in addition to the norm

# Volumetric instruments

## Pipettes

### Safety measuring pipettes with ground-in piston Class B

- + divided up to tip
- + standard type
- + zero on top
- + tolerance 1.5 times of the official tolerance of class AS
- + amber graduation
- + calibrated to deliver (TD,Ex)
- + calibrated, fire-polished, solid tip
- + packing: each in a solid plastic tube



Art.No.	Division	Material
42548020	1ml : 0.01	Soda-lime glass
42548036	2ml : 0.01	
42548044	5ml : 0.01	
42548048	10ml : 0.02	
42548052	20ml : 0.10	
42548056	25ml : 0.10	

### Volumetric pipettes Class AS

- + DIN EN ISO 648
- + with 1 mark
- + blue graduation
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass



Art.No.	Capacity (ml)	Tolerance ( $\pm$ ml)
42554004	0.5	0.005
42554008	1	0.008
42554016	2	0.010
42554020	2.5	0.010
42554024	3	0.010
42554028	4	0.015
42554032	5	0.015
42554044	8	0.020
42554048	9	0.020
42554052	10	0.020
42554060	15	0.030
42554064	20	0.030
42554068	25	0.030
42554072	30	0.050
42554080	50	0.050
42554084	100	0.080

### Volumetric pipettes Class AS

- + DIN EN ISO 648
- + with 1 mark
- + amber graduation
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass



Art.No.	Capacity (ml)	Tolerance ( $\pm$ ml)
42556004	0,5	0.005
42556008	1	0.008
42556016	2	0.010
42556020	2,5	0.010
42556024	3	0.010
42556028	4	0.015
42556032	5	0.015
42556044	8	0.020
42556048	9	0.020
42556052	10	0.020
42556060	15	0.030
42556064	20	0.030
42556068	25	0.030
42556072	30	0.050
42556080	50	0.050
42556084	100	0.080

# Volumetric instruments

## Pipettes



### Volumetric pipettes Class AS



- + DIN EN ISO 648
- + with 2 marks
- + amber graduation
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass

Art.No.	Capacity (ml)	Tolerance (±ml)
42557004	0.5	0.005
42557008	1	0.008
42557016	2	0.010
42557020	2.5	0.010
42557024	3	0.010
42557028	4	0.015
42557032	5	0.015
42557044	8	0.020
42557056	10	0.020
42557064	20	0.030
42557068	25	0.030
42557080	50	0.050

### Volumetric pipettes Class AS



- + DIN EN ISO 648
- + with 2 marks
- + blue graduated
- + calibrated to deliver (TD,Ex)
- + waiting time 5 s at 20°C
- + DE-M
- + with batch number
- + with ISO batch certificate
- + made of soda-lime glass

Art.No.	Capacity (ml)	Tolerance (±ml)
42558004	0.5	0.005
42558008	1	0.008
42558016	2	0.010
42558020	2.5	0.010
42558024	3	0.010
42558028	4	0.015
42558032	5	0.015
42558040	7	0.020
42558044	8	0.020
42558056	10	0.020
42558064	20	0.030
42558068	25	0.030
42558080	50	0.050

### Glass pipettes without graduation, clear glass



Art.No.	Length (mm)	Capacity (ml)
42569012	120	1.5
42569015	150	2.0
42569020	200	2.5
42569025	250	3.0

Outer Ø (mm)	Wall (mm)	Material
6.5 ± 0.2	0.95 ± 0.05	AR-Glas®

# Volumetric instruments

## Pipettes & pipetting aid

### Demeter pipettes (Diluting pipettes)

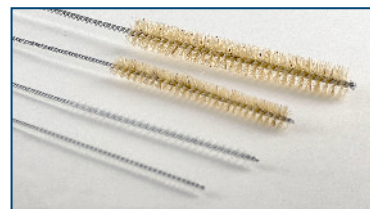
- + for dairy farming
- + with ring marks
- + calibrated for blowing out up to 1 ml
- + other marks calibrated to deliver (TD,Ex)
- + DIN 12838 and 12839
- + made of soda-lime glass
- + fused amber graduation
- + non steril



Art.No.	Marks at	Length (mm)	Tolerance (±ml)
42574001	1.0/1.1ml	250	0.5/0.005
42574002	0.5/1.0/1.1ml	250	0.05/0.05/0.005
42574004	1.0/2.0/2.1/2.2ml	250	0.05/0.05/0.005

### Pipette brushes

supplied as 4 sizes set,  
galvanised twist wire



Art.No.	42588010
for measuring pipettes	1 - 10 ml
Material (Brush 1 and 2ml)	Goat hair
Material (Brush 5 and 10ml)	Dun bristles

### Pipette brushes for measuring pipettes, individual

- + galvanised twisted wire
- + wire with eyelet

Art.No.	Total length (mm)	Brush Ø (mm)	Brush length (mm)	Twisted wire (mm)	Bristles	Variant	Size suitable for
42589001*	410	4	70	0.8	Goat hair	straight	1 ml
42589002*	405	4.5	75	1.0	Goat hair	straight	2 ml
42589005*	400	8	75	1.0	Pig bristles	straight	5 ml
42589010*	400	12	100	1.4	Pig bristles	straight	10 ml
42589030	250	8	70	1.0	Pig bristles	bent	
42589031	250	15	70	1.0	Pig bristles	bent	
42589032	300	11	65	1.4	Nylon bristles	bent	
42589033	300	30	90	1.6	Pig bristles	bent	
42589034	400	4	80	0.8	Goat hair	straight	
42589035	400	3	90	0.8	Goat hair	straight	
42589036	850	8	110	1.2	Pig bristles	straight	

\*all 4 sizes available as set under Art.No. 42588010



### Pipette stands made of Plexiglas® sloping, for measuring pipettes and volumetric pipettes

Art.No.	Dimensions (mm)	Capacity
42590006	188 x 123 x 181	6
42590012	350 x 123 x 190	12

- + for holding glass pipettes horizontally
- + 6 or 12 recesses of 17.5 mm



### Pipette fillers standard model

- + pipetting aid for bulb and graduated pipettes
- + three operating points

Density:  $1.08 \pm 0.02 \text{ g/cm}^3$   
 Hardness:  $40 \pm 5 \text{ Shore A}$   
 Tensile strength:  $19 \text{ Pa (N/mm}^2\text{)}$   
 Elongation at break:  $> 700 \%$   
 Tear strength:  $> 9 \text{ N/mm}$



Art.No.	for pipettes up to	Material	Valves	Colour
42580010	100 ml/10 mm Ø	Natural rubber	2	red

### Pipette fillers model „Flip“

- + one handed design
- + two operating points
- + evacuate via the new automatic valve
- + ability to clean inside of bulk by removing patented valve

Density:  $1.08 \pm 0.02 \text{ g/cm}^3$   
 Hardness:  $40 \pm 5 \text{ Shore A}$   
 Tensile strength:  $19 \text{ Pa (N/mm}^2\text{)}$   
 Elongation at break:  $> 700 \%$   
 Tear strength:  $> 9 \text{ N/mm}$



Art.No.	for pipettes up to	Material	Valves	Colour
42581020	100 ml/8 mm Ø	Natural rubber	2	red

### Pipette fillers universal model



- + three operating points
- + emptying via the new automatic valve
- + effective internal cleaning thanks to removable automatic valve

Art.No.	for pipettes up to	Material	Valves	Colour
42581010	100 ml/10 mm Ø	Natural rubber	3	red

### accu-jet S Pipettor

for glass and plastic pipettes from 0.1 to 200 ml

- + two-coloured battery charge indicator
- + battery with intelligent charging electronics
- + charger Europe 100-240 VAC 50/60 HZ
- + ergonomic handle and balanced weight distribution
- + fast: a 25 ml pipette is filled in 3 seconds at maximum motor speed
- + anthracite colour

With one hand, you can sensitively control the pipetting speed from fast, powerful aspiration to exact meniscus adjustment and precise dispensing of even small volumes.

You can regulate the motor speed without having to reposition your hand in order to work particularly powerfully or sensitively, and switch between free flow (with pipettes calibrated to 'EX') or fast blowing out of the liquid with motor power.

You can typically work for 8 hours or more on a single full charge (continuous aspiration and dispensing with a 10 ml pipette), and you can continue working seamlessly even when the battery is empty by connecting the charging cable.



Art.No.	Storage temperature	Dimensions (mm)	Battery	Charger	Material	Weight (g)
42577010	-20°C up to +50°C/ -4°F up to +122°F	139 x 230 x 62	Akku-Pack NiMH 2,4V, 730mAh	Input: 100-240 VAC, 50/60 Hz	PC/PBT	485.1

### macro-pipettor with membrane filter and spare parts

for pipettes from 0.1 ml up to 100 ml



- + standard membrane filter against penetration of liquids
- + adapter can be steam sterilised  
up to +121°C/+249.8 °F / 2 bar according to DIN
- + macro pipette controller weighs only 95 g
- + 1 replacement filter is included in the scope of delivery,  
which makes work easier, especially for serial pipetting

#### Suction bellows:

Simply press together before pipetting; there is no complex valve system to operate. Pipetting lever: There is just the one pipetting lever to operate for filling, adjusting volume and delivering.

Pipette adapter: It can be unscrewed and is provided with a built-in, hydrophobic membrane filter. For pipettes from 0.1 ml up to 100 ml.

#### Blow-out button:

For blowing out the residual liquid from blow-out pipettes.

#### Aspiration:

First squeeze the suction bellows. This is sufficient to aspirate approx. 50 ml in one go. To aspirate, move the pipetting lever upwards.

#### Adjust the volume:

Draw up the pipetting liquid to above the desired mark, then slowly move the pipetting lever downwards. The liquid level lowers. The meniscus stops when the lever is released.

#### Dispense:

Press the pipetting lever all the way down. The liquid drains off. The valve system is designed in such a way that the volume accuracy is not impaired if the liquid drains freely.

#### Blowing out:

When using blow-out pipettes, allow the liquid to drain until the meniscus in the jet. Then give the rubber blowball a short squeeze.

Art.No.	Variant	Material
42576001	spare membrane filter, 3µm, unsterile, hydrophobic	Polypropylene and PTFE
42576002	Adapter, approx. 44mm long	Silicone
42576003	Spare suction bellows with screw connection	Silicone and polypropylene
42576004	Valve assembly	Polypropylene, PTFE and silicone
42576005	Adapter housing, approx. 49mm long	Polypropylene
42576010	macro-pipettors with filter	complete

### Certificates and Quality Documentation

#### Documented quality in accordance with international standards

Our products are subject to strict quality controls and are manufactured and tested in accordance with nationally and internationally recognized standards.  
The corresponding certificates confirm compliance with all relevant technical specifications and regulatory requirements.

Class A/AS volumetric measuring instruments are supplied in conformity with the German Weights and Measures Act. They are marked with DE-M and are supplied as standard with one batch certificate per packaging unit.

#### Additional certificates:

Upon request, Class A/AS volumetric glassware can be supplied with an individual certificate, a USP batch certificate, or a USP individual certificate.

### Certificate of performance with information of the mean value of the production lot

A batch certificate documents the quality testing of an entire production batch. It confirms that all products within the batch were manufactured and tested according to the specified standards. All products in the batch are based on the same test results and quality data. This certificate is ideal when products originate from a uniform production batch and the quality requirements need to be demonstrated at the batch level.

Art.No.

49201010

### Individual certificate of performance with information of the actually determined volume of the instrument

An individual certificate certifies the quality and test results of a single product or component. Each item is tested and certified individually to ensure maximum precision and traceability. This type of certificate is preferred when special documentation or traceability requirements exist for each individual product — for example, in safety-critical or specialized applications.

Art.No.

49200010

DIN EN ISO 9001 CERTIFIED			
<b>QUALITÄT SZERTIFIKAT · CERTIFICATE OF PERFORMANCE</b> <b>CERTIFICAT DE QUALITÉ · CERTIFICADO DE CALIDAD</b>			
<b>CHARGENPRÜFUNG - BATCH QUALITY CONTROL</b>			
<b>Messzylinder</b> <b>Measuring cylinders</b> <b>DIN EN ISO 4788 - Klasse A / Class A</b>	<b>Artikelnummer</b> <b>Product code: 42182048</b> <b>DE-M</b>	<b>Chargennr.</b> <b>Batch no.: E4427</b>	<b>03.11.2025</b>
Nennvolumen/Nominal Volume/ Volume nominal/Volumen nominal:	250 : 2 ml	Mittelwert/ Mean value/ Valeur moyenne/ Valor medio:	249,931 ml
Toleranz/ Tolerance/ Tolérance/ Tolerancia:	1,000 ml	Standardabweichung Standard deviation/Ecart type/ Desviación standard:	0,42910 ml
<p>- Der angegebene Wert ist korrigiert, d. h. die ursprünglichen Meßbedingungen sind umgerechnet auf eine Bezugstemperatur von 20°C am Gerät, Umgebung und Prüfflüssigkeit. Die verwendeten Prüfmittel sind rückführbar auf nationale Normale (Die Prüfung erfolgte gemäß ISO4787).</p> <p>- The indicated value is adjusted acc.to the original measuring conditions referring to a temperature of 20°C at the instrument, the liquid (distilled water) and the ambience. The standards used for the measurements can be traced to national standards. The test was effected acc. to ISO 4787.</p> <p>- La valeur indiquée est corrigée, c'est-à-dire que les conditions de mesure d'origine sont ramenées à une température de référence de 20°C de l'appareil, de l'environnement et du fluide d'essai. Les standards normalisés nationaux peuvent servir de références pour l'appareil de mesure utilisé (les essais se sont déroulés selon ISO4787).</p> <p>- El valor indicado está corregido, es decir, las condiciones de comprobación originales se han convertido a la temperatura de referencia de 20°C del aparato, del ambiente y el líquido de comprobación. Los estándares nacionales pueden servir de referencia para el aparato de medición empleado (la prueba se lleva a cabo de acuerdo a ISO4787).</p>			
Prüfer/Tester/Vérificateur/Comprobador:			
Glaswarenfabrik Karl Hecht GmbH & Co KG Stettener Straße 22-24   97647 Sondheim/Rhön   Germany			



# LABORATORY EQUIPMENT.

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# Laboratory Equipment

## Watch glasses, dishes, aid & weighing bottles

### Watch glasses made of soda-lime glass



- + polished rim
- + ground edges
- + DIN 12341
- + wall thickness 1.9 mm
- + packed of 10 pieces

PREMIUM

Art.No.	Diameter (mm)
40010004	40
40010005	50
40010006	60
40010007	70
40010008	80
40010009	90
40010010	100
40010011	110
40010012	120
40010014	140
40010015	150
40010016	160
40010018	180
40010020*	200

\*2.9 mm wall thickness

### Watch glasses



BASIC

Boro 3.3

- + fire polished rim

Art.No.	Diameter (mm)	PU (pcs)
50016005	50	10
50016006	60	10
50016007	70	10
50016008	80	10
50016010	100	10
50016012	120	10
50016015	150	10
50016020	200	10

### Evaporating dishes

BASIC

Boro 3.3



- + DIN 12336
- + with spout
- + beaded rim
- + highly resistant to chemicals and thermal shocks
- + transparent
- + autoclavable: can tolerate repeated sterilisation (wet or dry)
- + useful for routine tasks

Art.No.	Capacity (ml)	Height x upper Ø (mm)	PU (pcs)
51968050	15	25 x 50 Ø	10
51968060	45	30 x 60 Ø	10
51968070	60	35 x 70 Ø	10
51968080	90	45 x 80 Ø	10
51968095	170	55 x 95 Ø	10
51968105	290	55 x 105 Ø	10
51968115	320	65 x 115 Ø	10
51968140	600	80 x 140 Ø	10
51968150	800	80 x 150 Ø	1
51968190	1500	100 x 190 Ø	1
51968200	1800	90 x 200 Ø	1
51968230	2500	130 x 230 Ø	1

### Crystallizing dishes

BASIC

Boro 3.3



- + DIN 12338
- + with spout
- + fire-polished rims
- + large labelling field for easy marking
- + highly resistant to chemicals and thermal shocks

Art.No.	Capacity (ml)	Height x upper Ø (mm)	PU (pcs)
51969040	25	25 x 40 Ø	10
51969050	50	30 x 50 Ø	10
51969060	60	35 x 60 Ø	6
51969070	100	40 x 70 Ø	6
51969080	150	45 x 80 Ø	6
51969095	300	55 x 95 Ø	6
51969098	900	75 x 140 Ø	1

### Weighing bottles tall form

- + with interchangeable ground joint cover

- + with frosted label

- + used for precise weighing of solids

PREMIUM

Boro 3.3



Art.No.	Capacity (ml)	Outer Ø (mm)	Height (mm)	NS short grind
44250001	10	25	40	24/12
44250002	20	30	50	29/12
44250003	40	40	50	40/12
44250004	45	35	70	34/12
44250005	70	40	80	40/12
44250006	110	50	80	50/12

### Weighing bottles tall form

BASIC

Boro  
3.3

- + with interchangeable ground joint lid
- + with frosted label



Art.No.	Height x outer Ø approx. (mm)	PU (pcs)
54250001	40 x 25 Ø	10
54250002	50 x 25 Ø	10
54250003	50 x 30 Ø	10
54250004	65 x 30 Ø	10
54250005	70 x 35 Ø	10
54250006	50 x 40 Ø	10
54250007	80 x 40 Ø	10
54250008	90 x 40 Ø	10
54250009	80 x 50 Ø	10
54250010	100 x 50 Ø	10

### Weighing bottles low form

PREMIUM

Boro  
3.3

- + with interchangeable ground joint lid
- + with frosted label



Art.No.	Capacity (ml)	Outer Ø (mm)	Height (mm)	NS short grind
44251010	10	30	30	29/12
44251011	15	35	30	34/12
44251012	20	40	25	40/12
44251013	30	50	30	50/12
44251014	45	60	30	50/12
44251016	80	80	30	80/12

### Weighing bottles low form

BASIC

Boro  
3.3

- + with interchangeable ground joint lid
- + with frosted label



Art.No.	Height x outer Ø approx. (mm)	PU (pcs)
54251011	30 x 35 Ø	10
54251012	25 x 40 Ø	10
54251013	30 x 40 Ø	10
54251014	25 x 50 Ø	10
54251015	30 x 50 Ø	10
54251016	50 x 50 Ø	10
54251017	30 x 60 Ø	10
54251018	30 x 80 Ø	10

### Weighing scoops

BASIC

Boro  
3.3

- + provided with open tubular arm
- + used for weighing small quantities of dyes and powders



Art.No.	Capacity (ml)	Length approx. (mm)	PU (pcs)
54248001	1	31	10
54248002	2	40	10
54248003	3	72	10
54248006	6	82	10
54248010	10	105	10

### Weighing boats

PREMIUM

Boro  
3.3



Art.No.	Capacity (ml)	Total length (mm)	Stem length (mm)	Stem wall (mm)	Stem Ø (mm)	Tube wall (mm)	Tube Ø (mm)
44248003	3	70	20	1.0	8	1.8	22
44248006	6	80	20	1.0	8	1.4	28
44248010	10	105	31	1.0	8	1.4	32

### Measuring jugs with embossed scale, made of polypropylene

- + highly transparent
- + stable, easy grip handle
- + with functional spout, so no dripping
- + microwave-safe
- + autoclavable at +121°C/+257°F (2 bar)  
in accordance with DIN EN 285
- + max. temperature at +125°C/+249.8°F
- + suitable for contact with food  
(EU) No. 10/2011



Art.No.	Capacity (ml)	Division (ml)	Dimensions (mm)
42284024	50	2	70 x 40 Ø
42284030	100	2	80 x 50 Ø
42284048	250	5	120 x 74 Ø
42284060	500	10	140 x 95 Ø
42284066	1000	10	181 x 117 Ø
42284072	2000	20	213 x 152 Ø
42284078	3000	50	242 x 172 Ø
42284084	5000	100	270 x 204 Ø

### Measuring jugs with scale, made of polypropylene

- + highly transparent
- + stable, easy grip handle
- + with functional spout, so no dripping
- + blue, raised scale
- + autoclavable at +121°C/+249.8°F (2 bar)
- + to preserve the marking, do not clean  
at temperatures exceeding 60°C/140°F
- + suitable for contact with food  
(EU) No. 10/2011
- + DIN EN 285



Art.No.	Capacity (ml)	Division (ml)	Dimensions (mm)
42283024	50	2	61 x 50 Ø
42283030	100	2	80 x 50 Ø
42283048	250	5	120 x 74 Ø
42283060	500	10	140 x 92 Ø
42283066	1000	10	181 x 117 Ø
42283072	2000	20	213 x 152 Ø
42283078	3000	50	242 x 172 Ø
42283084	5000	100	270 x 204 Ø

### Measuring jugs with scale, made of glass

- + stable, easy grip handle
- + with functional spout, so no dripping
- + blue, raised scale
- + made of soda-lime glass



Art.No.	Capacity (ml)
42281066	1000
Division (ml)	Diameter (mm)
100	90

### Griffin beakers

with printed blue scale,  
low form,  
made of polypropylene

- + highly transparent
- + ISO 7056
- + antistatic
- + with rim and spout
- + maximum temperature resistance  
+135 °C/+275 °F
- + suitable for steam sterilisation  
at +121 °C/+249.8 °F.



Art.No.	Capacity (ml)	Division (ml)	Dimensions (mm)
41935006	10	2	36 x 28 Ø
41935012	25	1	49 x 34 Ø
41935018	50	5	60 x 43 Ø
41935024	100	5	72 x 51 Ø
41935030	150	5	82 x 58 Ø
41935036	250	5	95 x 70 Ø
41935042	400	10	110 x 80 Ø
41935048	600	25	125 x 93 Ø
41935060	1000	50	148 x 108 Ø
41935066	2000	100	188 x 140 Ø
41935072	3000	200	212 x 170 Ø
41935078	5000	500	247 x 203 Ø

### Griffin beakers

with printed red scale,  
low form,  
made of polymethylpentene

- + highly transparent
- + ISO 7056
- + antistatic
- + with rim and spout
- + autoclavable at +121 °C/+249.8 °F (2 bar)
- + maximum temperature resistance  
+180 °C/+356 °F
- + suitable for universal use in laboratories,  
in industry, etc.



Art.No.	Capacity (ml)	Division (ml)	Dimensions (mm)
41934006	10	2	36 x 28 Ø
41934012	25	1	49 x 34 Ø
41934018	50	5	60 x 43 Ø
41934024	100	5	72 x 51 Ø
41934030	150	5	82 x 58 Ø
41934036	250	5	95 x 70 Ø
41934042	400	10	110 x 80 Ø
41934048	600	25	125 x 93 Ø
41934060	1000	50	148 x 108 Ø
41934066	2000	100	188 x 140 Ø

### Beakers

low form, with scale

PREMIUM

Boro  
3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions (mm)
41930004	25	50 x 34 Ø
41930008	50	60 x 42 Ø
41930012	100	70 x 50 Ø
41930016	150	80 x 60 Ø
41930020	250	95 x 70 Ø
41930024	400	110 x 80 Ø
41930028	600	125 x 90 Ø
41930032	800	135 x 100 Ø
41930036	1000	145 x 105 Ø
41930040	2000	185 x 132 Ø
41930044	3000	210 x 152 Ø
41930048	5000	270 x 170 Ø

# Laboratory Equipment

## Beakers

### Beakers

tall form, with scale

PREMIUM

Boro 3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions approx. (mm)
41929024	50	70 x 38 Ø
41929030	100	80 x 48 Ø
41929036	150	95 x 54 Ø
41929042	250	120 x 60 Ø
41929048	400	130 x 70 Ø
41929054	600	150 x 80 Ø
41929060	800	175 x 90 Ø
41929066	1000	180 x 95 Ø
41929072	2000	240 x 120 Ø

### Angled brushes

- + with wooden handle
- + with angled handle
- + suitable for flasks with a ground joint from NS 29/32



Art.No.	Total length (mm)	Brush (mm)	Handle length (mm)
41912010	445	45 x 20 Ø	370

### Brushes for beakers

- + dun nylon bristles
- + for glass or plastic beakers



Art.No.	Total length (mm)	Brush Ø (mm)	Brush length (mm)	Handle
41936010	430	85/60	140	wooden
41936020	390	85/60	125	wooden
41936030	430	80	130	wire

### Beakers

low form, with scale

BASIC

Boro 3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions approx. (mm)	PU (pcs)
51930000	5	32 x 22 Ø	10
51930002	10	37 x 26 Ø	10
51930004	25	52 x 34 Ø	10
51930008	50	62 x 42 Ø	10
51930012	100	72 x 50 Ø	10
51930016	150	82 x 60 Ø	6
51930020	250	97 x 70 Ø	10
51930024	400	113 x 80 Ø	10
51930026*	500	118 x 85 Ø	8
51930028	600	128 x 90 Ø	8
51930032	800	138 x 100 Ø	6
51930036	1000	148 x 105 Ø	6
51930040	2000	188 x 130 Ø	4
51930044	3000	214 x 150 Ø	1
51930048	5000	277 x 170 Ø	1
51930052*	10000	360 x 220 Ø	1

\*in addition to the norm

### Beakers

tall form, with scale

BASIC

Boro 3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions approx. (mm)	PU (pcs)
51929018	25	55 x 32 Ø	10
51929024	50	72 x 38 Ø	10
51929030	100	82 x 48 Ø	10
51929036	150	97 x 54 Ø	10
51929042	250	123 x 60 Ø	10
51929048	400	133 x 70 Ø	10
51929050*	500	140 x 79 Ø	8
51929054	600	153 x 80 Ø	8
51929060	800	178 x 90 Ø	6
51929066	1000	183 x 95 Ø	6
51929072	2000	244 x 120 Ø	1

\*in addition to the norm



### Beakers SIMAX

tall form, with scale

PREMIUM

Boro 3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions (mm)
41929218*	25	55 x 30 Ø
41929224	50	70 x 38 Ø
41929230	100	80 x 48 Ø
41929236	150	95 x 54 Ø
41929242	250	120 x 60 Ø
41929248	400	130 x 70 Ø
41929254	600	150 x 80 Ø
41929260	800	175 x 90 Ø
41929266	1000	180 x 95 Ø
41929272	2000	240 x 120 Ø

\*without scale

### Beakers SIMAX

low form, with scale

PREMIUM

Boro 3.3

- + with spout
- + DIN EN ISO 3819
- + white graduation



Art.No.	Capacity (ml)	Dimensions (mm)
41930204*	25	50 x 34 Ø
41930208	50	60 x 42 Ø
41930212	100	70 x 50 Ø
41930216	150	80 x 60 Ø
41930220	250	95 x 70 Ø
41930224	400	110 x 80 Ø
41930228	600	125 x 90 Ø
41930232	800	135 x 100 Ø
41930236	1000	145 x 105 Ø
41930240	2000	185 x 130 Ø
41930244	3000	210 x 150 Ø
41930248	5000	270 x 170 Ø

\*without scale

### Erlenmeyer flasks

(baffled flasks)

BASIC

Boro 3.3

- + made from ASTM E-438 Type 1
- + ideal for using of culture preparation
- + suitable for autoclave at 121°C.

- + white graduation
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck Ø approx. (mm)	PU (pcs)
51909012	250	145 x 85 Ø	38	6
51909014	500	182 x 105 Ø	38	6
51909016	1000	230 x 129 Ø	38	6
51909018	2000	275 x 165 Ø	38	4

### Erlenmeyer flasks

with glass stopper

BASIC

Boro 3.3

- + DIN ISO 4797
- + white graduation, with ground joint
- + with NS joint size labelling
- + supplied with hollow glass stopper



Art.No.	Capacity (ml)	Dimensions approx. (mm)	NS	PU (pcs)
51918006	25	70 x 40 Ø	14/23	10
51918012	50	90 x 51 Ø	29/32	10
51918013	50	90 x 51 Ø	14/23	10
51918014	50	90 x 51 Ø	19/26	10
51918016	50	90 x 51 Ø	24/29	10
51918017	100	105 x 64 Ø	14/23	6
51918018	100	105 x 64 Ø	29/32	2
51918020	100	105 x 64 Ø	19/26	6
51918021	100	105 x 64 Ø	24/29	6
51918026	250	145 x 85 Ø	19/26	6
51918028	250	145 x 85 Ø	24/29	6
51918030	250	145 x 85 Ø	29/32	2
51918036	300	150 x 85 Ø	29/32	6
51918038	500	180 x 105 Ø	19/26	6
51918040	500	180 x 105 Ø	24/29	6
51918042	500	180 x 105 Ø	29/32	6
51918048	1000	220 x 131 Ø	29/32	6
51918056	2000	280 x 166 Ø	29/32	4

### Erlenmeyer flasks narrow neck

PREMIUM Boro 3.3

- + DIN ISO 1773
- + white graduation
- + with scale



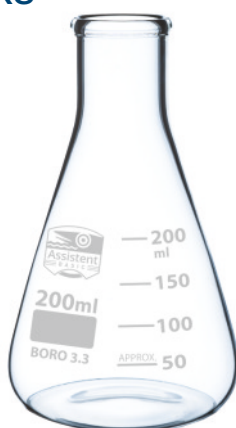
Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck outer-Ø approx. (mm)
41940012	25	75 x 42 Ø	22
41940018	50	90 x 51 Ø	22
41940024	100	105 x 64 Ø	22
41940030*	200	131 x 79 Ø	34
41940036	250	145 x 85 Ø	34
41940042*	300	156 x 87 Ø	34
41940048	500	180 x 105 Ø	34
41940054	1000	220 x 131 Ø	42
41940060	2000	280 x 166 Ø	50
41940066	3000	310 x 187 Ø	51
41940072	5000	365 x 220 Ø	51

\*in addition to the norm

### Erlenmeyer flasks narrow neck

BASIC Boro 3.3

- + DIN ISO 1773
- + white graduation
- + with scale
- + has a reinforced thick rim to reduce breakage



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck outer Ø approx. (mm)	PU (pcs)
51940012	25	75 x 42 Ø	22	10
51940018	50	90 x 51 Ø	22	10
51940024	100	105 x 64 Ø	22	10
51940026*	125	110 x 66 Ø	28	6
51940028*	150	124 x 72 Ø	28	10
51940030*	200	130 x 78 Ø	34	6
51940036	250	145 x 85 Ø	34	10
51940042*	300	156 x 88 Ø	34	6
51940048	500	180 x 105 Ø	34	10
51940054	1000	220 x 131 Ø	42	10
51940060	2000	280 x 166 Ø	50	6
51940066	3000	310 x 187 Ø	50	1
51940072	5000	365 x 220 Ø	50	1

\*in addition to the norm

### Erlenmeyer flasks SIMAX, narrow neck

PREMIUM Boro 3.3

- + DIN ISO 1773
- + white graduation
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck inner Ø approx. (mm)
41940212	25	70 x 42 Ø	22
41940218	50	85 x 51 Ø	22
41940224	100	105 x 64 Ø	22
41940230	200	131 x 79 Ø	34
41940236	250	140 x 85 Ø	34
41940242	300	156 x 87 Ø	34
41940248	500	175 x 105 Ø	34
41940254	1000	220 x 131 Ø	42
41940260	2000	280 x 166 Ø	50
41940266	3000	310 x 187 Ø	50
41940272	5000	365 x 220 Ø	50

### Erlenmeyer flasks

#### wide neck

**PREMIUM** Boro 3.3

- + DIN EN ISO 24450
- + white graduation
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck Ø approx. (mm)
41941012*	25	75 x 43 Ø	31
41941018	50	85 x 51 Ø	34
41941024	100	105 x 64 Ø	34
41941030*	200	131 x 79 Ø	50
41941036	250	145 x 85 Ø	50
41941042*	300	156 x 87 Ø	50
41941048	500	175 x 105 Ø	50
41941054	1000	220 x 131 Ø	50
41941060*	2000	276 x 153 Ø	72

\*in addition to the norm

### Erlenmeyer flasks

#### wide neck

**BASIC** Boro 3.3

- + DIN EN ISO 24450
- + white graduation
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck outer Ø approx. (mm)	PU (pcs)
51941012*	25	70 x 41 Ø	31	10
51941018	50	85 x 51 Ø	34	10
51941024	100	105 x 64 Ø	34	10
51941026*	125	110 x 66 Ø	34	10
51941028*	150	124 x 72 Ø	34	10
51941030*	200	130 x 78 Ø	50	10
51941036	250	140 x 85 Ø	50	10
51941042*	300	156 x 88 Ø	50	10
51941048	500	175 x 105 Ø	50	10
51941054	1000	220 x 131 Ø	50	10
51941060*	2000	280 x 166 Ø	55	6
51941066*	3000	320 x 192 Ø	62	1
51941072*	5000	380 x 235 Ø	63	1

\*in addition to the norm

### Erlenmeyer flasks

#### SIMAX, wide neck

**PREMIUM** Boro 3.3

- + DIN ISO 1773
- + white graduation
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck inner Ø approx. (mm)
41941212	25	70 x 42 Ø	32
41941218	50	85 x 51 Ø	34
41941224	100	105 x 64 Ø	34
41941230	200	131 x 79 Ø	50
41941236	250	135 x 85 Ø	50
41941242	300	156 x 87 Ø	50
41941248	500	170 x 105 Ø	50
41941254	1000	215 x 131 Ø	50
41941260	2000	280 x 153 Ø	72

# Laboratory Equipment

## Erlenmeyer flasks

### Erlenmeyer flasks

narrow neck, with standard ground

PREMIUM

Boro 3.3

- + without stopper
- + DIN EN ISO 4797
- + white graduation
- + with NS joint size labelling
- + with scale



Art.No.	Capacity (ml)	NS
41915006	25	14/23
41915012	50	29/32
41915014	50	19/26
41915018	100	29/32
41915020	100	19/26
41915024	200	29/32
41915030	250	29/32
41915034	250	45/40
41915036	300	29/32
41915042	500	29/32
41915046	500	45/40
41915048	1000	29/32
41915052	1000	45/40
41915056	2000	29/32

### Erlenmeyer flasks

with standard ground

BASIC

Boro 3.3

- + without stopper
- + DIN EN ISO 4797
- + white graduation
- + with NS joint size labelling
- + with scale



Art.No.	Capacity (ml)	Dimensions approx. (mm)	NS	PU (pcs)
51915006	25	70 x 40 Ø	14/23	10
51915012	50	85 x 51 Ø	29/32	10
51915013	50	85 x 51 Ø	14/23	10
51915014	50	85 x 51 Ø	19/26	10
51915016	50	85 x 51 Ø	24/29	10
51915017	100	100 x 64 Ø	14/23	10
51915018	100	100 x 64 Ø	29/32	10
51915020	100	100 x 64 Ø	19/26	10
51915021	100	100 x 64 Ø	24/29	10
51915026	250	150 x 85 Ø	19/26	10
51915028	250	150 x 85 Ø	24/29	10
51915030	250	150 x 85 Ø	29/32	10
51915036	300	150 x 85 Ø	29/32	10
51915038	500	180 x 105 Ø	19/26	10
51915040	500	180 x 105 Ø	24/29	10
51915042	500	180 x 105 Ø	29/32	10
51915048	1000	220 x 131 Ø	29/32	6
51915056	2000	270 x 166 Ø	29/32	6

upon request other sizes are available

### Erlenmeyer flasks

(iodine determination flasks)  
with standard ground

PREMIUM

Boro 3.3

- + with NS glass stopper
- + with NS joint size labelling
- + white graduation
- + with scale



Art.No.	Capacity (ml)	NS
41918006	25	14/23
41918012	50	29/32
41918018	100	29/32
41918020	100	19/26
41918024	200	29/32
41918030	250	29/32
41918036	300	29/32
41918042	500	29/32
41918048	1000	29/32

### Erlenmeyer flasks

SIMAX, narrow neck, with thread

PREMIUM

Boro 3.3

Art.No.	Capacity (ml)	Thread	Dimensions approx. (mm)
41943124	100	GL 25	100 x 64 Ø
41943136	250	GL 32	140 x 85 Ø
41943148	500	GL 32	175 x 105 Ø
41943154	1000	GL 32	215 x 131 Ø



- + with blue screw cap made of PP
- + with scale
- + white graduation
- + temperature resistant up to max. +140 °C/+284 °F

### Erlenmeyer flasks

narrow neck, with thread

BASIC

Boro 3.3

Art.No.	Capacity (ml)	Thread	Dimensions approx. (mm)	PU (pcs)
51943024	100	GL 25	105 x 64 Ø	2
51943036	250	GL 45	145 x 85 Ø	2
51943048	500	GL 45	180 x 105 Ø	2
51943054	1000	GL 45	220 x 131 Ø	2

upon request other sizes are available



- + with blue screw cap made of PP
- + white graduation
- + with scale
- + autoclavable

### Filtering flasks

suction flasks, Erlenmeyer shape

PREMIUM

Boro 3.3

- + DIN EN ISO 6556
- + with glass hose connection on the side

Art.No.	Capacity (ml)	Height (mm)
41270036	250	145
41270042	500	175
41270048	1000	230
41270054	2000	255



### Filtering flasks

suction flasks, Erlenmeyer shape

BASIC

Boro 3.3

- + DIN ISO 3585
- + with glass side arm

Art.No.	Capacity (ml)	Dimensions approx. (mm)	PU (pcs)
51270024	100	110 x 64 Ø	2
51270036	250	155 x 85 Ø	6
51270042	500	190 x 105 Ø	6
51270048	1000	230 x 136 Ø	6
51270056	2000	290 x 166 Ø	10



### Filtering jars

cylindrical, with spout

Art.No.	Capacity (ml)
41271006	50
41271012	100
41271018	250



### Nessler cylinders

colour comparison, flat bottom

BASIC

Boro 3.3

- + helps in comparing colour of water samples
- + blue graduation

Art.Nr.	Capacity (ml)	Division (ml)	Dimensions approx. (mm)	PU (pcs)
53100024	50	25 & 50	150 x 25 Ø	2
53100030	100	50 & 100	180 x 34 Ø	2



### Glass tanks

- + with fine ground rim
- + made of soda-lime glass



Art.No.	Width (mm)	Length (mm)	Height (mm)
40070001	100	150	150
40070002	130	180	180
40070003	150	200	200
40070004	180	220	250
40070005	220	240	300
40070011	220	150	300

### Specimen jars

- + with ground cover plate
- + made of soda-lime glass



Art.No.	Width (mm)	Length (mm)	Height (mm)
42660003	65	75	150
42660004	50	105	150
42660005	100	100	150
42660006	80	120	200
42660007	140	140	200
42660008	100	200	225

### Specimen jars

- + without cover plate
- + made of soda-lime glass



Art.No.	Width (mm)	Length (mm)	Height (mm)
42661010	50	105	120



### Reagent bottles ASSISTENT clear glass

Boro 3.3

- + with blue PP screw cap and blue O-ring
- + with scale
- + white graduation with marking area
- + in compliance with DIN ISO 4796
- + autoclavable (121°C)



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Thread	PU
41330206	50	91 x 46 Ø	GL 32	10
41330212	100	105 x 56 Ø	GL 45	10
41330218	250	143 x 70 Ø	GL 45	10
41330224	500	181 x 86 Ø	GL 45	10
41330230	1000	230 x 101 Ø	GL 45	10
41330236	2000	265 x 136 Ø	GL 45	10
41330242	5000	336 x 181 Ø	GL 45	6

### Reagent bottles SIMAX clear glass

Boro 3.3

- + with blue PP screw cap and blue O-ring
- + with scale
- + white graduation
- + DIN EN ISO 4796-1
- + autoclavable (121°C)



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Thread
41330106	50	91 x 46 Ø	GL 32
41330112	100	105 x 56 Ø	GL 45
41330118	250	143 x 70 Ø	GL 45
41330124	500	181 x 86 Ø	GL 45
41330130	1000	230 x 101 Ø	GL 45
41330136	2000	265 x 136 Ø	GL 45
41330142	5000	336 x 181 Ø	GL 45
41330148	10000	416 x 227 Ø	GL 45

### Reagent bottles SIMAX amber glass

Boro 3.3

- + with blue PP screw cap and blue O-ring
- + with scale
- + white graduation
- + DIN EN ISO 4796-1
- + autoclavable (121°C)



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Thread
41331106	50	91 x 46 Ø	GL 32
41331112	100	105 x 56 Ø	GL 45
41331118	250	143 x 70 Ø	GL 45
41331124	500	181 x 86 Ø	GL 45
41331130	1000	230 x 101 Ø	GL 45
41331136	2000	265 x 136 Ø	GL 45
41331142	5000	336 x 181 Ø	GL 45



### Aspirator bottles with socket

BASIC

Boro  
3.3



- + DIN EN ISO 4796-3
- + with autoclavable PP screw cap and o-ring and pouring ring
- + white graduation and white enamel marking area
- + with NS 29/32 side joint

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Thread	PU (pcs)
51277003	5000	330 x 181 Ø	GL 45	1
51277004	10000	410 x 227 Ø	GL 45	1
51277005	20000	500 x 296 Ø	GL 45	1

Other sizes are available upon request.

### Laboratory bottles SIMAX square, clear glass

- + with blue screw cap and blue pouring ring
- + resistant up to +140°C/+284°F
- + thread GL 80
- + DIN ISO 4796-1

Boro  
3.3



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)
41333124	500	139 x 95 x 95
41333130	1000	185 x 105 x 105
41333136	2000	258 x 115 x 115
41333142	5000	357 x 160 x 160

### Laboratory bottles SIMAX square, amber glass

- + with blue screw cap and blue pouring ring
- + resistant up to +140°C/+284°F
- + thread GL 80
- + DIN ISO 4796-1

Boro  
3.3



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)
41334124	500	139 x 95 x 95
41334130	1000	185 x 105 x 105
41334136	2000	258 x 115 x 115
41334142	5000	357 x 160 x 160

### Narrow neck bottles

clear glass



- + soda-lime glass (hydrolytic class 3) Type III
- + with thread and screw cap
- + screw caps of urea resin molding, black, with Lupolen®-insert
- + the screw caps are heat-resistant up to +110°C / +230°F

Art.No.	Capacity (ml)	Dimensions approx. (mm)	Thread
41322012	30	74 x 34 Ø	GL 18
41322018	50	97 x 37 Ø	GL 18
41322030	100	117 x 45 Ø	GL 22
41322054	250	148.5 x 61.5 Ø	GL 22
41322066	500	187.7 x 76 Ø	GL 25
41322072	1000	218.3 x 97.5 Ø	GL 28

### Narrow neck bottles

amber glass



- + soda-lime glass (hydrolytic class 3) Type III
- + with thread and screw cap
- + screw caps of urea resin molding, black, with Lupolen®-insert
- + the screw caps are heat-resistant up to +110°C / +230°F

Art.No.	Capacity (ml)	Dimensions approx. (mm)	Thread
41323030	100	117 x 45 Ø	GL 22
41323048	200	143 x 56.5 Ø	GL 22
41323066	500	185.7 x 76 Ø	GL 25
41323072	1000	218.3 x 97.5 Ø	GL 28

### Wide neck bottles

clear glass



- + with thread and screw cap
- + the screw caps are heat-resistant up to +110°C / +230°F
- + sealing material: urea resin moulding compound
- + colour of sealing material: black
- + sealing of Lupolen®
- + made of recycling-glass (40 %)

Art.No.	Capacity (ml)	Dimensions approx. (mm)	Thread	Weight approx. (g)
41324006	25	57 x 36 Ø	GL 28	40
41324012	30	68 x 36 Ø	GL 32	47
41324018	50	75 x 44 Ø	GL 32	65
41324030	75	92.5 x 50 Ø	GL 40	100
41324036	100	98 x 54 Ø	GL 40	110
41324042	125	104 x 57 Ø	GL 45	138
41324048	150	109 x 63 Ø	GL 55	185
41324054	250	113 x 70 Ø	GL 55	218
41324066	500	154 x 84 Ø	GL 55	335
41324072	1000	180.5 x 103.5 Ø	GL 68	517

### Wide neck bottles

amber glass



- + with thread and screw cap
- + the screw caps are heat-resistant up to +110°C /+230°F
- + sealing material: urea resin moulding compound
- + colour of sealing material: black
- + sealing of Lupolen®
- + made of recycling-glass (40 %)

Art.No.	Capacity (ml)	Dimensions approx. (mm)	Thread	Weight approx. (g)
41325012	30	68 x 36 Ø	GL 32	47
41325018	50	75 x 44 Ø	GL 32	65
41325024	75	79 x 48.5 Ø	GL 40	85
41325030	100	92.5 x 50 Ø	GL 40	100
41325036	125	98 x 54 Ø	GL 40	110
41325042	150	104 x 57 Ø	GL 45	138
41325048	200	109 x 63 Ø	GL 55	185
41325054	250	113 x 70 Ø	GL 55	218
41325060	300	127 x 70 Ø	GL 55	230
41325066	500	154 x 84 Ø	GL 55	335
41325072	1000	180.5 x 103.5 Ø	GL 68	517

### Screw caps

made of urea resin moulding compound

- + heat-resistant up to +90°C /+194°F
- + recommended storage temperature: 20°C/68°F ± 5°C/41°F
- + colour black
- + sealing of Lupolen®



Art.No.	Dimensions approx. (mm)	Thread	Weight approx. (g)
41326018	12 x 20 Ø	GL 18	2.2
41326022	13.5 x 25 Ø	GL 22	4.1
41326025	13.5 x 28 Ø	GL 25	4.4
41326028	13.5 x 31 Ø	GL 28	4.5
41326032	13.5 x 36 Ø	GL 32	8.3
41326040	14 x 42.5 Ø	GL 40	8.7
41326045	13.5 x 47 Ø	GL 45	12
41326055	16.5 x 58.5 Ø	GL 55	16
41326068	16 x 71.5 Ø	GL 68	22

### Pouring rings

- + made of polypropylene
- + colour: blue
- + resistant up to +135°C/275°F



Art.No.	for	Thread
41335010	Bottles from 100ml	GL 45
41335032	Bottles of 50ml	GL 32

### Screw caps

- + made of polypropylene
- + colour: transparent
- + with seal
- + resistant up to +135°C/+275°F
- + also available in red and blue



Art.No.	for	Thread
41336010	Bottles from 100ml	GL 45
41336032	Bottles of 50ml	GL 32

### Storage bottle for titration apparatus clear glass



Boro  
3.3

Art.No.	Capacity (ml)	Height (mm)	NS
41916048	1000	200	29/32
41916054	2000	200	29/32

### Storage bottle for titration apparatus amber glass



Boro  
3.3

Art.No.	Capacity (ml)	Height (mm)	NS
41917048	1000	200	29/32
41917054	2000	200	29/32

### Bottles with conical shoulder narrow neck, clear glass

+ with stopper made of polyethylene and standard ground

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	NS
41280006	50	77 x 41.5 Ø	14/15
41280012	100	103 x 51.5 Ø	14/23
41280018	250	131 x 69 Ø	19/26
41280024	500	163 x 85 Ø	24/29
41280030	1000	199 x 106.5 Ø	29/32
41280036	2000	245 x 133 Ø	29/32



Boro  
3.3

### Bottles with conical shoulder narrow neck, amber glass

+ with stopper made of polyethylene and standard ground

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	NS
41282006	50	77 x 41.5 Ø	14/15
41282012	100	103 x 51.5 Ø	14/23
41282018	250	131 x 69 Ø	19/26
41282024	500	163 x 85 Ø	24/29
41282030	1000	199 x 106.5 Ø	29/32
41282036	2000	245 x 133 Ø	29/32



Boro  
3.3

### Bottles with conical shoulder narrow neck, clear glass

+ with glass stopper and standard ground

+ made of soda-lime glass

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	NS
41281006	50	77 x 41.5 Ø	14/15
41281012	100	103 x 51.5 Ø	14/23
41281018	250	131 x 69 Ø	19/26
41281024	500	163 x 85 Ø	24/29
41281030	1000	199 x 106.5 Ø	29/32
41281036	2000	245 x 133 Ø	29/32



### Bottles with conical shoulder narrow neck, amber glass

+ with glass stopper and standard ground

+ made of soda-lime glass

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	NS
41283006	50	77 x 41.5 Ø	14/15
41283012	100	103 x 51.5 Ø	14/23
41283018	250	131 x 69 Ø	19/26
41283024	500	163 x 85 Ø	24/29
41283030	1000	199 x 106.5 Ø	29/32
41283036	2000	245 x 133 Ø	29/32



### Narrow neck bottles (round shoulder) clear glass

+ with ground-in glass stopper

+ made of soda-lime glass

Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height without stopper (mm)
41301006	50	41.5	77
41301012	100	51.5	103
41301018	250	69	131
41301024	500	85	163
41301030	1000	106.5	199



### Narrow neck bottles (round shoulder) amber glass

- + with ground-in glass stopper
- + made of soda-lime glass

Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height without stopper (mm)
41303006	50	41.5	77
41303012	100	51.5	103
41303018	250	69	131
41303024	500	85	163
41303030	1000	106.5	199
41303036	2000	132	245



### Wide neck bottles (round shoulder) clear glass

- + with ground-in glass stopper
- + made of soda-lime glass

Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height without stopper (mm)	NS
41311006	50	42,6	76,5	24/20
41311012	100	52	95	29/22
41311018	250	71	129,5	34/24
41311024	500	87	164	45/27
41311030	1000	110	190	60/31



### Wide neck bottles (round shoulder) amber glass

- + with ground-in glass stopper
- + made of soda-lime glass

Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height without stopper (mm)	NS
41313006	50	42,6	76,5	24/20
41313012	100	52	95	29/22
41313018	250	71	129,5	34/24
41313024	500	87	164	45/27
41313030	1000	110	190	60/31
41313036	2000	132	238	60/31





# Laboratory Equipment

## Bottles

### Dropping bottles

amber glass



- + with thread DIN 18
- + without cap
- + made of soda-lime glass

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)
41314005	5	53.4 x 22 Ø
41314010	10	63.7 x 24.2 Ø
41314015	15	65 x 28.5 Ø
41314020	20	72.2 x 29.5 Ø
41314030	30	80.2 x 33 Ø
41314050	50	91.7 x 38 Ø
41314060	100	110.7 x 47 Ø

### Pipette kit for dropping bottles for Art.No. 41314...



Consisting of:

- + screw cap made of PP
- + suction bulb (blue or red) made of TPE
- + glass pipette made of soda-lime glass
- + with thread DIN 18
- + heat resistant up to max. 60°C/140°F

Art.No.	for (ml)	Colour	Art.No.	for (ml)	Colour
41315005	5	blue	41315006	5	red
41315010	10		41315011	10	
41315020	20		41315021	20	
41315030	30		41315031	30	
41315050	50		41315051	50	
41315060	100		41315061	100	

### Screw caps for dropping bottles for Art.No. 41314...

made of LDPE



Art.No.	GL	Variant
41316101	18	UNI 1, fast dropping, 4 holes, red
41316102		UNI 1, fast dropping, 4 holes, white
41316202		UNI 2, slow dropping, 2 holes, white
41316301		tamper-evident, red
41316302		tamper-evident, white
41316303		tamper-evident, yellow
41316304		tamper-evident, black
41316402		with child safety lock, white



### Dropping bottles TK clear glass

- + with ground-in, flat glass stopper
- + made of soda-lime glass



Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height approx. (mm)
41318006	50	44	92
41318012	100	55	106

### Dropping bottles TK amber glass

- + with ground-in, flat glass stopper
- + made of soda-lime glass



Art.No.	Capacity approx. (ml)	Diameter approx. (mm)	Height approx. (mm)
41319006	50	44	92
41319012	100	55	106



### Narrow neck bottles made of polyethylene

- + with screw cap
- + PE-LD, flexible

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)
49100006	30	GL 14	35	9	66
49100012	50	GL 18	40	13	84
49100018	100	GL 18	45	13	102
49100024	250	GL 25	60	18	138
49100030	500	GL 25	75	18	169
49100036	1000	GL 28	95	21	212
49100042	2000	GL 28	120	21	260
49100048*	5000	GL 40	163	31	360

\*with handle



### Wide neck bottles made of polyethylene

- + with screw cap
- + PE-LD, flexible

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)
49101012	50	GL 32	40	24	77
49101018	100	GL 32	48	24	92
49101024	250	GL 40	64	31	123
49101030	500	GL 50	75	38.5	153
49101036	1000	GL 65	94	50	202
49101042	2000	GL 65	120	50	243

### Washing bottles made of polyethylene

- + PE-LD
- + flexible
- + with PP screw cap and spray tube

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)	Height with screw cap (mm)
49102018	100	GL 18	45	13	102	205
49102024	250	GL 25	60	18	138	310
49102030	500	GL 25	75	18	169	315
49102036	1000	GL 28	95	21	212	375



### High shoulder bottles narrow neck

- + PE-LD
- + with screw cap

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)
49105012	50	GL 18	37	13	81
49105018	100	GL 18	44	13	96
49105024	250	GL 25	60	17.5	125
49105030	500	GL 25	77	17.5	160
49105036	1000	GL 28	95	21	197



### Bottles with conical shoulder narrow neck

- + made of polypropylene
- + with octagonal stopper made of polyethylene

Art.No.	Capacity (ml)	NS	Diameter (mm)	Neck inner Ø (mm)	Height without stopper (mm)
49108018	100	14/23	52	14.5	100
49108024	250	19/26	70	19	128
49108030	500	24/29	86	24	162
49108036	1000	29/30	106	29	197



## Bottles

wide neck, round

- + made of polypropylene
- + with screw cap and graduation
- + autoclavable up to +121°C / +249.8°F

Art.No.	Capacity(ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)
49115012	50	GL 32	40	24	77
49115018	100	GL 32	48	24	92
49115024	250	GL 40	64	31	123
49115030	500	GL 50	75	38.5	153
49115036	1000	GL 65	94	50	202



## Square bottles made of polyethylene

- + PE-HD
- + with PE-HD screw caps

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without screw cap (mm)	Variant
49116012	50	GL 18	33 x 34	13	74	narrow neck
49116018	100	GL 18	33 x 41	13	111	narrow neck
49116024	250	GL 25	43 x 51	17.5	159	narrow neck
49116030	500	GL 25	53 x 68	17.5	180	narrow neck
49116036	1000	GL 25	66 x 89	17.5	228	narrow neck
49116924	250	GL 50	80 x 80	38.5	83	wide neck
49116930	500	GL 65	90 x 90	50	120	wide neck
49116936	1000	GL 65	90 x 90	50	168	wide neck



## Bottles amber narrow neck

- + made of PE-LD
- + with screw cap
- + amber colour protects light sensitive materials against UV-light
- + for light-sensitive liquids



Art.No.	Capacity (ml)	Thread	Ø (mm)	Neck inner Ø (mm)	Height without screw cap (mm)
49112018	100	GL 18	45	13	102
49112024	250	GL 25	60	18	138
49112030	500	GL 25	75	18	169
49112036	1000	GL 28	95	21	212

## Spray bottles made of polyethylene

- + PE-LD
- + with spray attachment made of polypropylene
- + with rotatable and adjustable attachment

Art.No.	Capacity (ml)	Thread
49119010	1000	GL 28
49119020	500	GL 25



### Dropping bottles made of PE-LD

- + with dropping tip
- + with attached cap

Art.No.	Capacity (ml)	Thread	Diameter (mm)	Neck inner Ø (mm)	Height without stopper (mm)
49103004	10	GL 14	26	9	45.5
49103008	20	GL 14	32	9	57
49103012	30	GL 14	35	9	66
49103016	50	GL 18	40	13	84
49103020	100	GL 18	45	13	102
49103024	250	GL 25	60	18	138
49103028	500	GL 25	75	18	169



### Bottles for drinking water analysis according to DIN EN ISO 5667-3

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).

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	PU (pcs)
49125020	125	92 x 50 Ø	350
49125024	250	115 x 50 Ø	216
49125030	500	145 x 50 Ø	120
49125036	1000	175 x 50 Ø	72

- + with sodium thiosulphate
- + sterile, disposable
- + made of polypropylene
- + wide neck
- + quite transparent
- + square
- + with scale
- + for sampling of possibly chlorinated water
- + pre-dispensed 20 mg/1 l
- + safety closure, tight-fitting
- + minimum order quantity 1 PU

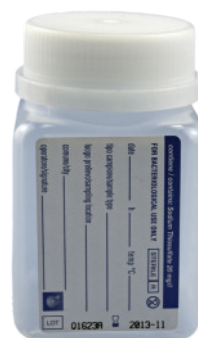


### Bottles for drinking water analysis according to DIN EN ISO 5667-3

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).

Art.No.	Capacity (ml)	Dimensions (mm)	PU (pcs)
49126020	125	92 x 50 Ø	350
49126024	250	115 x 50 Ø	216
49126030	500	145 x 50 Ø	120
49126036	1000	175 x 50 Ø	72

- + without sodium thiosulphate
- + sterile, disposable
- + made of polypropylene
- + wide neck
- + quite transparent
- + square
- + with scale
- + for sampling of open water, lakes, rivers etc.
- + pre-dispensed 20 mg/1 l
- + safety closure, tight-fitting,
- + minimum order quantity 1 PU



### Aspirator bottles narrow neck

- + made of polyethylene
- + transparent
- + with stopcock, handle and screw cap
- + complete with interchangeable, smooth-running stopcock made of PP with 3/4-inch connection



Art.No.	Capacity (l)	Diameter (mm)	Neck inner Ø (mm)
49130005	5	170	52.5
49130010	10	210	52.5
49130025*	25	280	79.5
49130050*	50	350	79.5

\* with two handles

### Spare stopcocks for Art.No. 49130...

- + made of polypropylene
- + for aspirator bottles
- + complete with 3/4-inch connection and rubber ring



Art.No.	Opening (mm)	Connection
49131010	10	3/4"

### Brushes for flasks and bottles

- + for narrow neck, round-shouldered and threaded bottles, etc.
- + with head bundle for better cleaning of the bottoms of bottles
- + with wire handle



Art.No.	Total length (mm)	Brush Ø (mm)	Brush length (mm)	Material
41279010	420	55	100	Natural bristles
41279015	450	40	140	Natural bristles
41279020	500	55	150	Natural bristles
41279025	600	80	160	Natural bristles

### Winkler oxygen bottles

- + for the determination of the oxygen dissolved in the water
- + made of soda-lime glass
- + with interchangeable stopper made of PE-HD
- + frosted label and precisely adjusted capacity

Art.No.	Capacity (ml)	NS
44267010	100 - 150	14/23
44267020	250 - 300	19/26



### Stopper holders for Winkler bottles

- + nickel-plated
- + for bottles with nominal capacity 250 ml



Art.No.	Material
44268010	Metal

# Laboratory Equipment

## Test tubes

### Test tubes

Boro  
3.3



- + heavy wall
- + with rim
- + round bottom
- + packed of 100 pcs

Art.No.	Dimensions approx. (mm)	Wall thickness approx. (mm)
42788024	75 x 12 Ø	1.0
42788051	160 x 16 Ø	1.2
42788060	180 x 18 Ø	1.2
42788063	180 x 20 Ø	1.2
42788066	200 x 24 Ø	1.2
42788078	200 x 30 Ø	1.2
42788081	200 x 38 Ø	1.4

### Test tubes

Boro  
3.3

- + heavy wall
- + rimless
- + round bottom
- + packed of 100 pcs



Art.No.	Dimensions approx. (mm)	Wall thickness approx. (mm)	Capacity approx. (mm)
42787024	75 x 12 Ø	1.0	4
42787051	160 x 16 Ø	1.2	20

### Test tubes with screw cap

- + round bottom
- + sterilisable
- + with PP screw cap GL 18
- + autoclavable to +121°C/+249.8°F
- + wall thickness: approx. 1.1 mm
- + packed of 100 pcs



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Material
42782045	12.5	100 x 16 Ø	Soda glass
42782051	22.0	160 x 16 Ø	

### Test tubes

AR-Glas®

Boro  
7.0



- + heavy wall
- + rimless
- + round bottom

Density: 2.50 g/cm<sup>3</sup>

Lin. Coefficient of expansion: 9.1 · 10<sup>-6</sup> K<sup>-1</sup>

Thermal shock resistance: 30 K

Hydrolytic class: 3

Acid resistance class: 1

Alkali resistance class: 2

#### Note:

Art.No. 42775009 Durham tubes

Art.No. 42775024 Kahn tubes, Urastrat tubes, tubes for Combs test

Art.No. 42775027 Centrifuge tubes for examination of mastic and blood typing

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Wall thickness approx. (mm)	PU (pcs)
42775003	0.8	50 x 6 Ø	0.65	500
42775009	0.6	35 x 6 Ø	0.65	500
42775012	1.2	40 x 8 Ø	0.7	500
42775015	4.7	80 x 10 Ø	0.9	200
42775018	4.0	70 x 10 Ø	0.9	100
42775021	4.5	100 x 10 Ø	0.9	100
42775024*	5.5	75 x 12 Ø	0.6	2000
42775027	7.5	100 x 12 Ø	0.7	100
42775030	9.5	100 x 14 Ø	0.9	100
42775033	15.5	130 x 14 Ø	0.9	100
42775039	10.2	85 x 15 Ø	0.9	100
42775042	16.0	135 x 15 Ø	0.9	100
42775045*	14.0	100 x 16 Ø	0.7	1000
42775051*	22.0	160 x 16 Ø	1.0	1000
42775060	33.0	180 x 18 Ø	1.0	100

\*made of borosilicate glass 7.0

### Test tubes „ELKA“

AR-Glas®



- + can be used as a disposable test tube
- + round bottom
- + with rim
- + packed of 1000 pcs

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Wall thickness approx. (mm)
42770021	5.5	100 x 9.5 Ø	0.5
42770027	8.5	100 x 11.5 Ø	0.5
42770033	15.5	130 x 14 Ø	0.6
42770045	14.5	100 x 15.5 Ø	0.5
42770048	18.5	120 x 15.5 Ø	0.5
42770051	25.0	160 x 15.5 Ø	0.5
42770057	31.5	160 x 17.25 Ø	0.5
42770060	35.0	180 x 17.25 Ø	0.5
42770063	47.0	180 x 19.5 Ø	0.5
42770069	64.5	160 x 24.0 Ø	0.8
42770072	70.4	200 x 24.0 Ø	0.8
42770078	116.0	200 x 29.0 Ø	0.8
42770251	25.0	160 x 15.5 Ø	0.5

### Test tubes disposable

- + round bottom
- + rimless



AR-Glas®

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Wall thickness approx. (mm)
42769045	15	98 x 16 Ø	0.5
42769051	25	160 x 16 Ø	0.5

### Test tubes graduated

- + with spout, round bottom
- + standard type
- + short line graduation
- + precisely calibrated
- + with rim
- + white graduation



AR-Glas®

Art.No.	Division (ml)	Dimensions approx. (mm)	Wall thickness approx. (mm)
42765005	5ml : 0.1	110 x 11.6 Ø	0.7
42765010	10ml : 0.1	160 x 13 Ø	1.0
42765020	20ml : 0.1	200 x 14.5 Ø	0.9
42765025	25ml : 0.5	180 x 17.5 Ø	1.0

### Test tubes



- + round bottom
- + with rim
- + packed of 100 pcs

Boro 5.1

Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Wall thickness approx. (mm)
42771015	2.5	70 x 8 Ø	0.45
42771021	6	100 x 10 Ø	0.45
42771027	8	100 x 12 Ø	0.45
42771051	23	160 x 16 Ø	0.6
42771060	37	180 x 18 Ø	0.55
42771063	47	180 x 20 Ø	0.55
42771075	27	120 x 20 Ø	0.8



# Laboratory Equipment

## Test tubes & accessories

### Flat bottom tubes for Globules

- + rimless
- + with transparent lamellar plug
- + tension-free
- + soda-lime glass / clear glass
- + packaged in pieces of 300



Art.No.	Capacity approx. (ml)	Dimension approx. (mm)	Wall thickness approx. (mm)
42784010	1.8	52.5 x 8 Ø	0.70

### Flat bottom tubes

- + rimless
- + tension-free
- + Art.No. 42779065: AR-Glas®
- + Art.No. 42779070: Borosilicate glass 5.1

#### suitable stoppers:

Art.No. 42779065: Rubber stopper Art.No. 41590014;  
Cork stopper Art.No. 41594014  
Art.No. 42779070: Rubber stopper Art.No. 41590026;  
Cork stopper Art.No. 41594022



Art.No.	Capacity approx. (ml)	Dimension approx. (mm)	Wall thickness approx. (mm)
42779065	7.5	65 x 15 Ø	0.9
42779070	18.5	70 x 22 Ø	1.0

### Glass vials amber glass, Type II/WBK II with snap-cap and flat bottom

- + snap-cap made of plastic (LDPE)
- + tension-free



Art.No.	Dimensions approx. (mm)	Wall thickness approx. (mm)	Capacity approx. (ml)	PU (pcs)
42786004	30 x 19 Ø	1.0	3	200
42786008	40 x 19 Ø	1.0	5	200
42786012	45 x 22 Ø	1.0	10	200
42786016	50 x 30 Ø	1.0	25	200
42786020	75 x 28 Ø	1.0	30	200
42786024	80 x 30 Ø	1.0	40	200
42786028	100 x 30 Ø	1.1	50	200
42786032	145 x 34 Ø	1.1	100	100

### Glass vials clear glass with snap-cap and flat bottom

- + snap-cap made of plastic (LDPE)
- + tension-free



Art.No.	Dimensions approx. (mm)	Wall thickness approx. (mm)	Capacity approx. (ml)	HGB/WBK	PU (pcs)
42785004	30 x 19 Ø	1.0	3	HGB/WBK I	200
42785008	40 x 19 Ø	1.0	5	HGB/WBK I	200
42785012	45 x 22 Ø	1.0	10	HGB/WBK III	200
42785016	50 x 30 Ø	1.0	25	HGB/WBK III	200
42785020	75 x 28 Ø	1.0	30	HGB/WBK III	200
42785024	80 x 30 Ø	1.0	40	HGB/WBK III	200
42785028	100 x 30 Ø	1.1	50	HGB/WBK III	200
42785032	145 x 34 Ø	1.1	100	HGB/WBK III	100

### Glass vials soda-lime glass with plastic snap-cap and flat bottom

+ tension-free

+ minimum purchase quantity: 1 PU

Art.No.	Dimensions approx. (mm)	Wall thickness approx. (mm)	Capacity approx. (ml)	PU (pcs)
42783004	36 x 11.5 Ø	0.7	2	690
42783008	24 x 24 Ø	1.0	5	154
42783012	34 x 24 Ø	1.0	8	154
42783016	41 x 24 Ø	1.0	10	154
42783020	48 x 26 Ø	1.0	15	130
42783024	60 x 26 Ø	1.0	20	130
42783028	72 x 28 Ø	1.2	30	108
42783032	106 x 32 Ø	1.2	60	84



### Brushes for test tubes with cotton end

+ with loop

+ with white cotton tuft

+ galvanised wire

+ minimum purchase quantity: 1 PU = 10 pieces



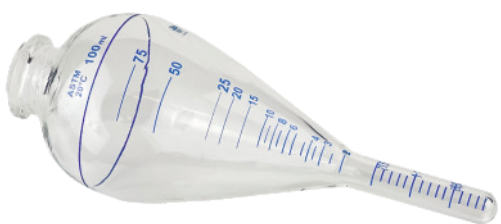
Art.No.	Total length (mm)	Brush Ø (mm)	Brush length (mm)	for glasses of approx. (mm)	Wire (mm)	Bristles
42760010	300	20	80	16-20 Ø	1.6	Dun bristles
42760020	160	10	50	10-12 Ø	1.0	Dun bristles
42760030	330	26	100	25 Ø	1.6	Dun bristles
42760035	300	16	65	14-16 Ø	1.6	Nylon bristles
42760037	300	20	65	16-20 Ø	1.6	Nylon bristles
42760039	300	28	70	25-28 Ø	1.6	Nylon bristles
42760041	300	38	75	34-38 Ø	1.8	Nylon bristles
42760043	300	75	100	65-75 Ø	2.5	Nylon bristles
42760115	150	8	50	8-12 Ø	1.9	Cotton
42760120	220	15	50	13-15 Ø	1.0	Cotton
42760130	330	30	90	26-30 Ø	1.6	Cotton

- + light-coloured bristles
- + with white wool head
- + galvanised twist wire



### Brushes for conical centrifuge tubes

Art.No.	Total length (mm)	Brush length (mm)	Brush Ø (mm)	Wire (mm)
40937010	270	80	14 upper - 13 below	1.4



### ASTM centrifuge tube pear shape

Boro  
3.3

- + DIN 51793
- + with cylindrical base
- + short neck with rim

Art.No.	Capacity (ml)	Graduation	Material	Dimensions (mm)
40931010	160	blue	Borosilicate glass 3.3	160 x 58 Ø



### Centrifuge tubes conical

AR-Glas®

- + rimless
- + graduated

Art.No.	Graduation (ml)	Graduation	Dimensions (mm)
40939002	15 : 0.1	white	112 x 17 Ø



### Centrifuge tubes short, conical bottom

AR-Glas®

- + rimless
- + ungraduated

Art.No.	Capacity (ml)	Wall (mm)	Material	Dimensions (mm)
40946001	10-15	1.2	AR-Glas® (Soda glass)	98 x 17 Ø



### Centrifuge tubes short, conical bottom

AR-Glas®

- + rimless
- + graduated

Art.No.	Graduation (ml)	Graduation	Material	Dimensions (mm)
40947001	10-15 : 0.2	white	AR-Glas® (Soda glass)	98 x 17 Ø

### Centrifuge tubes

#### round bottom

AR-Glas®

- + rimless
- + ungraduated



Art.No.	Capacity (ml)	Dimensions (mm)
40950001	10-15	98 x 17 Ø
40950002	10-15	108 x 17 Ø
40950003	25-30	100 x 25 Ø
40950016	10-12	100 x 16 Ø

### Centrifuge tubes

#### round bottom

AR-Glas®

- + rimless
- + white graduated
- + packed of 10 pieces



Art.Nr.	Capacity (ml)	Dimensions (mm)
40951001	10-15	98 x 17 Ø
40951002	10-15	107 x 17 Ø
40951003	25	100 x 25 Ø

### Centrifuge tubes

#### round bottom

Boro 3.3

- + rimless
- + ungraduated
- + packed of 100 pieces



Art.Nr.	Capacity (ml)	Dimensions (mm)
40958016	10-12	100 x 16 Ø

### Centrifuge tubes

#### with screw cap

AR-Glas®



- + conical bottom
- + ungraduated
- + incl. screw cap
- + packed of 100 pieces

The screw caps are gas-sterilisable up to +121°C/+249.8°F using Ethylene Oxide.

Art.No.	40970010
Capacity (ml)	10-15
Dimensions (mm)	112 x 17 Ø
Total length* (mm)	115
Wall(mm)	1.1
Thread	GL 14
Material	AR-Glas®

\*incl. screw cap

### Centrifuge tubes

#### with screw cap

AR-Glas®



- + round bottom
- + ungraduated
- + incl. screw cap
- + packed of 100 pieces

The screw caps are gas-sterilisable up to +121°C/+249.8°F using Ethylene Oxide.

Art.No.	40976010
Capacity (ml)	10-15
Dimensions (mm)	110 x 17 Ø
Wall (mm)	1.0
Thread	GL 14
Material	AR-Glas®

# Laboratory Equipment

## Stoppers

### Rubber stoppers

#### without holes

Density  $\rho$ : 1,175 g/cm<sup>3</sup>

Tensile strength: >10 N/mm<sup>2</sup>

Elongation at break: >690 %

Impact elasticity: >55 %

Material: natural rubber

Colour: grey

Temperature resistance:

-30 to +60°C/-22 to 140°F



- + DIN 12871
- + Hardness 40 Shore A
- + free from phthalates

Art.No.	Bottom Ø approx. (mm)	Upper Ø approx. (mm)	Height approx. (mm)	Art.No.	Bottom Ø approx. (mm)	Upper Ø approx. (mm)	Height approx. (mm)
41590002	4	8	20	41590035	29	35	30
41590005	5	9	20	41590038	31	38	35
41590008	8	12	20	41590041	34	41	35
41590011	9	12	19	41590044	36	44	40
41590014	10.5	14.5	20	41590047	41	49	40
41590017	12.5	16.5	20	41590050	47	55	40
41590020	14	18	20	41590053	50.5	59.5	45
41590023	17	22	25	41590056	56	65	45
41590026	18	24	30	41590059	64.5	75.5	55
41590029	21	27	30	41590062	71	83	60
41590032	26	32	30	41590065	79	92	65

### Rubber stoppers

- + suitable for tubes with a Ø of 17 mm (10-15 ml)
- + not autoclavable



- + DIN 12871
- + Hardness 40 Shore A
- + free from phthalates
- + packed of 10 pieces

Art.No.	Dimensions (mm)	Material
40955010	12.5 x 16.5 x 20	Natural rubber mix

### Stoppers

#### with standard joint

#### made of polyethylene (PE-HD)

- + resistant to acid and alkali
- + octagonal grip, hollow



Art.No.	NS
42990007	7/16
42990010	10/19
42990012	12/21
42990014	14/23
42990019	19/26
42990024	24/29
42990029	29/32
42990034	34/35
42990045	45/40

### Stoppers clear glass

#### hexagonal, hollow glass

Boro 3.3

- + with hexagonal grip
- + DIN 12252



Art.No.	NS
42992007	7/16
42992010	10/19
42992012	12/21
42992014	14/23
42992019	19/26
42992024	24/29
42992029	29/32
42992034	34/35
42992045	45/40

### Kapsenberg® test tube caps

- + made of aluminium
- + with handle

Art.No.	for tubes up to approx. (mm)	Colour
42776051	16 Ø	silver



### Silicone stoppers without holes

- + DIN 12871
- + transparent
- + Hardness 50 Shore A
- + max. temperature of use -50°C/-58°F to +180°C/356°F (short-term up to +240°C/464°F)
- + autoclavable at +121°C/249.8°F (2 bar)



### Cork stoppers

Art.No.	Height approx. (mm)	Bottom Ø approx. (mm)	Upper Ø approx. (mm)
41594009	17	6	9
41594013	22	10	13
41594014	22	11	14
41594015	22	12	15
41594016	22	13	16
41594018	22	15	18
41594019	23	16	19
41594020	26	17	20
41594022	26	18	22
41594023	26	19	23
41594026	27	22	26
41594030	27	26	30
41594036	27	32	36
41594040	27	36	40



- + high quality
- + low porosity

Art.No.	Bottom Ø approx. (mm)	Upper Ø approx. (mm)	Height approx. (mm)
41583004	5	9	20
41583008	10,5	14,5	20
41583012	12,5	16,5	20
41583016	14	18	20
41583020	17	22	25
41583024	18	24	30
41583028	21	27	30
41583032	26	32	30
41583036	29	35	30
41583040	31	38	35
41583044	36	44	40
41583048	41	49	40
41583052	47	55	40
41583056	64,5	75,5	55
41583060	8	12	20

### Stoppers made of polyethylene

BASIC

- + with standard joint
- + packed in pieces of 100



Art.No.	NS
52990010	10/19
52990012	12/21
52990014	14/23
52990019	19/26
52990024	24/29
52990029	29/32
52990034	34/35
52990045	45/40

### Stoppers clear glass hexagonal, hollow glass

BASIC

Boro 3.3

- + with standard joint
- + DIN 12252
- + packed in pieces of 100



Art.No.	NS
52992010	10/19
52992012	12/21
52992014	14/23
52992019	19/26
52992024	24/29
52992029	29/32
52992034	34/35
52992045	45/40

# Laboratory Equipment

## Stoppers, aid & test tube racks

### Stoppers amber glass hexagonal, hollow glass

BASIC

Boro 3.3

- + with standard joint
- + DIN 12252
- + packed of 100 pieces

Art.No.	NS
52994010	10/19
52994012	12/21
52994014	14/23
52994019	19/26
52994024	24/29
52994029	29/32
52994034	34/35
52994045	45/40



### Cork borer set made of brass tubing

- + nickel-plated
- + with handles
- + tube wall 0.4 mm thick



Art.No.	for holes of Ø approx. (mm)	Set of (pcs)	Weight approx. (g)
41593006	5 - 11	6	170
41593012	5 - 19	9	400

### Automatic tilting pipettes

Boro 3.3



- + with curved spout
- + without bottle

Art.No.	Capacity (ml)	NS
41877003	5	29/32
41877006	10	29/32
41877009	20	29/32
41877012	25	29/32
41877015	50	29/32
41877018	100	29/32

### Draining racks made of wire, tall



- + PE coated wire
- + white
- + suitable for hanging and standing
- + for 60 test tubes and 5 flasks
- + with plastic drip tray

Art.No.	Dimensions approx. (mm)
49027010	420 x 170 x 610

### Draining racks made of wire, small



- + PE coated wire
- + white
- + suitable for hanging and standing
- + for 12 test tubes and 11 flasks
- + with plastic drip tray

Art.No.	Dimensions approx. (mm)
49028010	420 x 170 x 300

### Test tube holder made of wood

- + with sturdy spring made of stainless steel

Art.No.	Length (mm)	for glasses up to (mm)	Material
42811010	175	30 Ø	Beech wood





### Test tube holder

made of wood

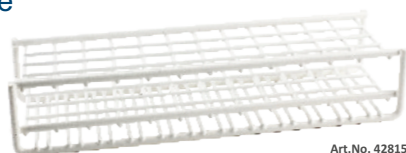
+ with stable spring made of stainless steel



Art.No.	Surface	for tubes up to approx. (mm)	Material	Dimensions approx. (mm)
42810010	Galvanised	20 Ø	Beech wood	175 x 10 x 20

### Test tube racks

made of wire



Art.No. 42815248

- + with white plastic-coated wire
- + without pins
- + heat resistance up to approx. 60°C/140°F
- + not autoclavable
- + for test tubes or centrifuge tubes



Art.No. 42815024

Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)
42815012	12 tubes (3 x 4)	95 x 70 x 80	17 Ø
42815024	24 tubes (4 x 6)	135 x 90 x 80	17 Ø
42815248	48 tubes (4 x 12)	210 x 77 x 40	12 Ø

### Test tube racks

made of Plexiglas®

- + with numbered holes
- + universal use in the laboratories
- + one level
- + without pins



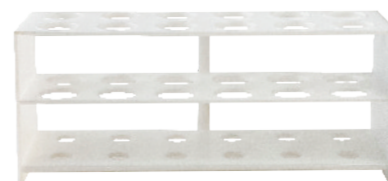
Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)
42808006	6 tubes	165 x 55 x 75	18 Ø
42808012	12 tubes	164 x 55 x 76	18 Ø
42808024	24 tubes	220 x 79 x 80	18 Ø
42808033*	33 tubes (3 x 11)	310 x 80 x 80	18 Ø

\*Takata rack

### Test tube racks made of polystyrene

- + two levels, without pins
- + with graduation

Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)	Colour	Holes Ø (mm)
42814010	12 tubes (2 x 6)	193 x 61 x 82	20 Ø	natural	20

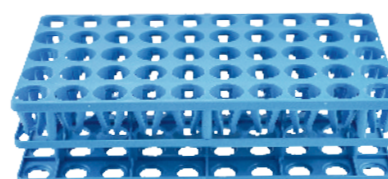


### Racks for sample tubes Multistand Plus made of polypropylene

+ autoclavable at 121°C/249.8°F

The frames have a spring holder so the tubes are held securely in place.

Art.No.	for	for tubes up to approx. (mm)	Colour
42812010	50 tubes (5 x 10)	12 - 18 Ø	blue



# Laboratory Equipment

## Test tube racks



### Test tube racks made of wood

- + varnished
- + water-resistant
- + chemical-free
- + made of beech wood

Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)	Pins	Levels
42794001	6 tubes	230 x 55 x 120	22 Ø	without	1
42794002	12 tubes	230 x 75 x 200	22 Ø	6	2
42794013	6 tubes	270 x 55 x 180	30 Ø	without	1



### Test tube racks made of wood

- + varnished
- + water-resistant
- + chemical-free
- + made of beech wood

Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)	Pins	Levels
42795010	6 tubes	200 x 60 x 114	18 Ø	without	1



### Test tube racks made of wood

- + varnished
- + water-resistant
- + chemical-free
- + made of beech wood

Art.No.	for	Dimensions approx. (mm)	for tubes up to approx. (mm)	Pins	Levels
42796010	12 tubes	200 x 80 x 180	18 Ø	without	2



### Test tube racks made of wood

- + varnished
- + water-resistant
- + chemical-free
- + made of beech wood

Art.No.	for	for tubes up to approx. (mm)	Pins	Levels
42800010	6 tubes	18 Ø	6	1



### Test tube racks made of wood

- + varnished
- + water-resistant
- + chemical-free
- + made of beech wood

Art.No.	for	for tubes up to approx. (mm)	Pins	Levels
42801010	12 tubes	18 Ø	6	2

### Melting point determination apparatus

according to Thiele

Boro 3.3



Art.No.	Dimension approx. (mm)
43004010	120 x 20 Ø

### Melting point determination tubes

open on both sides

AR-Glas®



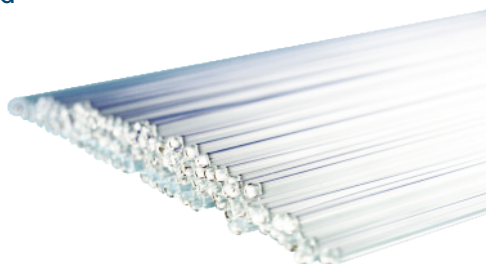
Art.No.	Dimension approx. (mm)
43005010	90 x 1.5 Ø

+ packed in pieces of 100 in a glass tube

### Melting point determination tubes

closed end

AR-Glas®



Art.No.	Dimension approx. (mm)
43006010	90 x 1.5 Ø

+ packed in pieces of 100 in a glass tube

### Crucible tongs



Art.No.	Length approx. (mm)
43010010	220

+ nickel-chromium steel  
+ stainless  
+ double bent

### Magnesia grooves DIN 40680

- + thermal resistance approx. 560 K
- + for laboratory test samples and the incineration of small quantities of substances
- + packed in pieces of 25



Art.No.	Length approx. (mm)	Width approx. (mm)
42065010	100	9

### Magnesia rods DIN 40680

- + thermal resistance approx. 560 K
- + permissible deflection: 0.5 % of the maximum length
- + packed in pieces of 25



Art.No.	Length approx. (mm)	Diameter approx. (mm)
42066010	140	1.8

### Vacuum filter set

BASIC Boro 3.3

- + scaled funnels simplify dosing and analysis
- + with fritted glass filter base
- + anodised aluminium spring clamp
- + the filter size is 47mm

#### Supplied with:

- + support base with sintered disc
- + connecting clamp
- + 1000 ml flask
- + vacuum connection side arm
- + filter funnel of 300 ml volume capacity



Art.No.	Funnel capacity approx. (mm)	PU (pcs)
50647002	300	1
Filtration base approx. (mm)	Capacity approx. (ml)	NS
47	1000	45/46

### Membrane filtration assembly

BASIC

- + supplied without flask & clamp



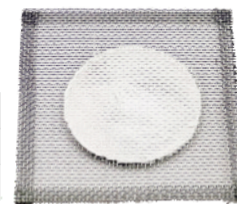
Art.No.	Filtration base approx. (mm)	Capacity (ml)	Funnel capacity approx. (ml)	PU (pcs)
50650003	B 24	300	47	1

### Wire gauze

BASIC

- + made of stainless steel
- + with a ceramic circular plate at the center
- + close mesh with folded edges
- + free of hazardous materials

Art.No.	Dimensions approx. (mm)	PU (pcs)
51071012	120 x 120	10
51071016	160 x 160	10
51071020	200 x 200	10



### Funnels Büchner

BASIC Boro 3.3

Suitable for qualitative inorganic analysis and preparative chemistry



Art.No.	Capacity approx. (ml)	Disc Ø approx. (mm)	Porosity	PU (pcs)
50645006	50	40	G-1	12
50645007	50	40	G-2	12
50645008	50	40	G-3	12
50645009	50	40	G-4	12
50645012	75	40	G-1	12
50645013	75	40	G-2	12
50645014	75	40	G-3	12
50645015	75	40	G-4	12
50645022	125	65	G-1	6
50645023	125	65	G-2	6
50645024	125	65	G-3	6
50645025	125	65	G-4	6
50645032	500	90	G-1	2
50645033	500	90	G-2	2
50645034	500	90	G-3	2
50645035	500	90	G-4	2

### Crucibles Gooch

BASIC Boro 3.3

- + with an acid resistant sintered glass disc for filtration
- + suitable for metal casting and analysis



Art.No.	Capacity approx. (ml)	Disc Ø approx. (mm)	Porosity	PU (pcs)
50628006	30	30	G-1	10
50628007			G-2	10
50628008			G-3	10
50628009			G-4	10
50628011	50	40	G-1	10
50628012			G-2	10
50628013			G-3	10
50628014			G-4	10

## All-gas Bunsen burners

+ with air regulation, needle valve and adjustable nozzle

The following hoses are suitable for connection to the tubing olive:

- + inner hose Ø: 10 mm
- + outer hose Ø: 14 mm

The burner can be used for methane.

Gas pressure range: 18 - 25 mbar

Art.No.	41385010
Burner tube Ø (mm)	13
Height approx. (mm)	170
Base Ø approx. (mm)	80
Head Ø approx. (mm)	17
Consumption approx. (l/h)	110
Power approx. (kW)	1.20
Weight (g)	270
Temp (°C)	1460



## Bunsen burners

+ with air regulation

+ DIN type

Gas pressure range for propane gas burners:

47.5 - 57.5 mbar

Gas pressure range for natural gas burners:

18 - 25 mbar



Art.No.	41390001	41390002
Burner tube Ø (mm)	14	14
Height approx. (mm)	155	155
Base Ø approx. (mm)	75	75
Head Ø approx. (mm)	17	17
Consumption approx. (l/h)	110	55
Power approx. (kW)	1.25	1.35
Weight (g)	210	210
Temp (°C)	1500	1540
for	Natural gas	Bottle gas/ Butane gas

## Bunsen burners for bottle gas/ butane gas

+ with stopcock and pilot flame

+ with air regulation

Gas pressure range: 47.5 - 57.5 mbar

Art.No.	41391002
Burner tube Ø (mm)	14
Height approx. (mm)	155
Base Ø approx. (mm)	75
Head Ø approx. (mm)	17
Consumption (l/h)	50
Power approx. (kW)	1.25
Weight (g)	225
Temp (°C)	1520
for	Bottle gas/ Butane gas



## Gas burners according to Teclu

+ with stopcock and pilot flame

+ with air regulation

Gas pressure range for propane gas burners:

47.5 - 57.5 mbar

Gas pressure range for natural gas burners:

18 - 25 mbar



Art.No.	41393001	41393002
Burner tube Ø (mm)	14	14
Height approx. (mm)	155	155
Base Ø approx. (mm)	80	80
Head Ø approx. (mm)	17	17
Consumption (l/h)	110	55
Power approx. (kW)	1.25	1.5
Weight (g)	265	265
Temp (°C)	1530	1550
for	Natural gas	Bottle gas/ Butane gas

# Laboratory Equipment Burners

## Bunsen burners LABOGAZ® for cartridges with safety valve

Cartridge may always be disconnected easily,  
provided that burner is not operating.

The burners Art.No. 41395010 and cartridges Art.No. 41395001  
are incompatible with burners Art.No. 41396010.

UN 2037, class 2

Safety data sheet comes with the item.



Art.No.	Dimensions approx. (mm)	Variant	Capacity approx. (g)	Weight approx. (g)
41395001	14 x 11 Ø	Cartridge	450	710
41395010	24 incl. cartridge	Burner	/	380

## Wire triangle with smooth clay tubes

+ made of galvanised iron wire



Art.No.	Length (mm)
41065004	40
41065006	60
41065008	80

## Cartridges with 190g butane gas for LABOGAZ® Bunsen burners Art.No. 41396010

+ according to EN 417:2012

+ Mixing ratio butane/propane: 80/20

+ Flammable gas - Category 1



Art.No.	Capacity approx. (ml)	Dimensions approx. (mm)	Weight approx. (g)
41396020	314	90 x 90 Ø	190

## Bunsen burners LABOGAZ®



+ without cartridge

+ with Clip & Go mounting system

+ direct butane labelling

The device can be removed from the cartridge even  
if the cartridge is not completely empty.

For use with cartridge Art.No. 41396020.

Art.No.	Dimensions approx. (mm)	Weight approx. (g)	Gas consumption
41396010	9 x 10 x 19.5	380	55 g/h



### Tripod - short made of iron

- + galvanised
- + edges neatly polished (no sharp edges)
- + holding ring with 140 mm diameter
- offers practical use of ceramic triangles and wire gauzes

Art.No.	Ring outer Ø (mm)	Ring inner Ø (mm)	Height (mm)	Ring thickness (mm)
41090010	140	110	210	2.5



### Tripod - tall made of iron

- + galvanised
- + edges neatly polished (no sharp edges)

Art.No.	Ring outer Ø (mm)	Ring inner Ø (mm)	Height (mm)	Ring thickness (mm)
41091010	140	110	280	2.5



### Spirit lamps with side filler tube and wick



Art.No.	Capacity approx. (ml)	Material
43033010	60	Stainless steel

### Boiling flasks flat bottom, narrow neck

BASIC Boro 3.3

- + DIN ISO 1773
- + white graduation
- + with matt area for marking
- + beaded rim
- + uniform wall thickness



Art.No.	Capacity (ml)	Dimensions approx. (mm)	Neck Ø (mm)	PU (pcs)
51924024	50	95 x 51 Ø	22	10
51924030	100	110 x 64 Ø	22	10
51924036	250	144 x 85 Ø	34	10
51924042	500	168 x 105 Ø	34	10
51924048	1000	200 x 131 Ø	42	10
51924054	2000	240 x 166 Ø	50	6
51924058	4000	290 x 207 Ø	50	1
51924060	6000	330 x 236 Ø	50	1
51924062	10000	380 x 279 Ø	65	1



# Laboratory Equipment

## Boiling flasks

### Boiling flasks

round bottom,  
narrow neck

- + DIN ISO 1773
- + white graduation
- + with matt area for marking
- + beaded rim
- + uniform wall thickness
- + ideal for heating



BASIC

Boro 3.3

Art.No.	Capacity (ml)	Neck Ø (mm)	Dimensions approx. (mm)	PU (pcs)
51925024	50	22	95 x 51 Ø	10
51925030	100	26	110 x 64 Ø	10
51925036	250	34	144 x 85 Ø	10
51925042	500	34	168 x 105 Ø	10
51925048	1000	42	200 x 131 Ø	10
51925054	2000	50	240 x 166 Ø	6
51925060	4000	50	290 x 207 Ø	1
51925066	6000	50	330 x 236 Ø	1
51925072	10000	65	380 x 279 Ø	1

### Boiling flasks

round bottom,  
with standard grinding

- + DIN EN ISO 4797
- + white graduation
- + uniform wall thickness
- + round bottom
- + ideal for heating
- + with matt area for marking
- + generally used in distillation and extraction processes



BASIC

Boro 3.3

Art.No.	Capacity (ml)	NS	PU (pcs)
51913008	50	14/23	10
51913009	50	19/26	10
51913010	50	29/32	10
51913011	50	24/29	10
51913012	100	29/32	10
51913014	100	14/23	10
51913015	100	19/26	10
51913016	100	24/29	10
51913018	250	29/32	10
51913019	250	19/26	10
51913020	250	24/29	10
51913024	500	29/32	10
51913025	500	24/29	10
51913030	1000	29/32	10
51913031	1000	24/29	10
51913036	2000	29/32	6
51913041	4000	29/32	1

### Boiling flasks

flat bottom,  
with standard grinding

- + DIN EN ISO 4797
- + white graduation
- + flat bottom
- + short neck
- + ideal for boiling processes
- + with matt area for marking



BASIC

Boro 3.3

Art.No.	Capacity (ml)	NS	Height approx. (mm)	PU (pcs)
51911003	50	14/23	85	10
51911004	50	19/26	85	10
51911005	50	24/29	85	10
51911006	50	29/32	85	10
51911012	100	29/32	103	10
51911014	100	14/23	103	10
51911015	100	19/26	103	10
51911016	250	24/29	125	10
51911017	250	19/26	125	10
51911018	250	29/32	125	10
51911024	500	29/32	145	10
51911030	1000	29/32	175	10
51911036	2000	29/32	210	10
51911040	4000	29/32	255	1

### Round-bottom flasks

with standard ground joint,  
without stopper

- + medium length
- + with NS joint size labelling
- + white graduation
- + with matt area for marking



PREMIUM

Boro 3.3

Art.No.	Capacity (ml)	NS
41913006	50	29/32
41913008	50	14/23
41913010	50	19/26
41913012	100	29/32
41913014	100	14/23
41913015	100	19/26
41913018	250	29/32
41913024	500	29/32
41913030	1000	29/32
41913036	2000	29/32

### Flasks

with standard ground joint,  
without stopper

- + medium length
- + with NS joint size labelling
- + white graduation
- + with matt area for marking



PREMIUM

Boro 3.3

Art.No.	Capacity (ml)	NS	Dimensions approx. (mm)
41911006	50	29/32	90 x 51 Ø
41911012	100	29/32	105 x 64 Ø
41911018	250	29/32	138 x 85 Ø
41911024	500	29/32	163 x 105 Ø
41911030	1000	29/32	190 x 131 Ø
41911036	2000	29/32	250 x 166 Ø

### Flasks

for rotary evaporator,  
with round bottom

- + white graduation
- + with matt area for marking
- + used in the rotary evaporator
- + optimal for heating sensitive solvent solute combinations



BASIC

Boro 3.3

Art.No.	Capacity (ml)	NS	Diameter approx. (mm)	PU (pcs)
51920024	25	19/26	40	10
51920048	50	19/26	50	10
51920060	100	29/32	100	10
51920064	100	19/26	100	6
51920072	250	29/32	135	10
51920076	500	29/32	160	10
51920080	1000	29/32	190	10

# Laboratory Equipment

## Boiling flasks

### Boiling flasks

with ground joint,  
with angled side neck 25°

BASIC

Boro  
3.3

- + DIN 12383
- + with matt area for marking
- + with sockets



Art.No.	Capacity (ml)	NS	PU (pcs)
51905022	100	14/23	2

### Boiling flasks

with ground joint

BASIC

Boro  
3.3

- + DIN 12383
- + packed in pieces of 10
- + with matt area for marking
- + used in the rotary evaporator
- + ideal for carrying out reactions on a small scale



Art.No.	Capacity (ml)	NS	Height approx. (mm)
51921012	10	14/23	75
51921018	25	14/23	90
51921024	50	14/23	110
51921027	50	29/32	110
51921028	100	14/23	125
51921029	100	29/32	125
51921033	250	14/23	145
51921034	250	19/26	145

### Kjeldahl flasks

PREMIUM

Boro  
3.3

- + DIN 12360
- + with rim
- + without ground joint
- + with matt area for marking



Art.No.	Capacity (ml)	Dimensions (mm)
41870018	250	270 x 81/34 Ø
41870024	500	300 x 101/34 Ø

### Kjeldahl flasks

with ground joint

BASIC

Boro  
3.3

- + DIN 12360
- + with matt area for marking
- + optimal for the determination of nitrogen/protein



Art.No.	Capacity (ml)	NS	Dimensions approx. (mm)	PU (pcs)
51871030	100	19/26	210 x 61 Ø	2
51871036	250	29/32	213 x 61 Ø	2
51871042	500	29/32	300 x 101 Ø	2
51871044	750	29/32	340 x 113 Ø	2
51871048	1000	29/32	375 x 126 Ø	2

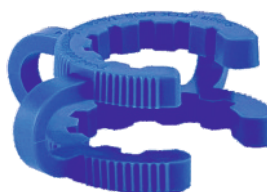
### Cork rings for round bottom flasks



Art.No.	Upper outer Ø (mm)	Upper inner Ø (mm)	Lower inner Ø (mm)	for round bottom flasks	Height (mm)
41914001	80	55	30	10 - 100 ml	30
41914002	110	85	60	250 - 1000 ml	30
41914003	140	110	90	2000 ml	30

### Keck™ Clips made of POM, for conical ground joints

- + clips are marked with the appropriate joint size and are colour coded for easier identification
- + improves safety in the laboratory as the glass surface of the joint is not scratched by the plastic material
- + easy, safe and quick to fit



Art.No.	for socket size	Colour
42386010	10/19	green
42386012	12/21	violet
42386014	14/23	yellow
42386019	19/26	blue
42386024	24/29	green
42386029	29/32	red
42386034	34/35	orange
42386040	40/38	yellow
42386045	45/40	brown

### Sleeves made of PTFE, for ground joints and stoppers

- + Excellent chemical resistance at temperatures from -200°C to +260°C
- + for NS cores and NS glass plugs
- + self-lubricating



Art.No.	for socket size	Wall (mm)
42388010	14/23	0.05
42388019	19/26	0.05
42388024	24/29	0.05
42388029	29/32	0.05
42388045	45/40	0.05

### Desiccator porcelain plate

- + with many small holes
- + made of porcelain
- + without bases



Art.No.	suitable for desiccator with upper inner Ø approx. (mm)	Outer Ø approx. (mm)
41175010	100	90
41175015	150	140
41175020	200	189
41175025	250	241
41175030	300	290

### Desiccators

- + ISO 13130
- + with interchangeable cover with glass knob
- + non vacuum
- + without porcelain plate



Boro  
3.3

Art.No.	Capacity (l)	Inner Ø (mm)
41160010	0.7	100
41160015	2.4	150
41160020	5.8	200
41160025	10.5	250
41160030	18.7	300

### Vacuum desiccators

- + DIN 12491 and ISO 13130
- + with interchangeable lid with vacuum connection
- + without valve
- + vacuum tightness and pressure tested
- + suitable for full vacuum (10 mbar)
- + without porcelain plate



Boro  
3.3

Art.No.	Capacity (l)	Inner Ø (mm)
41161015	2.4	150
41161020	5.8	200
41161025	10.5	250

### Desiccators

- + DIN 12491 and ISO 13130
- + with interchangeable tube cover and valve
- + suitable for full vacuum (10 mbar)
- + without porcelain plate



Boro  
3.3

Art.No.	Capacity (l)	Inner Ø (mm)	Tube (NS)
41162015	2.4	150	24/29
41162020	5.8	200	24/29
41162025	10.5	250	24/29

### Desiccators

- + DIN 12491 and ISO 13130
- + tight closure due to standard ground joint
- + suitable for all type of lids
- + without porcelain plate



Boro  
3.3

Art.No.	Capacity (l)	Inner Ø (mm)	Tube (NS)
41163015	2.4	150	24/29
41163020	5.8	200	24/29
41163025	10.5	250	24/29

### Desiccator valves

Boro  
3.3



Art.No. 41177024

Art.No. 41178024

Art.No.	for	Outer Ø of olive (mm)	Joint size	Bore (mm)	Valve spindle
41177024	Tube cover	8	24/29	NW 2,5	PTFE
41178024	Side tube	8	24/29	NW 2,5	PTFE

### Evaporating dishes semi-deep

- + with spout
- + DIN 12903
- + glazed inside and outside
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47000006	40	25	63
47000007	50	26	70
47000008	75	34	80
47000010	115	40	100
47000012	310	47	115
47000015	370	45	150

### Evaporating dishes semi-deep

- + with spout
- + DIN 12903
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47000102	20	20	50
47000104	30	22	63
47000106	60	32	80
47000108*	107	38	81
47000110	150	40	100
47000112*	232	47	112
47000114	285	50	125
47000116*	400	61	138
47000118*	700	74	170

\* in addition to the norm

### Evaporating dishes with flat bottom

- + with spout
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47001102	22	22	54
47001104	62	30	70
47001106	93	33	86
47001108	154	40	98
47001110	265	50	112
47001112	330	53	126
47001114	450	55	145

### Evaporating dishes low form

- + with spout
- + DIN 12903
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47002008	40	20	80
47002010	80	22	100

# Laboratory Equipment

## Porcelain

### Evaporating dishes low form

- + with spout
- + DIN 12903
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47002102	20	14	60
47002104	55	20	80
47002106	110	25	100
47002108	250	30	130
47002110	450	40	160

### Crucibles for swelling

- + with cover
- + unglazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47003102	19	27	43

### Gooch crucibles

- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47004102	17	36	30
47004104	25	43	35
47004106	35	49	39
47004108	120	71	60

### Funnels, Büchner

- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Stem length approx. (mm)	Height approx. (mm)	Filter area Ø approx. (mm)
47005040	25	37	76	40
47005055	75	53	129	55
47005070	135	75	150	70
47005090	290	75	165	90



### Funnels, Büchner

- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Bowl height approx. (mm)	Stem length approx. (mm)	Inner Ø approx. (mm)	Ø 2 approx. (mm)	Pore-Ø approx. (mm)	Filterpaper Ø (mm)
47005102	35	24	43	48	38	1	45
47005104	70	30	64	62	45	1	55
47005106	120	35	64	77	58	1	70
47005108	240	40	71	97	70	2	90
47005110	400	49	83	116	95	2	110
47005112	600	52	85	130	110	2	125
47005114	1000	59	96	156	130	2	150
47005116	2000	74	117	192	160	2	185
47005118	4000	90	117	248	220	2	240
47005120	7000	105	130	296	260	2	270
47005122	10000	120	133	334	320	2	320

### Filter crucibles

- + DIN 12909
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Upper Ø approx. (mm)	Lower Ø approx. (mm)	Pore size (µm)
47006102	8	20	25	20	6
47006104	8	20	25	20	7
47006106	8	20	25	20	8
47006108	15	35	30	24	6
47006110	15	35	30	24	7
47006112	15	35	30	24	8
47006114	25	40	35	28	6
47006116	25	40	35	28	7
47006118	25	40	35	28	8
47006120	35	43	40	30	6
47006122	35	43	40	30	7
47006124	35	43	40	30	8
47006126	50	50	45	36	6
47006128	50	50	45	36	7
47006130	50	50	45	36	8

### Casseroles

- + with handle and spout
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47015102	22	26	45
47015104	84	39	67
47015106	176	49	85
47015108	270	51	101
47015110	450	64	120
47015112	960	86	150

# Laboratory Equipment

## Porcelain

### Measuring jugs cylindrical

- + with handle and spout
- + with scale
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)
47020024	50	60
47020030	100	72
47020048	250	96
47020060	500	131
47020066	1000	160

### Beakers tall form

- + with spout
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47025102	170	90	52
47025104	225	106	57
47025106	450	143	70
47025108	1100	157	101

### Beakers low form

- + with spout
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47026102	275	85	40
47026104	400	99	80
47026106	620	116	90
47026108	860	129	100
47026110	950	100	123

### Incinerating dishes deep form

- + DIN 12904
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47034102	21	20	40
47034106	64	30	60
47034110	103	35	70

### Incinerating dishes low form

- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47034108	70	20	81

### Incinerating dishes deep form

- + with spout
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47034202	64	30	60

### Combustion boat

- + with handle
- + unglazed
- + made of porcelain



Art.No.	Dimensions approx. (mm)
47035010	85 x 13 x 4

### Melting pots medium-high form

- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47040025	5	20	25
47040030	10	25	30
47040035	13	28	35
47040040	20	32	40
47040045	38	36	45
47040050	50	40	50

### Melting pots medium-high form

- + DIN 12904
- + glazed
- + made of porcelain



Art.No.	Capacity (ml)	Height (mm)	Ø (mm)
47040130	10	25	30
47040135	12	28	35
47040140	20	32	40
47040145	30	36	45
47040150	45	40	50
47040160	80	48	60
47040170	120	56	70
47040180	200	62	80

### Covers for melting pots



Art.No.	Diameter approx. (mm)
47041025	25
47041030	30
47041035	35
47041040	40
47041045	45
47041050	50

- + glazed
- + made of porcelain
- + for articles 470400...

### Covers for melting pots ECO

- + DIN 12904
- + glazed
- + made of porcelain
- + for articles 470401.../47045.../47050...



Art.No.	Inner Ø approx. (mm)	Outer Ø approx. (mm)
47041130	30	34
47041135	35	39
47041140	40	44
47041145	45	49
47041150	50	54
47041160	60	64
47041170	70	74
47041180	70	84

### Melting pots

low form

- + DIN 12904
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47045102	5	19	30
47045104	10	22	35
47045106	17	25	40
47045108	21	28	45
47045110	34	32	50
47045112	62	38	60
47045114	91	44	70
47045130*	5	19	30
47045135*	10	22	35
47045140*	20	25	40
47045145*	21	28	45
47045150*	34	32	50
47045160*	62	38	60
47045170*	91	44	70

\* ECO

### Melting pots

tall form, ECO

- + DIN 12904
- + glazed
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47050130	15	38	30
47050135	26	40	35
47050140	35	50	40
47050145	50	56	45
47050150	72	62	50
47050160	120	75	60

### Weighing boats

- + glazed
- + made of porcelain



Art.No.	Length approx. (mm)	Width approx. (mm)
47048102	37	17
47048104	53	23
47048106	64	29

### Scoops

- + glazed
- + made of porcelain



Art.No.	Length approx. (mm)
47052102	237

### Spoon spatula

- + glazed
- + made of porcelain



Art.No.	Length approx. (mm)
47053102	103
47053104	148
47053106	164
47053108	187
47053110	200
47053112	250

### Double spoon spatula

- + glazed
- + made of porcelain



Art.No.	Length approx. (mm)
47054102	104
47054104	186
47054106	250
47054108	298

### Staining cassettes with cover



Art.No.	Width approx. (mm)	Depth approx. (mm)	Height approx. (mm)
47060102	20	40	86

### Mortars

- + with spout
- + DIN 12906
- + outside glazed
- + inside rough
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47030006	20	32	60
47030008	70	40	80
47030010	100	50	100
47030013	300	63	130
47030015	400	65	150

### Mortars ECO

- + with spout
- + outside glazed
- + inside rough
- + made of porcelain



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47030106	25	32	51
47030108*	70	41	63
47030110*	160	50	83
47030113	220	64	105

\* DIN 12906

# Laboratory Equipment

## Porcelain

### Pestles

- + DIN 12906
- + with friction surface
- + made of porcelain



Art.No.	Length approx. (mm)	Head Ø approx. (mm)
47031006	100	24
47031008	115	24
47031010	135	30
47031013	150	36
47031015	180	45

### Pestles ECO

- + DIN 12906
- + with friction surface
- + made of porcelain



Art.No.	Length approx. (mm)	Head Ø approx. (mm)
47031106	115	24
47031108	135	30
47031110	150	36
47031113	175	42

### Mortars

- + with spout
- + rough grinding surface

Boro 3.3



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Outer Ø approx. (mm)
47028008	125	60	80
47028010	225	75	100
47028012	400	90	120
47028015	700	110	150

### Pestles

- + rough grinding surface

Boro 3.3



Art.No.	Length approx. (mm)	Head Ø approx. (mm)	for mortars Ø approx. (mm)
47029008	110	28	80
47029010	130	31	100
47029012	150	36	120
47029015	180	40	150

### Mortars made of melamine white



Art.No.	Capacity approx. (ml)	Height approx. (mm)	Diameter approx. (mm)
47032001	400	80	120
47032002	700	90	150

### Pestles made of melamine white



Art.No.	Length approx. (mm)	Head Ø approx. (mm)
47033001	130	30
47033002	150	40

### Separating funnels Squibb with PE-HD stopper, PTFE stopcock

- + replaceable plugs with reliable stopcock locks
- + replaceable NS cover plugs made of polyethylene (PE-HD), resistant to alkalis and acids
- + stopcock sleeve and ground joint reinforced
- + capacity and NS sizes permanently labelled
- + with NS stopcock
- + packaged in pieces of 2 per box



PREMIUM

Boro 3.3

Art.No.	Capacity approx. (ml)	Joint size	Bore approx. (mm)
42986124	50	19/26	2.5
42986130	100	19/26	2.5
42986148	250	29/32	4
42986160	500	29/32	4
42986166	1000	29/32	6
42986172	2000	29/32	6

### Separating funnels Squibb with PE stopper, PTFE stopcock

- + replaceable NS cover plugs made of polyethylene
- + ISO 4800
- + capacity and NS sizes permanently labelled
- + with NS stopcock
- + packaged in pieces of 1 per box



BASIC

Boro 3.3

Art.No.	Capacity approx. (ml)	Joint size	Bore approx. (mm)
52985024	50	19/26	2.5
52985030	100	19/26	2.5
52985048	250	29/32	4
52985060	500	29/32	4
52985066	1000	29/32	6
52985072	2000	29/32	6

### Separating funnels pear shape with PE stopper, PTFE stopcock

- + replaceable NS cover plugs made of polyethylene
- + ISO 4800
- + capacity and NS sizes permanently labelled
- + with NS stopcock
- + packaged in pieces of 1 per box



BASIC

Boro 3.3

Art.No.	Capacity approx. (ml)	Joint size	Bore approx. (mm)
52971024	50	19/26	2.5
52971030	100	19/26	2.5
52971048	250	29/32	4
52971060	500	29/32	4
52971066	1000	29/32	6
52971072	2000	29/32	6

### Separating funnels pear shape stem with cone, with PE stopper, PTFE stopcock

- + replaceable NS cover plugs made of polyethylene
- + ISO 4800
- + capacity and NS sizes permanently labelled
- + with NS stopcock
- + packaged in pieces of 1 per box



BASIC

Boro 3.3

Art.No.	Capacity approx. (ml)	Joint size	Bore approx. (mm)
52987024	50	19/26	2.5
52987030	100	19/26	2.5
52987048	250	29/32	4
52987060	500	29/32	4
52987066	1000	29/32	6



### Sedimentation cones

acc. to Imhoff

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

- + DIN 12672
- + transparent
- + with raised scale up to 1000 ml
- + ring mark at 1000 ml
- + with screw connection for emptying



Art.No.	Capacity approx. (ml)	Material
44274010	1000	SAN (styrene-acrylonitrile copolymer)

### Sedimentation cones

acc. to Imhoff

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

- + DIN 12672
- + without stopcock
- + with scale up to 1000 ml
- + ring mark at 1000 ml
- + with frosted label
- + white graduated



Boro 3.3

Art.No.	Capacity approx. (ml)	Variant	Outer Ø approx. (mm)	Length approx. (mm)
44275010	1000	without stopcock	120	470

### Sedimentation cone racks

wooden



- + for sedimentation cones
- + maple wood
- + varnished
- + sturdy design

Art.No.	Suitable for	Dimensions approx. (mm)	Hole Ø bottom (mm)	Hole Ø top (mm)
44277010	4	590 x 650 x 130	24	86
44277020	2	480 x 380 x 130	22	84

### Cleaning brushes

for sedimentation cones



- + galvanised
- + with wooden handle
- + nylon bristles

Art.No.	Brush upper Ø approx. (mm)	Brush lower Ø approx. (mm)	Brush length approx. (mm)	Total length approx. (mm)
44279010	130	30	430	700

### Laboratory tubing PVC

- + Colour: transparent
- + free of Phthalates



**Hardness:** 80 Shore A

**Density:** 1,22 g/cm<sup>3</sup>

**Temperature resistance:** up to +60°C/+140°F

**Tensile strength:** > 18 N/mm<sup>2</sup>

**Elongation at break:** ≥ 240 %

**Thermal stability:** > 30 Min.

**Cold crack temperature:** < -25°C

Art.No.	Wall thickness approx. (mm)	Inner Ø approx. (mm)	Outer Ø approx. (mm)
41581004	1.5	4	7
41581006	1.5	6	9
41581008	1.5	8	11
41581010	2	10	14
41581012	2	12	16

### Laboratory tubing red natural rubber

- + Colour: red



**Hardness:** 50 Shore A

**Density:** 1,22 g/cm<sup>3</sup>

**Temperature resistance:** from -25°C/-13°F

up to +70°C/+158°F

**Tensile strength:** 10 N/mm<sup>2</sup>

**Elongation at break:** ≥ 500 %

**Compression set:** 60 %

Art.No.	Wall thickness approx. (mm)	Inner Ø approx. (mm)	Outer Ø approx. (mm)
41580004	1	4	6
41580006	1.5	6	9
41580008	2	8	12
41580010	2	10	14
41580012	2.5	12	17

### Laboratory tubing silicone (VMQ)

- + colour: transparent
- + free of BSE / TSE
- + biocompatibility: USP class 1-6
- + peroxide cross-linked
- + suitable for peristaltic pumps
- + food-safe

**Hardness:** 60 Shore A

**Density:** 1,14 g/cm<sup>3</sup>

**Temperature resistance:** from -60 to +200°C/-76 to 392°F

(temporarily +260 °C/+500 °F)

**Tensile strength:** 11 N/mm<sup>2</sup>

**Elongation at break:** ≥ 500 %

**Tear strength:** ≥ 22 kN/m

**Compression set:** 30 %



#### Electrical values:

**Dielectric strength:** 18 – 20 kV/mm

**Dielectric constant:** 2,7 – 3,3

**Dielectric dissipation factor:** 30 - 250 · 10<sup>-4</sup> tan Delta

**Volume resistivity:** 10<sup>15</sup> – 10<sup>16</sup> Ohm x cm

**Specific heat capacity:** approx. 1,25 KJ/kg /K and approx. 0,2 - 0,3 W/m/K

Art.No.	Wall thickness approx. (mm)	Inner Ø approx. (mm)	Outer Ø approx. (mm)
41582004	1	4	6
41582006	1.5	6	9
41582008	2	8	12
41582010	2	10	14
41582012	2	12	16

### Tubing clamps with thumb screw and chrome-nickel steel band



- + brass screw and nut
- + steel mounting saddle and cap
- + galvanised and white chromated

Art.No.	Clamping range Ø approx. (mm)
41586010	6 - 10
41586012	8 - 12
41586014	10 - 14
41586017	13 - 17
41586019	15 - 19
41586021	17 - 21
41586022	18 - 22
41586025	21 - 25
41586030	26 - 30

# Laboratory Equipment

## Aid & funnels

### Safety valves

made of PE-HD



The safety valve was designed for general laboratory applications that do not fall under the MPG. The polyethylene type used complies with the relevant requirements of Directive 1935/2004/EC. It also fulfils the requirements of FDA regulation 21 CFR 177.1520(a)(3)(i) and (c)3.2a.

#### Direction of insertion from the valve:

The valve half must be at the bottom. This means that the weight of the valve disc must also be overcome by the applied vacuum.

Art.No.	Material valve disc	for inner tubing Ø of approx. (mm)	Dimensions approx. (mm)
42860010	FKM (Viton)	6 - 9	78 x 24 Ø

### Funnels

short stem

Boro 3.3



Art.No.	Diameter approx. (mm)
44000004	30
44000008	35
44000012	40
44000016	45
44000020	50
44000024	55
44000028	60
44000032	70
44000036	80
44000040	100
44000044	120
44000048	150
44000056	200
44000064	300

+ angle of 60°

+ suitable for liquid solid filtration using with filter paper

### Analytical funnels

- + ISO 4798
- + angle of 60°
- + for quick filtration
- + with long stem
- + autoclavable
- + internal ribs lift the filter paper away from the funnel walls



Boro 3.3

Art.No.	Diameter approx. (mm)
43991007	65
43991014	80
43991021	110

### Powder funnels

made of glass

- + with short, wide stem
- + linear expansion coefficient:  $3,3 \cdot 10^{-6} \text{ K}^{-1}$
- + hydrolytic class: 1
- + acid resistance class: 1
- + alkali resistance class: 2
- + temperature change resistance: 100 K
- + density:  $2.23 \text{ g/cm}^3$



Boro 3.3

Art.No.	Diameter approx. (mm)	Height (mm)	Stem Ø approx. (mm)	Stem length approx. (mm)
44001012	40	45	14	18
44001020	50	55	18	25
44001028	60	60	20	25
44001036	80	70	24	26
44001040	100	80	26	27
44001044	120	115	26	32
44001052	160	135	35	24

### Powder funnels

made of polypropylene  
transparent  
with hanging loop



Art.No.	Outer Ø approx. (mm)	Height (mm)	Stem Ø approx. (mm)	Stem length approx. (mm)
44002030	65	70	15	26
44002036	80	75	21	26
44002040	100	92	24	23
44002044	120	105	27	22
44002048	150	138	28	22

### Funnels

made of polyethylene (PE-HD)  
with hanging loop



Art.No.	Diameter approx. (mm)	Stem Ø approx. (mm)	Stem length approx. (mm)
49050003	60	8	40
49050006	80	11	50
49050009	100	12	55
49050012	120	12	60
49050015	140	15	65
49050018	160	17	80
49050021	200	20	85

### Analytical funnels

made of polypropylene



- + with ribbed interior
- + for rapid filtration

Art.No.	Diameter approx. (mm)	Stem Ø approx. (mm)	Stem length approx. (mm)
49051030	45	5	44
49051033	65	9	63
49051036	80	10	69
49051039	100	11	82
49051042	120	11	85
49051045	150	14	115
49051048	180	14	143

### Powder funnels

made of glass



BASIC

Boro 3.3

- + at a bowl angle of 60°
- + ideal for filtering and transferring powders

Art.No.	Diameter approx. (mm)	Stem Ø approx. (mm)	PU (pcs)
54001028	60	25	6
54001036	80	25	6
54001040	100	25	6
54001044	120	25	2



### Funnels short stem

BASIC

Boro 3.3

- + DIN ISO 4798
- + with 60° bowl angle for precise fitting of filterpaper
- + ideally used for filtering and decanting liquids of varied densities

Art.No.	Diameter approx. (mm)	Stem length approx. (mm)	Stem Ø approx. (mm)	PU (pcs)
54003004	30	30	6	10
54003016	40	40	6	10
54003020	50	50	7	10
54003024	55	55	8	10
54003028	60	60	8	10
54003030	65	65	8	10
54003032	70	70	8	10
54003034	75	75	8	10
54003036	80	80	9	10
54003038	100	100	10	10
54003042	150	150	16	10
54003044	120	120	16	10
54003048	200	200	24	10



### Funnels long stem

BASIC

Boro 3.3

- + with 60° bowl angle for precise fitting of filterpaper
- + ideally used for filtering and decanting liquids of varied densities

Art.No.	Diameter approx. (mm)	Stem length approx. (mm)	Stem Ø approx. (mm)	PU (pcs)
54000008	35	150	6	10
54000012	40	150	6	10
54000016	45	150	6	10
54000020	50	150	7	10
54000028	60	150	8	10
54000032	65	150	8	10
54000036	80	150	9	10
54000040	100	150	10	10
54000044	120	150	16	10
54000048	150	200	16	6
54000056	200	200	24	6
54000064	300	175	30	6

## PARAFILM® M

### sealing film

**Toxicity:** non-toxic

**Melting point:** +60°C/+140°F

**Flash point:** +301°C/+573.8°F

**Temperature range:** -45°C up to +50°C/-49°F up to +122°F

**Stretching ability:** 200 %

**Ultimate elongation:** 300 %

**Density:** 0,922 g/cm<sup>3</sup>

**Colour:** transparent

**Storage environment:** cool, dry, shaded,  
+7°C up to +32°C/+44.6°F up to 89.6°F

**Shelf life:** unlimited

**Gas permeability in 24 hours at +23°C/+73.4°F**  
with 50 % relative humidity::

**Oxygen:** ≤ 350 cm<sup>3</sup>/m<sup>2</sup>

**Nitrogen:** ≤ 105 cm<sup>3</sup>/m<sup>2</sup>

**Carbon dioxide:** ≤ 1100 cm<sup>3</sup>/m<sup>2</sup>

**Water vapour permeability in 24 hours**

at +37°C/+98.6°F and 90 % relative humidity: 0.8 g/m<sup>2</sup>



Art.No.	Length approx. (m)	Width approx. (cm)	Thickness approx. (μm)
42511010	38	10	127
42511020	75	10	127

## PARAFILM® M

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**Water vapour permeability in 24 hours**

at +37°C/+98.6°F and 90 % relative humidity: 0.8 g/m<sup>2</sup>



Art.No.	Length approx. (m)	Width approx. (cm)	Thickness approx. (μm)
42512010	76	5	127

# Laboratory Equipment Timers

## Manual counters four figures

- + casing lies comfortably in the hand
- + large display for easy reading



For counting blood cells, bacterial colonies, drops of liquids or any repetitive action. With buttons for mechanical counting. 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.

Art.No.	Material	Dimensions (mm)	Counting range
40344010	Chrome-plated steel	31 x 45 x 45	0 - 9999

## Hand stopwatches

- + with pin anchor and 7 jewels
- + solid version, metal case
- + graduation 0 – 60 in 1/5 s and 1/100 min and 0 – 30 in 1/100 min
- + shock- and dustproof, water-protected



Art.No.	up to	Diameter approx. (mm)
41978010	30 min	60

## Digital stopwatches black

- + Start / Stop / Reset
- + Addition / Split / dual- & interval measurement
- + incl. battery (button cell) SR 54 1,55 V



Art.No.	LCD-display	Measuring unit	Display
41980010	7 digits	1/100 s	9h/59min/59,99s

## Digital interval timers table model

- + incl. battery (button cell) 1.5 V



- + without magnetic back
- + programmable for 99 min and 59 s
- + with memory recall function
- + countdown to 1 second
- + separate buttons for minutes and seconds

Art.No.	LCD-display	Colour	Dimensions approx. (mm)
41977030	4 digits	silver	65 x 15 x 55

## Digital interval timers

Art.No.	LCD-display	Colour
41977010	4 digits	silver
41977020		white



- + programmable up to 99 min and 59 s
- + countdown to 1 second
- + alarm tone for 30 s
- + memory recall function
- + separate buttons for minutes and seconds
- + with magnet on the back
- + incl. battery (button cell LR 44 1.5 V)

## Digital interval timers with stopwatch and clock

- + incl. battery (button cell) 1.5 V LR 44

Art.No.	Dimensions approx. (mm)	LCD-display	Material	Weight approx. (g)
41977040	65 x 13 x 60	6 digits	Plastic case, varnished metal front	40 (incl. battery)



- + stopwatch up to 23 h 59 min 59 s
- + interval timer, countdown 23 h 59 min 59 s with alarm
- + with clip, stand, magnetic back and battery
- + standard time
- + colour: white





## Stopclocks table model

- + electronic desk/wall stopclock with clear dial
- + luminescent minute track and luminescent hands
- + incl. battery AA 1.5 V

**Quartz movement:** 32,768 Khz quartz oscillator

**Case:** ABS plastic, light grey

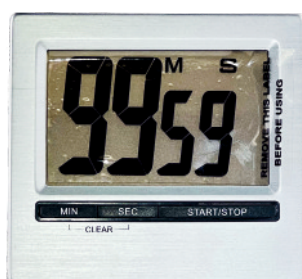
**Time measuring range:** 2 hands for 60 min and 60 s

**Time resolution:** 1 s and 1/100 min

**Temperature application range:** -10°C up to +60°C/  
14°F up to 140°F

**Service life:** approx. 18 months

Art.No.	Dimensions approx. (mm)	Dial Ø approx. (mm)	Inner scale	Outer scale	Weight approx. (g)
41979010	175 x 130 x 40/95	110	0 - 100/100 min.	0 - 60 s, 0 - 60 min	370



## Digital interval timers with large display

- + with magnet and stand
- + interval timer counting down 99 min 59 s with acoustic signal
- + countdown in seconds to 1 second
- + separate buttons for setting the minutes and seconds
- + incl. button cell AAA 1.5 V

Art.No.	Dimensions approx. (mm)	LCD-display	Material	Colour	Weight approx. (g)
41977060	84 x 77 x 16	4 digits	Plastic/aluminium	silver	70 (incl. battery)

## Interval timers with stopwatch and clock

- + with magnet, stand and clip
- + programmable for 99 h 59 min 59 s
- + separate buttons for hours, minutes and seconds
- + interval timer counting down with alarm
- + two different timer channels
- + Quartz digital stopwatch
- + standard time
- + incl. battery AA 1.5 V



Art.No.	Dimensions approx. (mm)	Colour
41977050	76 x 66 x 18	white
LCD-display		Weight approx. (g)
6 digits		100 (incl. battery)

## Interval timers mechanical

- + made of plastic
- + incl. desk stand
- + desk form
- + alarm sounds for approx. 3 - 8 sec.
- + with alarm 60 min.

For hanging, standing and lying down.

Versatile laboratory clock and essential element of laboratory diagnostics. Ideal for blood sedimentation or measurements in this area.



Art.No.	Running time up to	Colour	Dimensions approx. (mm)
41974016	60 min	beige	70 x 40 x 70
41974024	60 min	blue	
41974032	60 min	white	
41974040	120 min	white	

### Laboratory precision thermometers



- + DIN 12770
- + manufactured from standard glass in enclosed form
- + with calibratable accuracy
- + Richter lock with button for easy handling
- + red filling for good readability
- + packed in a sturdy tube to prevent damage during transport

Art.No.	Temperature range	Division (°C)	Length approx. (mm)
43210001	-10 to +50°C/+14 to +122°F	0.5	220
43210002	-10 to +50°C/+14 to +122°F	0.1	420
43210003	-10 to +100°C/+14 to 212°F	1.0	300
43210004	-10 to +100°C/+14 to 212°F	0.5	270
43210005	0 to +100°C/+32 to 212°F	0.1	550
43210006	-10 to +150°C/+14 to 302°F	1.0	300
43210007	-10 to +150°C/+14 to 302°F	0.5	350
43210008	-10 to +200°C/+14 to 392°F	1.0	350
43210009	-10 to +200°C/+14 to 392°F	0.5	350

### Distillation thermometers with standard ground



- + DIN 12770
- + NS 14/23
- + red filling for easy and accurate reading

Art.No.	Temperature range	Division (°C)	Immersion length with ground (mm)	Immersion tube Ø approx. (mm)
43225024	-10 to +150°C/+14 to 302°F	0.5	75	7
43225040	-10 to +250°C/+14 to 482°F	1.0		

### Chemical thermometers red filling

- + made of robust standard glass
- + with a diameter of approx. 7 - 8 mm
- + fine graduation in 1°C increments enables accurate readings
- + red filling ensures clear visibility of the measured liquid
- + packed in a sturdy tube to prevent damage during transport



Art.No.	Temperature range
43201008	-10 to +50°C/+14 to +122°F
43201016	-10 to +100°C/+14 to 212°F
43201024	-10 to +150°C/+14 to 302°F
43201032	-10 to +200°C/+14 to 392°F
43201040	-10 to +250°C/+14 to 482°F

### Pocket thermometers

The nickel case with bayonet catch and clip protects the thermometer and allows it to be stored safely.

- + alcohol filling in red or blue
- + with 1°C graduation for precise readings



Art.No.	43208008	43208016
Division (°C)	1.0	
Length approx. (mm)	140	
Temperature range	-35 to +50°C -31 to +122°F	-10 to +100°C +14 to +212°F

## Temperature data loggers

Microlite



Application in all areas where temperature recording is required, e.g. food industry, transport and storage, pharmaceuticals, etc.  
Free software (Internet download) is available to run the device's functions.

- + adjustable interval: 1 second up to 1 hour
- + robust and waterproof
- + graphic and tabular data evaluation
- + all data can be exported to Excel
- + IP 65 waterproof
- + direct USB interface
- + Hi-Lo-Alarm
- + case made of plastic (ABS)
- + with fixing

Art.No.	Range	Storage capacity	Lithium battery	Display	Division
43240010	-40 to +70°C/ -40 to +158°F	150,000 measurements	1x Cr2032 (3 V)	7-segment LCD	0.1°C
	Weight (g)	Dimensions approx. (mm)	Connection	Accuracy	Interface
	83	91.5 x 42 x 20	USB-standard port	± 0.5°C*	USB 2.0

\*or more, depending on the measuring range

## Alarm thermometers

digital, with immersion sensor

Ergonomically shaped laboratory thermometer with robust immersion probe.  
Ideal for measurements in liquids, food, etc.



- + displays the current temperature
- + IP 65 waterproof
- + maximum and minimum temperature
- + also usable for food industry according to HACCP
- + hold function
- + high precision
- + large display
- + according to EN 13485
- + switchable °C/°F
- + alarm when temperature falls below/exceeds freely customisable values

**Technical data:** + accuracy: ± 0.5°C at -20°C to +25°C/-4°F up to +77°F, otherwise ± 1°C  
+ battery: 1x CR 2032 3V lithium button cell

**Accessories:** stand, magnet, immersion sensor with 3 m cable, operating instructions, battery

**Product features:** Art.No. 43242020: with calibration certificate at 5°C/ 41°F

Art.No.	Range	Division	Weight (g)	Dimensions (mm)	Variant
43242010	-40 to +70°C/ -40 to +158°F	0.1°C	100	86 x 57 x 30	without calibration certificate
43242020	-40 to +70°C/ -40 to +158°F			86 x 57 x 30	with calibration certificate at 5°C

### Alarm thermometers digital, with insertion probe

#### Product features:

- + hold function
- + high precision
- + large display
- + according to EN 13485
- + switchable °C/°F
- + displays the current temperature
- + IP 65 waterproof
- + maximum and minimum temperature
- + alarm when temperature falls below/exceeds freely customisable values
- + also usable for food industry according to HACCP



Ergonomically shaped laboratory thermometer with robust immersion probe. Ideal for measurements in liquids, food, etc.

**Accuracy:**  $\pm 0.5^{\circ}\text{C}$  at  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}/32^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ ,  $\pm 1^{\circ}\text{C}$  at  $-20^{\circ}\text{C}$  to  $0^{\circ}\text{C}/-4^{\circ}\text{F}$  to  $32^{\circ}\text{F}$  as well as  $51^{\circ}\text{C}$  to  $70^{\circ}\text{C}/123.8^{\circ}\text{F}$  up to  $158^{\circ}\text{F}$ , otherwise  $\pm 2^{\circ}\text{C}$

**Accessories:** stand, magnet, insertion probe with 1 m cable, operating instructions, battery

Optionally available with calibration certificate.

Art.No.	Range	Division	Weight (g)	Dimensions (mm)
43243010	-40 to $+200^{\circ}\text{C}$ / -40 to $+392^{\circ}\text{F}$	$0.1^{\circ}\text{C}$	100	86 x 57 x 30

### Temperature brakes (reference body)

Made of aluminium for constant temperature measurement, for mounting in refrigerators and freezers.

The temperature sensor can be directly inserted into the associated holes. They must be securely screwed in place.

This will prevent premature triggering of the alarm (e.g. by briefly opening/closing the door).

Suitable for probes with diameters of 3.5 mm, 4.2 mm, and 5.0 mm, e.g. also for Maxima-Minima Thermometer Art.No. 43656010.



Art.No.	Drilled hole sizes (mm)
43244010	3.4 / 4.2 / 5.0

### Electronic indoor/outdoor thermometers with DKD calibration certificate

- + test point at  $+4^{\circ}\text{C}/39.2^{\circ}\text{F}$
- + min/max function and temperature alarm
- + with external cable of approx. 3 m
- + incl. button cell



Art.No.	Range outdoors	Range indoors	Division	Accuracy
43246010	-50 to $+70^{\circ}\text{C}$ / -58 to $+158^{\circ}\text{F}$	0 to $+50^{\circ}\text{C}$ / $+32$ to $+122^{\circ}\text{F}$	$0.1^{\circ}\text{C}$	$\pm 1^{\circ}\text{C}$ at $-20$ to $+70^{\circ}\text{C}$ / at $-4$ to $+158^{\circ}\text{C}$

### Digital thermometers "mini"

electronic, with sensor made of stainless steel

- + with temperature memory function
- + probe made of stainless steel
- + protective sleeve with clip
- + automatic power-off after 10 min
- + with battery round cell LR44/A76



#### Function:

- + right-hand switch to ON, left-hand switch to TEST = normal temperature display
- + left switch to HOLD = current display is held; °C symbol flashes

Art.No.	43235010
Ambient temperature casing	-10 to +40°C/+14 to +104°F
Range	-50 to +200°C/-58 to +392°F
Division	0.1°C at -20 to +200°C/-4 to +392°F
Casing approx. (mm)	55 x 22 Ø
Battery life approx. (h)	5000
Probe (mm)	125 x 3.5 Ø
Accuracy	± 1°C at -20 to +100°C/-4 to +212°F

### Digital pocket thermometers "ThermoJack"

with foldable insertion sensor

The thermometer automatically switches on as soon as the sensor is pulled out to 45°. It switches off when it is folded up again. It also switches off automatically after 10 minutes of inactivity with the sensor extended.

The functional thermometer is suitable for measuring the temperature of liquid, pasty and semi-solid media - also for food in accordance with HACCP and EN 13485.



- + folding angle up to 180°
- + large display, switchable °C/°F
- + incl. button cell 3 V
- + accuracy ± 0.5°C in the measuring range from -20°C to + 150°C/ -4°F up to 302°F; otherwise ± 1°C

Art.No.	Range	Division	Immersion length approx. (mm)
43238010	-40 to +250°C/ -40 to +482°F	0.1°C	600

### Barometer stations

with thermometer



- + consisting of:  
barometer, thermometer and hygrometer
- + rustic

Art.No.	Diameter (mm)	Material	Dimensions (mm)	Weight (g)
43660010	each 70	oak wood	110 x 36 x 272	361

### Analogue outdoor weather stations

- + consisting of:  
barometer, thermometer  
and hygrometer
- + weatherproof
- + with white scales
- + with mounting kit for hanging



#### Note:

The thermometer and hygrometer are factory-set.

The barometer must first be set to the respective local altitude before use.

The current air pressure can be obtained from the weather office, the Internet or an optician, for example. Using a small screwdriver, carefully turn the adjustment screw to the right until the pointer matches the requested value. Avoid over-tightening!

Even greater accuracy can be achieved by tapping lightly and readjusting.

Art.No.	Diameter (mm)	Material	Dimensions (mm)	Weight (g)
43662010	each 70	Stainless steel	96 x 35 x 282	340

### Sauna hygrometers round



Art.No.	Measuring range	Diameter (mm)	Material
43255010	0 - 100 %	100	Metal

### Weather station with sensors for indoor and outdoor temperature measurement

- + batteries 3x 1.5 V AA (base station), 2x 1.5 V AAA (T/H transmitter) not included
- + from -40°C to +65°C/-40°F to +149°F (range outdoors)  
and -10°C to +60°C/+14°F to +140°F (range indoors)
- + with LCD display and LED indicator
- + battery replacement indicator
- + table stand, wall mount
- + indoor temperature and humidity display
- + max/min feature
- + weather forecast
- + air pressure trend, air pressure with graphical display of air pressure over the last 24 hours
- + radio-controlled clock with date display, time zone  $\pm 12$  hours



Art.No.	Maximum range (m)	Temperature range	Measuring range humidity	Transmission frequency	Dimensions (mm)	Weight (g)
43655010	100	-40 to +65°C (outdoor) -10 to +60°C (indoor)	1 to 99 % (outdoor) 20 to 95 % (indoor)	433 Mhz	101 x 33 x 187	251



## Wireless thermometers

### Functions:

- + wireless transmission of outdoor temperature via transmitter (max. 80 m)
- + indoor temperature and humidity display
- + permanent display of maximum and minimum values with manual reset
- + additional max.-min.-memory with automatic reset after 24 hours
- + swiss precision sensor: humidity  $\pm 3\%$  (35 - 75 %)
- + power supply 2 x AA batteries

### Scope of delivery:

Base station, temperature transmitter, operating instructions

### Batteries sold separately:

Art.No. 49290010 Alkaline AA LR 6 1.5 V



Art.No.	43658010
Dimensions approx. (mm)	77 x 22 x 86
Range indoors	-10 to +60°C $\pm 1^\circ\text{C}$ (+14 to +140°F)
Range outdoors	-40 to +60°C $\pm 1^\circ\text{C}$ (-40 to +140 °F)
Battery	1 x 1.5 V AA (base station), 1 x 1.5 V AA (transmitter)
Indoor humidity	10 - 99 % accuracy $\pm 3\%$ (35 to 75 %)
Weight approx. (g)	104
Transmission (Mhz)	433

## Freezer-fridge thermometers digital

- + according to EN 13485
- + indication of temperature with corresponding freezer-fridge symbol
- + highest and lowest temperature
- + with stand and frame for mounting on surfaces or behind glass (display fridge, vegetable drawer)
- + switchable °C/°F



Art.No.	43595010
Range	-30 to +50°C/-22 to 122°F
Division	0.1°C
Weight approx. (g)	65
Dimensions approx. (mm)	72 x 91 x 13
incl. battery	CR 2032 Lithium-Knopfzelle
Accuracy	$\pm 0.8^\circ\text{C}$ at -20 to +10°C*/-4 to 50°F

\*otherwise  $\pm 1^\circ\text{C}$

## Batteries

e.g. for wireless thermometer  
Art.No. 43658010



Art.No.	Variant
49290010	Alkaline AA LR 6 1.5 V

## Freezer-fridge thermometers for hanging

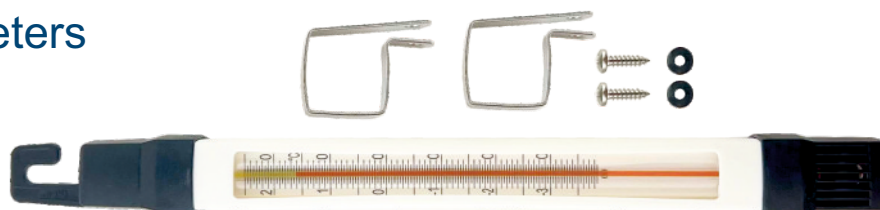
- + cylindrical plastic case, for hanging
- + range from -40°C up to +50°C / -40°F up to +122°F
- + coloured filling for clear and quick reading

Art.No.	43600010
Range	-40 to +50°C/-40 to +122°F
Length (mm)	210





### Freezer thermometers



- + includes official factory certificate to document the measuring accuracy
- + testing temperature: 0°C / 32°F
- + with practical holder for easy attachment

Art.No.	43599010
Range	-35 to +25 °C/-31 to +77°F
Dimensions (mm)	25 x 25 x 265

### Room thermometers beech wood



- + made of natural varnished beech wood, which offers a high-quality and natural appearance
- + coloured filling for a clear display

Art.No.	43513010
Range	-30 to +50 °C/-22 to +122°F
Dimensions (mm)	35 x 15 x 206

### Window thermometers Vienna type



A classic thermometer with robust metal holder

- + blue filling that stands out well against the background.
- + range from -50°C up to +50°C/ -58°F up to 122°F, ideal for indoor and outdoor measurements

Art.No.	43605010
Range	-50 to +50 °C/-58 to +122°F
Dimensions (mm)	23 x 32 x 200

### Maxima-Minima thermometers electronic

- + for indoor and outdoor temperature measurement
- + current temperature / highest and lowest day temperature
- + for hanging or standing
- + extra thin cable for easy passage through window seals
- + waterproof outdoor sensor
- + incl. 1.5 V AA battery

Art.No.	43656010
Range indoors	-10 to +50°C/-14 to +122°F
Range outdoors	-50 to +70°C/-58 to 158°F
Cable (m)	3



### Maximum-minimum thermometers

- + environmentally friendly capillary filling, without mercury.
- + plastic roof in beige
- + with protective cover against the weather.
- + push-button magnet for easy operation.



Art.No.	43647010
Range	-30 to +50°C/-22 to +122°F
Dimensions (mm)	85 x 45 x 232

### Maximum-minimum thermometers

- + plastic case with push button magnet
- + environmentally friendly capillary filling
- + without roof
- + black



Art.No.	43646010
Range	-35 to +50°C/-31 to +122°F
Dimensions (mm)	60 x 28 x 200

### Maximum-minimum thermometers digital

- + for indoor and outdoor
- + splash-proof
- + temperature Celsius or Fahrenheit
- + present temperature / highest and lowest day temperature
- + including button cell 1.5 V AAA



Art.No.	43653010	43653020
Range	-20 to +50 °C/-4 to +122°F	
Selectable	Celsius / Fahrenheit	
Colour	green	black

### Bath thermometers with wooden clamp

A classic bath thermometer with a practical wooden clamp..

- + handle and paper scale
- + combined with a coloured filling for clear readability



Art.No.	43700010
Range	-10 to +50 °C/+14 to +122°F
Length (mm)	250

### Bath thermometers in boat shape

- + made of durable plastic
- + available in blue or white
- + practical boat shape
- + floats in the water.



Art.No.	43711010
Range	0 to +50 °C/+32 to +122°F
Dimensions (mm)	37 x 160

## Mixed bed deionisers



- + disposable cartridge
- + practical ion exchanger for purified water
- + according to DAB and EuAB
- + blue lightproof cartridge avoids growth of algae

### Scope of delivery:

Including conductivity meter with inlet hose, outlet hose and wall holder.



Art.No.	40075010
Range (µS/cm)	0 – 50
Capacity at 1 °dH salt content (l)	425
Flow rate (l/h)	50
Pure water quality (µS/cm)	0.1 - 20
Max. water temperature	30°C/ 86°F
Electrical connection	230 V/50 - 60 Hz
Material	Polyethylene
Dimensions approx. (mm)*	600 x 100 Ø
Hose attachments	R ¾"
Weight approx. (kg)	3

\* incl. conductivity meter

## Spare cartridges for Art.No. 40075010

The used resin filling can be disposed of in the domestic refuse.

The empty PE cartridge is recyclable and can be utilised by a recycling station (not in the domestic refuse).



Art.No.	40076010
Screw connections	2
Flow rate (l/h)	50

## Aquademate 2 Demineraliser

- + demineralisation device - ion exchanger for demineralised water
- + according to DAB and EuAB
- + the exhaustion is indicated by colour indicator
- + change of colour from amber to red

Consisting of three filter cartridges, with the second cartridge serving as a safety filter and the third as a spare cartridge.

With accessories, wall holder and a manual.



Art.No.	40080010
Dimensions (mm)	370 x 125 Ø
Capacity at 10° dH salt content (l)	250
Power (l/min)	0.9

## Reconditioned cartridge for Aquademate, for Art.No. 40080010 without hose

regenerated cartridge in return of the exhausted one

**Notice:** Spare cartridge Art.No. 40088010 will be supplied and invoiced if no cartridge has been returned.



Art.No.	Dimensions (mm)	Weight (kg)
40087010	370 x 125 Ø	3.5

## Reconditioned cartridge for Aquademat



Art.No.	Dimensions (mm)	Weight (kg)
40088010	370 x 125 Ø	3.5

## Water distiller



- + with special tube for practical emptying and cleaning
- + complete with heater
- + without hose assembly
- + with instructions for use

Required cooling water volume: approx. 45 l/h

Cooling water outlet temperature: max. +60 °C

Art.No.	40225010
Conductivity (µS)	0.85
Mains voltage	220V, 2500W
pH value	7.06
Distillate temperature	+60°C/+140°F
Distillate quantity (l/h)	3.5
Weight (kg)	4



## Gas washing bottles according to Drechsel with filter plate

Boro  
3.3

- + DIN 12596
- + clear glass
- + with labeling of capacity and ground size



Art.No.	Capacity approx. (ml)	Porosity	Joint size	Filter plate Ø approx. (mm)
41470012	100	1	29/32	22
41470018	250			
41470024	500			

## Spare washing bottle heads with filter plate porosity 1



- + for gas washing bottle heads according to Drechsel
- + with joint size 29/32
- + top edge of ground joint to end of tube 185 ± 0.5 mm

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Art.No.	Outer Ø olive approx. (mm)
41470001	10

### Gas washing bottles according to Drechsel

- + DIN 12596
- + clear glass
- + with labeling of capacity and ground size



Boro  
3.3

Art.No.	Capacity approx. (ml)	Joint size
41469012	100	29/32
41469018	250	
41469024	500	
41469030	1000	

### Spare washing bottle heads without filter plate

- + for gas washing bottle heads according to Drechsel
- + with joint size 29/32
- + top edge of ground joint to end of tube  $185 \pm 0.5$  mm



Boro  
3.3

Art.No.	Outer Ø olive approx. (mm)
41469001	10

### Water jet pumps made of polypropylene

#### Includes:

- + tubing connector (10 - 12 mm outer Ø)
- + suction line connection (detachable hose nozzle of 6 - 9 mm outer Ø, with screw cap GL 14)
- + water connection (sleeve nut R 3/4")
- + thread adapter R 1/2"



Art.No.

44283010

Continuous operating temperature

max. 80°C/ 176°F

### Fermenting tube made of glass with two spheres

- + Soda-lime glass (hydrolytic class 3) Type III



Art.No.	Outer tube Ø (mm)	Length (mm)
41350010	10	195

### Bernadotte vinometer

- + with cylindrical vessel
- + amber graduation



AR-Glas®

Art.No.	Dimensions (mm)	Wall (mm)	Variant
44200010	33 x 12 Ø	1.2	wine sampler

## Hofmann Voltameter – platinum electrodes

+ water decomposition apparatus  
with metal stand

consisting of:

- + glass part Art.No. 44287010
- + metal stand
- + 2 clamps Art.No. 40870010
- + 2 platinum electrodes Art.No. 44288010



Art.No.	Scale (ml)	Division
44285010	0 - 60	1/5

## Hofmann Voltameter – carbon electrodes

+ water decomposition apparatus  
with metal stand

consisting of:

- + glass part Art.No. 44287010
- + metal stand
- + 2 clamps Art.No. 40870010
- + 2 carbon electrodes Art.No. 44289010



Art.No.	Scale (ml)	Division
44286010	0 - 60	1/5

## Voltmeters spare part made of glass

+ without stand  
+ without electrodes



Art.No.	Length approx. (mm)
44287010	560

## Electrodes platinum Voltmeters spare part



- + spare platinum electrodes
- + stopper (lower Ø 14 mm, upper Ø 18 mm,  
height 20 mm, 7 mm hole)
- + glass tube 8 mm outer Ø

Art.No.	Length approx. (mm)	Material	Bore Ø (mm)
44288010	140	Platinum	12

## Electrodes carbon Voltmeters spare part



- + stopper (lower Ø 14 mm, upper Ø 18 mm,  
height 20 mm, 6 mm hole)

Art.No.	Length approx. (mm)	Material	Diameter approx. (mm)
44289010	125	Carbon	67

## Glass beads

### solid glass beads

- + made of soda-lime glass
- + pressed, round, polished
- + pack: 1 kg
- + water resistance class 3
- + acid resistance class 1
- + alkali resistance class 1



Grinding and dispersing beads for dyes, pigments, ink, agrochemicals and minerals.

Filler in the chemicals, paper and plastics industries. Filler bead for increasing the physical properties of thermoplastics and thermosets. Reflective bead > 0.8 mm for road markings, especially for special markings to increase night visibility in the rain. Polishing bead in optics for interocular lenses. Blasting and coating material for mechanical surface treatment of metal, plastic and wood, as well as other technical applications.

Art.No.	Diameter approx. (mm)
41401001	1
41401002	2
41401003	3
41401004	4
41401005	5
41401006	6
41401007	7
41401008	8
41401010	10

## Raschig rings

- + made of soda-lime glass
- + pack: 1 kg
- + short pipe sections
- + ends cut
- + water resistance class 3
- + acid resistance class 1
- + alkali resistance class 2



Art.No.	Dimensions approx. (mm)
41400003	3 x 3 Ø
41400004	4 x 4 Ø
41400005	5 x 5 Ø
41400006	6 x 6 Ø
41400007	7 x 7 Ø
41400008	8 x 8 Ø
41400010	10 x 10 Ø

## Boiling stones Type A

Specifically for preparative work and vacuum distillation. The effect of these sedimentary stones remains even when multiple interruptions of the boiling process occur in the vacuum distillation. Long service life.

- + for normal distillation
- + suitable for vacuum distillation
- + grain size approx. 5 - 8 mm



Art.No.	Weight approx. (g)
41402010	250



### Glass wool superfine (filter aid)

Grit-water resistance of the raw glass according to ISO 719: HGB 3

Fibre formulation: max. 0.25% of a sizing made of natural or synthetic oils

Loss on ignition according to DIN ISO 1887: max. 0.3 %

Fibre type: C-glass according to DIN 1259 part 1

Transformation temperature: 530°C/ 986°F

Acid class according to DIN 12116: 3

Alkali class according to DIN 52322: 2

Softening point: 680°C/ 1256°F

Density: approx. 2.52 g/cm<sup>3</sup>



Art.No.	Pack (g)	Diameter approx. (µm)
41408002	30	11 ± 1.1
41408003	1000	

### Rubber squeegee spade-shaped

Temperature resistance: -30 to +60°C/ -22 to +140°F

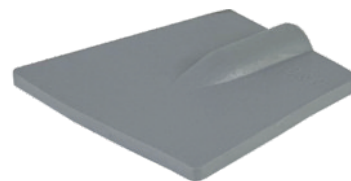
Tensile strength: >10 N/mm<sup>2</sup>

Elongation at break: > 690 %

Impact elasticity: > 55 %

Hardness: 40 Shore A

Density: 1.175 g/cm<sup>3</sup>



+ without glass rod

+ suitable for glass rod Art.No. 42850042

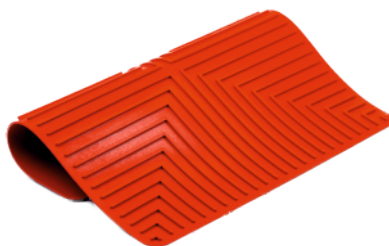
Art.No.	Dimensions approx. (mm)	Bore Ø approx. (mm)	Colour	Material
41596010	35 x 25 x 32	5	grey	Natural rubber

### Laboratory mats made of silicone (VMQ)

+ temperature resistant up to +260 °C/ 500°F

+ sterilisable

+ non-slip



Art.No.	Dimensions approx. (mm)	Colour
41598113	250 x 250	red
41598118	250 x 250	black
41598213	350 x 350	red
41598218	350 x 350	black

### Gas syringe

+ for injecting or extracting gas into or from a closed system or for measuring the gas volume

+ for measuring liquids without gas ingress

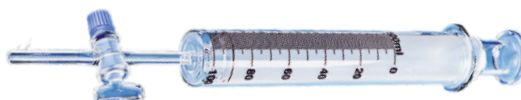


Art.No.	Capacity (ml)	Dimensions (mm)
41465050	50	242 x 29 Ø
41465100	100	280 x 35,5 Ø

### Gas syringe with single way stopcock

+ for injecting or extracting gas into or from a closed system or for measuring the gas volume

+ for measuring liquids without gas ingress



Art.No.	Capacity (ml)	Bore (mm)	Socket Size	Dimensions (mm)
41466050	50	3	12,5	320 x 29 Ø
41466100	100	3	12,5	357 x 35,5 Ø

# Laboratory Equipment

## Aid & gas syringes

### Gas syringe with three way stopcock

- + for injecting or extracting gas into or from a closed system or for measuring the gas volume
- + for measuring liquids without gas ingress



Art.No.	Capacity (ml)	Bore (mm)	Socket Size
41467050	50	3	12,5
41467100	100	3	12,5

### Laboratory lifter made of aluminium

- + height adjustable from 60 - 250 mm
- + powder-coated hammer blow blue
- + DIN 12897

The lab jack is characterised by a high-quality workmanship and high stability within the specified load range.  
The height can be adjusted manually.



Art.No.	Platform approx. (mm)	Height approx. (mm)	Max. static load (kg)	Weight approx. (g)
42011010	174 x 135	60 - 250	7	815

### pH test sticks

- + non-bleeding
- + for rapid determination of the pH value
- + packaged in pieces of 100

#### Note:

If buffering is insufficient, leave the test strips in the test liquid until the colour is constant.

#### Storage:

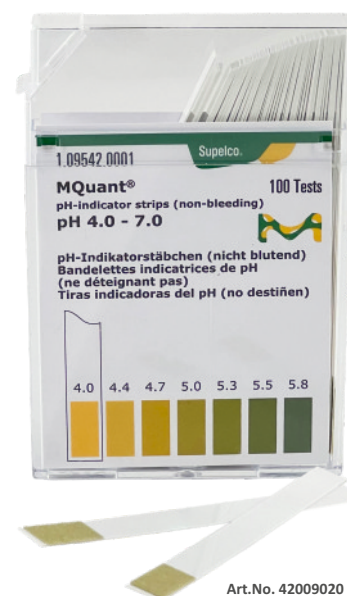
Avoid exposing the test strips to sunlight and moisture.  
Store the container between 4°C and 30°C in a dry place.

#### Disposal:

Please dispose used test strips in household waste.



Art.No. 42009010



Art.No. 42009020

Art.No.	Variant	Dimensions approx. (mm)
42009010	pH 0-14	6 x 85
42009020	pH 4-7	/

## Universal indicator paper reel in plastic rotary box

**Graduation:** pH 1 – 2 – 3 – 5 – 6 – 7 – 8 – 9 – 10 – 12 – 14

The indicator paper comes in a plastic reel that ensure long term stability and protection.

**Storage:** Avoid exposing the test strips to sunlight and moisture. Store the container below 4-30°C / 86°F in a dry place.



Art.No.	Variant	Dimensions approx. (mm x m)
42007010	pH 1-14	7 x 5

## Universal indicator paper refill pack of 3 reels

+ refill reels for No. 42007010

+ without graduation

+ without plastic box



Art.No.	Variant	Dimensions approx. (mm x m)
42008010	pH 1-14	7 x 5

## Bench protective paper for laboratory tables

+ packaged in 100 sheets/pack



Made with an absorbent paper and with a PE film coating on one side, which allows an efficient protection of laboratory benches against acids, toxic, corrosive or radioactive fluids.

Art.No.	Dimensions approx. (mm)	Cellulose weight (g/m <sup>2</sup> )	PE weight (g/m <sup>2</sup> )	Absorption capacity (ml/m <sup>2</sup> )
44080042	400 x 520	100-375	25-35	240-750
44080046	460 x 570	100-375	25-35	240-750
44080050	500 x 600	100-375	25-35	240-750

## Litmus paper blue

+ pH indicator 100 strips per booklet

**Acid-Base Indicator:**

Changes colour from blue to red when conditions change from alkaline to acidic. Litmus paper is the best known indicator paper for neutralization analysis.



Art.No.	Variant	Dimensions approx. (mm)
42005010	pH 8 - 5	10 x 75

## Litmus paper red

+ pH indicator 100 strips per booklet

**Acid-Base Indicator:**

Changes colour from red to blue when conditions change from acidic to alkaline.



Art.No.	Variant	Dimensions approx. (mm)
42006010	pH 5 - 8	10 x 75

# Laboratory Equipment

## pH-meters

### pH-instrument, digital with temperature measurement

Professional digital instrument for fast and accurate calculation of pH value (acidic, neutral, alkaline) and temperature measurement.

- + IP65 water proof
- + one touch auto-calibration
- + HOLD function
- + dual display
- + with automatic temperature compensation i. e. measurement results are not falsified even at different temperatures
- + for testing in containers with lim. opening size
- + 1 - 3-point calibration
- + battery low indicator
- + incl. storage solution and batteries



Electrode: fix mounted 120 mm long pH electrode with small diameter of 12 mm  
Power supply: 2x CR2032 battery

Art.No.	Measuring range	Temperature range	Resolution	Dimensions (mm)	Weight (g)	Colour
43255010	0-14 : 0.1 pH	0°C to +60°C/ +32°F to +140°F	0.01 pH/0.5°C or 32.9°F	225 x 35 x 20	69	blue

### pH buffer solution for pH-instrument

**pH buffer solution N.I.S.T-Certificate in patent bottle:**

- + 250 ml ergonomic bottle with built-in dosing compartment and value table depending on temperature for an accurate calibration
- + economical, using just the proper amount per calibration
- + coloured for an easier identification
- + immune to micro-organisms
- + actual value and expiration date printed on the bottle
- + actual value referred to N.I.S.T. Reference material and expiration date reported on the certificate



**pH buffer solution with certificate of analysis in sachets:**

- + boxes with 20 sachets in 25 ml of the same solution
- + sachets for single use
- + every sachet well identifiable with own colour
- + every box with certificate of analysis and sachet holder made of carton box
- + all solutions are traceable to N.I.S.T. and noted on certificate

Art.No.	pH	Capacity (ml)	Colour	Variant
43255220	4.01 ± 0.01	250	red	with N.I.S.T-Certificate in patent bottle
43255230	7.00 ± 0.01	250	green	with N.I.S.T-Certificate in patent bottle
43255240	10.01 ± 0.02	250	colourless	with N.I.S.T-Certificate in patent bottle
43255320	4.01 ± 0.01	20 à 25	red	with certificate of analysis in sachets
43255330	7.00 ± 0.01	20 à 25	green	with certificate of analysis in sachets
43255340	10.01 ± 0.02	20 à 25	yellow	with certificate of analysis in sachets

## Glass fibre round filter

Chemical resistance to most organic and inorganic solvents.  
Safe filtration of aggressive solutions, as well as strong acids and bases.

- + temperature-stable up to 200°C/ 392°F
- + fast filtering
- + smooth surface
- + packed of 100 pieces

**Filtration speed:** 15 s  
**Retention capacity:** 0.6 µm  
**Paper weight:** 70 g/m<sup>2</sup>  
**Thickness:** 0.35 mm



Art.No.	Diameter approx. (mm)
41245005	55
41245007	70
41245009	90
41245011	110
41245012	125
41245015	150
41245018	185

## Filter paper sheets round filter for qualitative analyses

- + medium fast (DIN 53137)
- + grained
- + packed of 100 pieces

**Filtration rate:** 10 - 12 s  
**Paper weight:** 75 g/m<sup>2</sup>  
**Thickness:** 0.25 mm



Art.No.	Diameter approx. (mm)
41255005	55
41255007	70
41255009	90
41255011	110
41255012	125
41255015	150
41255018	185

## Filter paper sheets round filter for qualitative analyses

Suitable for most laboratory applications,  
e.g. for clarifying liquids or determining dry masses

- + packed of 100 pieces.

**Filtration speed:** 22 s  
**Retention capacity:** 4 - 12 µm  
**Paper weight:** 70 g/m<sup>2</sup>  
**Thickness:** 0.16 mm



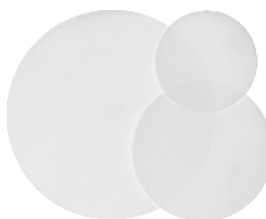
Art.No.	Diameter approx. (mm)
41256005	55
41256007	70
41256009	90
41256011	110
41256012	125
41256015	150
41256018	185

## Round filter ash-free for quantitative routine analysis

E.g. for gravimetric analysis of substances or  
quantitative determination of sediment.

- + medium-fast filtering
- + smooth
- + packed of 100 pieces

**Filtration speed:** 27 s  
**Retention capacity:** 4 - 12 µm  
**Paper weight:** 85 g/m<sup>2</sup>  
**Thickness:** 0.2 mm

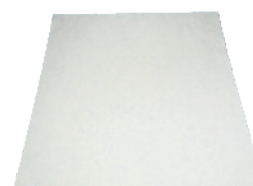


Art.No.	Diameter approx. (mm)
41257005	55
41257007	70
41257009	90
41257011	110
41257012	125
41257015	150
41257018	185

## Filter paper sheets

- + medium fast (DIN 53137)
- + smooth
- + packed of 100 pieces

**Thickness:** 0.15 mm  
**Paper weight:** 70 g/m<sup>2</sup>  
**Filtration speed:** 20 s



Art.No.	Diameter approx. (mm)
41250045	45 x 45
41250058	58 x 58

## Pleated filter



- + medium fast filtration (DIN 53137)
- + pack of 100 pieces
- + smooth

suitable for the analysis of fats  
(due to low ether-soluble residue)

**Filtration speed:** 22 s  
**Paper weight:** 70 g/m<sup>2</sup>  
**Thickness:** 0.16 mm

Art.No.	Diameter approx. (mm)
41260011	110
41260012	125
41260015	150
41260018	185
41260024	240
41260027	270
41260032	320
41260038	385

## Pleated filter for qualitative analyses



Suitable for most laboratory applications, e.g. for clarifying liquids or determining dry masses.

- + medium-fast filtering
- + smooth
- + packed of 100 pieces

**Filtration speed:** 22 s  
**Paper weight:** 70 g/m<sup>2</sup>  
**Thickness:** 0.16 mm

Art.No.	Diameter approx. (mm)
41261011	110
41261012	125
41261015	150
41261018	185
41261024	240
41261027	270
41261032	320
41261038	385

## Phosphorus spoon

made of stainless steel



Art.No.	Spoon Ø approx. (mm)	Total length approx. (mm)
42515010	20	450

## Spoon spatula

made of stainless steel



- + chrome-nickel steel

Art.No.	Spoon dimensions (mm)	Spatula dimensions (mm)	Total length approx. (mm)
42520001	36 x 26	32 x 22	150
42520002	40 x 28	36 x 26	180
42520003	40 x 28	36 x 26	210

## Stirring rods made of glass

both ends fused

- + soda-lime glass
- + water resistance class 3
- + acid resistance class 1
- + alkali resistance class 2



Art.No.	Length approx. (mm)	Diameter approx. (mm)
42850006	150 ± 5	4 ± 0.15
42850012	150 ± 5	5 ± 0.15
42850018	150 ± 5	6 ± 0.15
42850024	200 ± 5	3 ± 0.10
42850030	200 ± 5	4 ± 0.15
42850036	200 ± 5	5 ± 0.15
42850042	200 ± 5	6 ± 0.15
42850048	250 ± 5	4 ± 0.15
42850054	250 ± 5	6 ± 0.15
42850060	250 ± 5	7 ± 0.20
42850066	300 ± 5	7 ± 0.20
42850072	300 ± 5	8 ± 0.20
42850078	300 ± 5	9 ± 0.20
42850084	500 ± 5	12 ± 0.25



## Radiometers

(Light mills, Crooke's radiometers)

+ made of glass

A radiometer – also known as a light mill – consists of a glass bulb with a partial vacuum and a revolving rotor with black and light-coloured blades. When light hits the blades, the black side heats up more than the light side. This creates higher pressure from the remaining air molecules on the black side. These molecules collide more strongly with the blades and drive the rotor. In this way, the radiometer converts light energy into a visible rotational movement.



Art.No.	Dimensions approx. (mm)	Weight approx. (g)
42757002	130 x 80 Ø	47

## Silicone stopcock grease medium viscosity

Excellent heat and cold resistance without considerable change of the consistency between -50 °C and +150 °C/-58 °F and +302 °F.

**Resting penetration according to Klein in 1/10 mm:** 270 (medium)

**Density at 25°C/ 77°F:** approx.. 1.0 g/cm<sup>3</sup>

**Temperature application range:** -40°C up to +200°C/ -40°F up to 392°F

**Freezing point:** approx. -45°C/ -49°F

**Thermal conductivity according to DIN 52612:** approx. 0.15 W m<sup>-1</sup> K<sup>-1</sup>

**Specific resistance at 25°C/ 77°F:** approx: 10<sup>13</sup> Ω cm

- + mostly temperature-independent consistency
- + colourless, odourless, non-toxic
- + thixotropic behaviour
- + hydrophobic behaviour
- + insoluble in water, resistant to seawater and hot steam
- + good electrical insulation and good dielectric behaviour
- + inert to many chemicals, resistant to microorganisms
- + good adhesion, good lubricating and sliding properties as well as good release properties

The paste is used as a lubricant and release agent for e.g. valves, seals, ground joints, equipment, cables and pipes. It is also frequently used as an assembly aid, protective and sealing paste.

The paste is also ideal for maintaining rubber seals. In electrical engineering, KORASILON® paste medium viscosity is used for the assembly of insulators and switchgear, among other things.



Art.No.	Capacity approx. (g)	Material tube
41480035	35	Aluminium



### Allihn condensers with side glass olives

- + DIN 12576
- + dropper tip
- + thin wall of the inner tube enables efficient temperature transfer
- + low cooling capacity
- + for distillate separation

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51987008	160	14/23	14/23	Glass	1
51987010	250	14/23	14/23	Glass	1
51987032	250	24/29	24/29	Glass	1
51987040	250	29/32	29/32	Glass	1
51987042	300	29/32	29/32	Glass	1
51987044	400	14/23	14/23	Glass	1
51987048	400	24/29	24/29	Glass	1
51987056	400	29/32	29/32	Glass	1



BASIC

Boro 3.3

### Allihn condensers with side threaded connection and screw connection (PP)

- + with DIN 12576
- + dropper tip
- + thin wall of the inner tube enables efficient temperature transfer
- + low cooling capacity
- + interchangeable inner and outer joints come with plastic screw thread connector
- + for distillate separation

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51988002	160	14/23	14/23	Screw thread	1
51988012	250	14/23	14/23	Screw thread	1
51988013	250	24/29	24/29	Screw thread	1
51988015	250	29/32	29/32	Screw thread	1
51988017	300	29/32	29/32	Screw thread	1
51988018	400	14/23	14/23	Screw thread	1
51988020	400	24/29	24/29	Screw thread	1
51988022	400	29/32	29/32	Screw thread	1



BASIC

Boro 3.3

### Liebig condensers with side glass olives

- + DIN 12576
- + dropper tip
- + thin wall of the inner tube enables efficient temperature transfer
- + low cooling capacity
- + for distillate separation

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51982008	160	14/23	14/23	Glass	1
51982012	250	14/23	14/23	Glass	1
51982013	250	24/29	24/29	Glass	1
51982014	250	29/32	29/32	Glass	1
51982015	400	14/23	14/23	Glass	1
51982028	400	24/29	24/29	Glass	1
51982056	400	29/32	29/32	Glass	1



BASIC

Boro 3.3

### Liebig condensers with side threaded connection and screw connection (PP)

- + DIN 12576
- + dropper tip
- + thin wall of the inner tube enables efficient temperature transfer
- + low cooling capacity
- + interchangeable inner and outer joints come with plastic screw thread connector
- + For distillate separation

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51983002	160	14/23	14/23	Screw thread	1
51983012	250	24/29	24/29	Screw thread	1
51983013	250	14/23	14/23	Screw thread	1
51983015	250	29/32	29/32	Screw thread	1
51983018	400	14/23	14/23	Screw thread	1
51983020	400	24/29	24/29	Screw thread	1
51983022	400	29/32	29/32	Screw thread	1



BASIC

Boro 3.3

# Laboratory Equipment

## Condensers

### Graham condensers with side glass olives

- + DIN 12592
- + highly efficient with large cooling surface
- + suitable for distillation and reflux applications

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51990108	160	14/23	14/23	Glass	1
51990140	250	29/32	29/32	Glass	1
51990156	400	29/32	29/32	Glass	1



BASIC

Boro 3.3

### Graham condensers with side threaded connection and screw connection (PP)

- + DIN 12592
- + interchangeable inner and outer joints come with plastic screw thread connector
- + highly efficient with large cooling surface
- + suitable for distillation and reflux applications

Art.No.	Length (mm)	Socket size	Cone size	Connection	PU (pcs)
51990008	160	14/23	14/23	Screw thread	1
51990040	250	29/32	29/32	Screw thread	1
51990056	400	29/32	29/32	Screw thread	1



BASIC

Boro 3.3

### Allihn condensers for Soxhlet, with side glass olives

- + DIN 12602
- + for separating the extract from the liquid or solid
- + this method enables effective separation with relatively small amounts of solvent
- + ideal for reflux processes on a laboratory scale

Art.No.	for extractor capacity (ml)	Cone size	Connection	PU (pcs)
51153029	30	29/32	Glass	1
51153034	70	34/35	Glass	1
51153045	100/250	45/40	Glass	1
51153048	500	45/40	Glass	1



BASIC

Boro 3.3

### Allihn condensers

for Soxhlet, with side threaded connection and screw connection (PP)

- + DIN 12602
- + for separating the extract from the liquid or solid
- + this method enables effective separation with relatively small amounts of solvent
- + ideal for reflux processes on a laboratory scale

Art.No.	for extractor capacity (ml)	Cone size	Connection	PU (pcs)
51153129	30	29/32	Screw thread	1
51153134	70	34/35	Screw thread	1
51153145	100/250	45/40	Screw thread	1
51153148	500	45/40	Screw thread	1



BASIC

Boro 3.3

### Dimroth condensers

for Soxhlet, with side glass olives

- + DIN 12591
- + for separating the extract from the liquid or solid
- + this method enables effective separation with relatively small amounts of solvent
- + ideal for reflux processes on a laboratory scale

Art.No.	for extractor capacity (ml)	Cone size	Connection	PU (pcs)
51154029	30	29/32	Glass	1
51154034	70	34/35	Glass	1
51154045	100/250	45/40	Glass	1



BASIC

Boro 3.3

### Dimroth condensers

for Soxhlet, with side threaded connection and screw connection (PP)

- + DIN 12602
- + for separating the extract from the liquid or solid
- + this method enables effective separation with relatively small amounts of solvent
- + ideal for reflux processes on a laboratory scale

Art.No.	for extractor capacity (ml)	Cone size	Connection	PU (pcs)
51154129	30	29/32	Screw thread	1
51154134	70	34/35	Screw thread	1
51154145	100/250	45/40	Screw thread	1



BASIC

Boro 3.3

### Soxhlet-Extractor apparatus without stopcock

- + DIN 12602
- + for separating the extract from the liquid or solid
- + this method enables effective separation with relatively small amounts of solvent
- + ideal for reflux processes on a laboratory scale

Art.No.	Capacity (ml)	Socket size	Cone size	PU (pcs)
51155006	30	29/32	29/32	1
51155012	70	34/35	29/32	1
51155018	250	45/40	29/32	1
51155048	500	45/40	29/32	1



BASIC

Boro 3.3

### Chromatography columns with sintered disc and rotaflow stopcock

- + rotaflow stopcock improves control over the process and ensures smooth operation
- + equipped with a sintered disc for optimal results
- + generally used for purifying individual substances from mixtures of components

Art.No.	Length (mm)	Socket size	Diameter (mm)	PU (pcs)
51991002	200	14/23	10	1
51991003	200	14/23	15	1
51991008	300	14/23	10	1
51991017	400	29/32	20	1
51991018	600	29/32	30	1



BASIC

Boro 3.3

### Chromatography columns without sintered disc, with rotaflow stopcock

- + rotaflow stopcock improves control over the process and ensures smooth operation
- + generally used for purifying individual substances from mixtures of components

Art.No.	Length (mm)	Socket size	Diameter (mm)	PU (pcs)
51992001	600	29/32	30	1



BASIC

Boro 3.3

## Rotating mixers Type: RM 5



Tumbling rotating mixer with five synchronous, diagonally eccentric and removable PVC rolls. These bottles are rotating around its long axis and rocking along its contact surface.

Each roll can be removed individually to provide using of bigger cylindrical tubes or bottles (up to 5l)

The speed is continuously adjustable

This device is specially designed for the consistent mixing of test samples (e.g. whole blood) for haematological determinations and for the gentle mixing of other cell suspensions. It also prevents sedimentation or dispersion of samples of all kinds such as paints, varnishes etc.

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Art.No.	40347010	40347020
Rotating speed	approx. 4 - 30 rpm	approx. 10 - 70 rpm
Power	15W	15W
Roll Ø (mm)	32	32
Roll length (mm)	330	330
Dimensions (mm)	180 x 480 x 110	180 x 480 x 113
Max. loading weight (kg)	5	5
Variant	RM 5	RM 5

## Rotating mixers with integral rolls



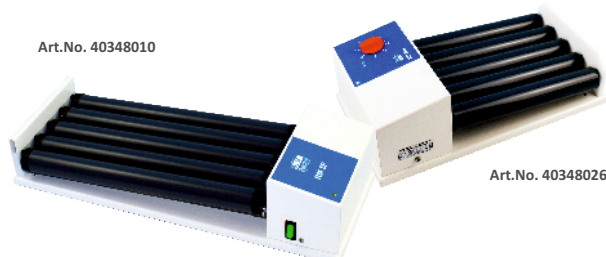
Tumbling rotating mixer with five synchronous, diagonally eccentric PVC rolls. Perfectly suited for the smooth mixing of liquids in cylindrical containers. Permanently set speed of 40 rpm for Art.No. 40348010

Five synchronously running, diagonally eccentrically mounted, permanently installed PVC rollers at an inclination angle of 3° form a uniformly tumbling support surface on which the sample vials rotate around their longitudinal axis and are simultaneously tilted along their support surface. This ensures uniform and gentle mixing of samples for haematological determinations (e.g. whole blood) and other cell suspensions. The continuous rotation also prevents sedimentation or dispersion of samples of all kinds.

Scope of delivery:

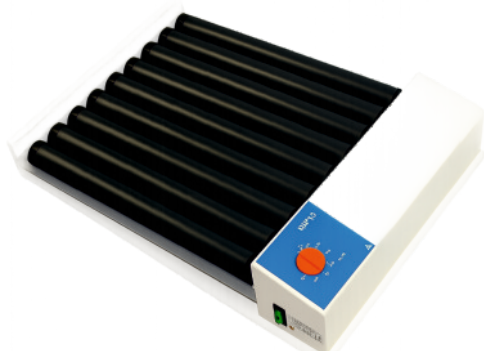
Roller mixer, operating instructions, mains adapter, 4 adapters (AU, EU, UK, US)

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Art.No.	40348010	40348026
Dimensions (mm)	180 x 480 x 110	180 x 480 x 113
Weight (kg)	3.7	3
Roll Ø (mm)	32	32
Roll length (mm)	330	216
Roll distance (mm)	36	36
Max. loading weight (kg)	5	5
Rotation speed	approx. 40 rpm	approx. 4 - 30 rpm
Power	15W	15W
Power supply	24 VDC	24 VDC
Variant	RM 5 F	RM 5 K
Motor	BLDC	maintenance-free motor 24V

### Tumbling rotating mixer Type: RM10 with wide speed range



Roller mixer with 10 removable rollers.  
The speed is continuously adjustable.

MADE IN GERMANY

Ten synchronously rotating PVC rolls provide a uniform and gently tumbling mixing of the tubes etc.

The bottles are being rotated around their long axis and rocked along their 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.

Art.No.	40349018	40349020
Dimensions (mm)	180 x 480 x 113	180 x 480 x 113
Weight (kg)	6.5	6.5
Roll Ø (mm)	32	32
Roll length (mm)	330	330
Max. loading weight (kg)	5	5
Rotating speed	approx. 4 - 30 rpm	approx. 10 - 70 rpm
Power	15W	15W
Power supply	24 VDC	24 VDC
Variant	RM 10	RM 10
Motor	BLDC	BLDC

### Shaker with platform



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 a 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.



MADE IN GERMANY

Art.No.	40348018
Dimensions (mm)	150 x 160 x 103
Weight (kg)	4.7
Voltage	230V, 50Hz, 40W
Cable Length (m)	approx. 1.5 (with plug)
Platform size (mm)	200 x 400
Motor	Capacitor motor
Shaking rate	steplessly adjustable from 100 - 1100 rpm

upon request 115 VAC 60Hz available



### Test tube shaker Reamix



Test tube shakers VM2, electronic, steplessly adjustable speed, circular shaking motion / with dual function (pressure on the receiving disc or continuous operation) small model, for one test tube 5 to 30 mm Ø



**2 operating modes:**  
manual (one-hand operation) or permanent (continuous operation), mounting disc made of chemical-resistant PP, durable stainless steel cover with CE marking, with overheating and overload protection

MADE IN GERMANY

Art.No.	42789020
Shaking rate	1.7 - 46.6Hz
Nominal voltage	230V/50Hz
Weight (kg)	1.1
Dimensions (mm)	110 x 100 x 90
Rotation speed	100 - 2800 rpm
Ambient temp. range	+5°C/41°F to +40°C/104°F

### Sand bath TS with bath attachment for heating sand and liquid substances of all kind



**Operating mode:** continuous operation square heating surface



The bath attachment connected with the device is made of stainless steel.

The temperature regulation is controlled by a thermal sensor. Setup according to VDE.

With cable, 1.5 metres, and safety plug

Bath approx. 140 x 140 x 55 mm inside

MADE IN GERMANY

Art.No.	42081010
Capacity (ml)	1000
Dimensions (mm)	155 x 157 x 165
Weight (kg)	1.8
Voltage	230V 50/60Hz*
Power consumption	600W
Temperature control range	Room temp. up to +330°C/626°F

\*also other options available

### Mini magnetic stirrer anodised heating plate, energy-saving device with heating



**Power consumption:** 6 W  
**Motor:** stepper motor  
**Mains switch:** with indicator light  
**Heating plate:** Aluminium anodized  
**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  
**Operating mode:** continuous operation

MADE IN GERMANY

Art.No.	42073004
Cable length (m)	1.5
Dimensions (mm)	100 x 100 x 83
Heating power	160W
Voltage	230V 50Hz / 45W*
Capacity	up to 1 l (liquid)
Weight (kg)	1.2
Motor	Stepper motor 6W
Rotating speed	steplessly from 10 - 1200 rpm

\*110V also available

## Laboratory Equipment

### Magnetic stirrers

#### Magnetic stirrers with CERAN® heating plate, fully electronic speed and temperature control



- + square CERAN® hotplate
  - + possibility of connecting a PT-100 temperature sensor
  - + fully electronic control of the speed and the heating plate temperature, microprocessor-controlled and with digital display and timer function
  - + heating plate dimensions: approx. 135 x 135 mm
  - + mains switch and heating plate switch with LED
- Temperature control:**  
stepless from room temperature to +250°C/482°F
- Operating mode:** continuous operation



MADE IN GERMANY

Art.No.	42072012
Cable length (m)	1.5
Dimensions (mm)	210 x 145 x 110
Heating power	600W
Power	230V 50/60Hz / 25W
Capacity	up to 10 l (liquid)
Weight (kg)	2.6
Motor	Shaded pole motor
Rotating speed	steplessly adjustable from 60 - 1600 rpm

#### Magnetic stirrer with heating plate made of stainless steel, circular, fully electronic speed and temperature control

**Cable:** 1.5 m long with Schuko plug

**Operating mode:** continuous operation

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.



- + with digital display and timer function
- + option to connect a PT-100 temperature sensor
- + 4-digit LED display
- + mains switch and heating plate switch with LED
- + diameter of the heating plate approx. 130 mm
- + temperature control: infinitely variable from room temperature to +350°C/+662°F



MADE IN GERMANY

Art.No.	42071012
Cable length (m)	1.5
Dimensions (mm)	210 x 145 x 110
Heating power	500W
Power	230V 50Hz / 25W*
Capacity	up to 10 litres (liquid)
Weight (kg)	2.6
Motor	Shaded pole motor
Rotating speed	steplessly adjustable from 60 - 1600 rpm

\*110V also available

### MAGNETMIX - Magnetic stirrer with CERAN® heating plate



Square CERAN®- heating plate

**Dimensions of heating plate:** approx. 135 x 135 mm

**Operating mode:** continuous operation

MADE IN GERMANY

Art.No.	42072004
Dimensions (mm)	155 x 160 x 110
Heating power	600W
Power	230V 50/60Hz / 25W
Capacity	up to approx. 10 l (liquid)
Weight (kg)	2.4
Rotating speed	steplessly adjustable from 80 - 1600 rpm

### MAGNETMIX - Magnetic stirrer with heating plate made of stainless steel, circular



**Operating mode:** continuous operation

**Diameter of heating plate:** approx. 130 mm

**Temperature control:** infinitely variable  
from room temperature to +330°C/+626°F

**Cable:** 1.5 m long with Schuko plug

+ mains switch with indicator light

+ indicator light for heating plate

+ lower part varnished, acid and alkali resistant

+ precise, electronic speed control, according to VDE

Art.No.	42071004
Cable length (m)	1.5
Dimensions (mm)	155 x 160 x 115
Heating power	500W
Power	230V 50Hz / 40W
Capacity	up to 10 litres (liquid)
Weight (kg)	2.4
Motor	Shaded pole motor
Rotating speed	steplessly adjustable from 80 - 1600 rpm

MADE IN GERMANY

### Magnetic stirrer without heating



+ mains switch with indicator light

+ without heating

**Cable:** 1.5 m long with Schuko plug

**Operating mode:** continuous operation



+ low-noise motor with electronic speed control

+ with stainless steel cover plate

+ lower part varnished, acid resistant

+ precise, electronic speed control, according to VDE

Art.No.	42070004	42070036
Variant	MAGNETMIX	Mini magnetic stirrer
Cable length (m)	1.5	1.5
Dimensions (mm)	157 x 157 x 80	115 x 100 x 58
Power	230V 50Hz / 40W	230V 50Hz / 4W
Capacity	up to 10 l (liquid)	up to 1 l (liquid)
Weight (kg)	1.8	0.7
Motor	Shaded pole motor	Stepper motor
Rotation speed	steplessly adjustable from 60 - 1600 rpm	steplessly adjustable from 50 - 1200 rpm

MADE IN GERMANY



## Stirrers

with electronic speed control, for capacities up to 50 litres



The robust laboratory agitator is directly powered and is ideal for stirring tasks of up to 50 litres (liquid), e.g. in schools and laboratories.

Small dimensions, large capacity range.  
Also suitable for highly viscous solutions.

### Suitable stirring rod:

6-10 mm shaft Ø

Power output: 85 W

Operating mode: short-time operation

MADE IN GERMANY

Art.No.	42068018
Cable length (m)	1.5
Dimensions (mm)	65 x 120 x 200
Capacity of chuck (mm)	1 - 10.5
Power	230V 50Hz / 40W
Capacity	50 l
Weight (kg)	2.2
Motor	Shaded pole motor
Rotating speed	steplessly adjustable from 100 - 2000 rpm

## Stirring rods made of polystyrene



- + crystal clear
- + optimally stirring rod for a wide variety of laboratory applications
- + packed of 500 pieces

Art.No.	42067001
Total length (mm)	120
Diameter (mm)	2.5
Rod width (mm)	3

## Magnetic stirring bars

octagonal,  
PTFE-coated

- + axially magnetised centre
- + suitable for high, slim vessels such as measuring cylinders, jars etc.
- + universal chemical resistance
- + temperature resistance -200°C to +250°C



Art.No.	Length (mm)	Diameter (mm)
42075001	12	4.5
42075002	15	4.5
42075003	20	6
42075004	25	6
42075005	30	6
42075006	40	8
42075007	50	8
42075008	60	10
42075009	70	10

## Retrievers PTFE-coated



- + universal chemical resistance for removing stirring bars from aggressive liquids, prevents of stirring bars.

With powerful magnet at the bottom end for removing the magnetic stirring bar from the liquid.

Art.No.	42076010
Total length (mm)	350
Diameter (mm)	8

15 horizontal grey bars for writing notes.

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