

# Clinical Laboratory

Clinical laboratories see a wide range of specimens and use a great variety of methods. PLASTIBRAND® products for the medical laboratory are subjected to rigid quality control procedures. This ensures precise results – when it counts.

**When results matter.**

**PLASTIBRAND®**



NEUBAUER  
IMPROVED  
BRIGHT LINE





## Sample cup

### for Technicon®-Analyzer

PS, transparent. CE-marked according to IVD-Directive 98/79 EC.  
Packed in bags of 1000.

Capacity ml	Upper Ø mm	Lower Ø mm	Height mm	Pack of	Cat. No.
1.5	15	12.2	22.7	10000	1150 15
2	14.8	12.8	24.9	10000	1150 16
4	17	13.3	38	6000	1150 17



## Push-on caps

### for Analyzer Sample cup

PE. Suitable for Technicon® 1.5 ml sample tubes.  
CE-marked according to IVD-Directive 98/79 EC.  
Pack of 1000.

Cat. No.	
	1150 20



## Sample cup

### with Snap cap

PS, transparent. PE snap cap.  
Pack quantity: 1000 = 10 bags of 100.

Capacity ml	Ø mm	Height mm	Cat. No.
12	22	38	7220 60



## Sample cup

### for Coulter Counter®

PS, transparent. PE lid. CE-marked according to IVD-Directive 98/79 EC.  
Pack quantity: 1000 = 4 bags of 250.

Capacity ml	Ø mm	Height mm	Cat. No.
20	32	56	7220 55

## Jar with snap-on lid

Jar PS, snap-on lid PE-LD. Conical shape. Pack of 1000.

Capacity ml	max. Ø mm	Height mm	Cat. No.
25	47	32	623 15



## Jars with push-on lid

PP. Pack of 10.

Capacity ml	max. Ø mm	Height mm	Cat. No.
approx. 40	56	25	618 15
approx. 80	75	30	618 20



## Jar with screw cap

PP. Conical shape. Pack of 500.

Capacity ml	max. Ø mm	Height mm	Cat. No.
30	57	32	623 10





## Urine beaker

### with press-on lid

PP, with red PE lid. For hygienic and odorless urine sample handling. Lid is simply sealed by being pressed on. Easy to use: simply cut off integrated spout tip and insert test strip. CE-marked according to IVD-Directive 98/79 EC.

Description	Capacity ml	Subdivision ml	Ø mm	Height mm	Pack of	Cat. No.
Beaker	125	25	65	70	1000*	7589 01
Red Lid	–	–	70	–	1000*	7589 02

\* Beakers: Pack of 1000, lids: Pack of 2 x 500.



## Urine beaker

### with screw cap

PP, PE screw cap. For hygienic urine sample handling. CE-marked according to IVD-Directive 98/79 EC.

Description	Capacity ml	Subdivision ml	Ø mm	Height mm	Pack of	Cat. No.
non-sterile (green cap)	100	20	65	75	1000*	7589 05
γ-ray sterile (yellow cap)	100	20	65	75	240**	7589 10

\* Beakers: Pack of 1 x 1000, lids: Pack of 2 x 500 \*\* 48 bags of 5



## Faeces container

### with screw cap

PS. With label. Easy to use with PS screw cap which serves as a sample scoop grip. CE-marked according to IVD-Directive 98/79 EC. Pack of 400.

Description	Capacity ml	Ø mm	Height mm	Cat. No.
non-sterile (blue cap)	30	26	92	623 05



## Sterilization indicator tape

Self-adhesive crêpe paper containing thermoactive pigments. The white colored strips turn brown after autoclaving (121 °C: after approx. 20 min., 134 °C: after approx. 5 min.). Pack quantity: 1 roll.

Length m	Width mm	Cat. No.
50	19	617 50

## Disposal bags

for collection of disposable items after use

PP/PA. Caution: Risk of injury! Never put sharp objects such as needles into plastic bags. Bags must be open during sterilization.

PP, autoclavable (121 °C).

PA, autoclavable (134 °C) and hot-air sterilization at 180 °C.

Description	Length mm	Width mm	Pack of	Cat. No.
PP	300	200	100	7597 05
PA	300	200	50	7597 10



## Stand for disposal bags

Epoxy-coated steel wire, with rubber feet. Not autoclavable. Pack of 1.

Description	Inner Ø mm	Height mm	Cat. No.
with 100 disposal bags of PP	120	250	7597 00
with 50 disposal bags of PA	120	250	7597 01

## Workstation storage/dispenser boxes

PMMA, white and clear. Available in two sizes. Ideal for storing and dispensing small laboratory items like pipette tips, microcentrifuge tubes, pasteur pipettes, etc. Removeable top cover with hinged front cover. Pack of 1.

Description	Length mm	Width mm	Height mm	Cat. No.
large	165	152	355	1319 00
small	165	152	178	1319 02





## Petri dish

Soda-lime glass. Excellent glass quality and workmanship. Dish and lid are flat inside and outside and are free from bubbles and streaks. Cut edges are fire-polished. Pack of 10.

Lid Ø mm	Dish height (base) mm	Cat. No.
40	12	4557 01
60	15	4557 17
80	15	4557 32
100	15	4557 42
100	20	4557 43
150	25	4557 51



## Petri dish

PS. Transparent, with lid, disposable. Available with or without vent lid. Dishes and lids are assembled robotically to reduce the risk of contamination. Pack of 480 = 24 bags of 20.

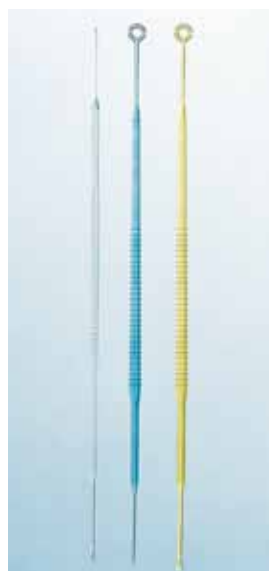
Description	Lid Ø mm	Height mm	Cat. No.
without vent	94	16	4520 00
with vent lid	94	16	4520 05



## Petri dish

PS. With or without vent. Dishes and lids are assembled robotically to reduce the risk of contamination. Pack of 1620 = 108 bags of 15.

Description	Lid Ø mm	Height mm	Cat. No.
without vent	55	14	4520 15
with vent lid	55	14	4520 10



## Inoculation loops

with needle, disposable

PS. For inoculation of nutrient media. Available either with loop at one end and needle at the other or loops at both ends. High flexibility permits gentle streaking without damaging the nutrient surface.  $\gamma$ -ray sterilized. Pack quantity: 1000 = 50 bags of 20.

Description	Color	Cat. No.
Capacity of loop: 1 $\mu$ l	natural	4522 01
Capacity of loop: 10 $\mu$ l	blue	4522 10
Capacity of loop: 1 + 10 $\mu$ l	yellow	4522 15

## Culture tubes

### Rimless or with screw cap (GL thread)

Soda-lime glass. Screw cap, PP, with white TPE elastomer seal. Autoclavable (121 °C). Pack of 100.

Description	Ø mm	Height mm	Wall thickness, mm	RCF max.	Pack of	Cat. No.
with thread GL 14 and screw cap	12	100	1	3000	100	1139 31
with thread GL 18 and screw cap	16	100	1	3000	100	1139 35
with thread GL 18 and screw cap	16	160	1	1800	100	1139 41
with thread GL 18 and screw cap	18	180	1	1100	100	1139 43
rimless	10	75	0.6	3000	250	1141 05
rimless	12	75	0.6	3000	250	1141 06
rimless	12	100	0.6	3000	144	1141 10
rimless	16	100	0.7	2600	78	1141 15
rimless	16	125	0.7	1800	105	1141 20
rimless	16	160	0.7	1500	100	1141 25
rimless	18	180	0.7	900	121	1141 30



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## Centrifuge tubes

### Rimless, round bottom

PC. Embossed graduation, subdivisions approx. 1 mm. Transparent, slight yellow tint. Withstands RCF up to 5000. Pack of 10.

Capacity ml	Subdivision ml	Ø mm	Height mm	Cat. No.
50	1	35	99	7810 29
100	2	41	115	7810 39
100	2	45	98	7810 40

Polycarbonate strength may be dramatically reduced when it is autoclaved or treated with alkaline cleaning agents.



## Centrifuge tubes

### with screw cap

PP, translucent. Withstands RCF up to 3000. Graduated, available non-sterile and  $\gamma$ -ray sterilized in 15 ml or 50 ml. Screw cap PE with sealing cone. High clarity. CE-marked according to IVD-Directive 98/79 EC.

Capacity ml	Description	$\gamma$ -ray sterile/non-sterile	Ø mm	Height mm	Pack of	Cat. No.
13	without base	non-sterile	17	120	750 (5 x 150)	1148 17
13	without base	sterile	17	120	750 (5 x 150)	1148 18
50	without base	non-sterile	30	114	300 (6 x 50)	1148 20
50	without base	sterile	30	114	300 (6 x 50)	1148 21
50	with base	non-sterile	30	116	250 (5 x 50)	1148 22
50	with base	sterile	30	116	250 (5 x 50)	1148 23





## Centrifuge tubes

**Cylindrical, with rim**

PP. Without stopper. Withstands RCF up to 4500. Autoclavable (121 °C).

Capacity ml	Ø mm	Height mm	Pack of	Cat. No. (without stopper)
10	16	100	3750 (250 per bag)	1153 42
20	20	100	500 (50 per bag)	1153 48
26	24	90	500 (50 per bag)	1153 46
48	30	100	400 (25 per bag)	1153 50
75 *	35	100	300 (20 per bag)	1153 52
110	40	120	300 (20 per bag)	1153 54
125	45	120	100 (10 per bag)	1153 56

\* Stopper reduces max. volume

## PE-Stopper

**for centrifuge tubes**

PP. Packed in bags of 100.



Suitable for tube No.	Pack of	Cat. No.
1153 42	1000	1153 60
1153 48	500	1153 66
1153 46	500	1153 68
1153 50	500	1153 70
1153 52	500	1153 72
1153 54	100	1153 74
1153 56	100	1153 76



## Centrifuge tubes

**Rimless, round bottom.**

PP. Translucent. Withstands RCF up to 5000. Autoclavable (121 °C). Pack of 10.

Capacity ml	Ø mm	Height mm	Cat. No.
3.5	13	50	7812 05
10	16	76	7812 08
12	17	99	7812 12
25	25	76	7812 20
30	25	88	7812 26
75	35	105	7812 28
80	38	101	7812 36
100	41	115	7812 38
100	45	97	7812 39
250	57	147	7812 48

## Sample tubes

PS, transparent.

Type of tube	RCF max.	Ø mm	Height mm	Pack of	Cat. No.
Universal	2000	16	100	2000	1147 15
Universal	4000	12	75	4000	1147 60
Coagulometer	2000	12	55	5000	1147 50



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## Grip stopper

for sample tubes

PE-LD, neutral. Packed in bags of 1000.

Stoppers for tubes	Pack of	Cat. No.
1147 15	10000	1147 20
1147 50, 1147 60	20000	1147 30



## Sedimentation tube

PS, transparent. Conical bottom. Pack of 2000 = 2 bags of 1000.

RCF max.	Ø mm	Height mm	Cat. No.
1000	16	105	1147 40





## Test tube rack

available in 6 sizes and four colors

PP. Sturdy construction, stackable. Versatile and inexpensive racks for common diameter test tubes. Filled PP, density 1.2 g/cm<sup>3</sup>. Will not float in waterbath. Alphanumerical positions for clear sample identification. Wide spaces between positions. Operating temperature -20 to 90 °C. Autoclavable (121 °C). Racks are supplied in three-pieces for convenient and permanent assembly. Pack of 5.

for Ø up to mm	Positions	Length mm	Width mm	Height mm	white Cat. No.	blau Cat. No.	red Cat. No.	yellow Cat. No.
13	6 x 14	265	126	75	43400 00	43400 01	43400 02	43400 03
18	5 x 11	265	126	75	43400 10	43400 11	43400 12	43400 13
20	4 x 10	265	126	75	43400 20	43400 21	43400 22	43400 23
25	4 x 8	265	126	88	43400 30	43400 31	43400 32	43400 33
30	3 x 7	265	126	88	43400 40	43400 41	43400 42	43400 43
16	5 x 11	265	126	75	43400 60	43400 61	43400 62	43400 63



## Test tube rack

PTFE. Excellent chemical resistance. Operating temperature -200 to 250 °C. Pack of 1.

for Ø up to mm	Positions	Length mm	Width mm	Height mm	Cat. No.
13	21	180	60	60	1155 10
19	10	180	60	70	1155 15
30	4	180	60	80	1155 20

## Microcentrifuge tube rack

Filled PP, sturdy construction. Stackable racks with alphanumerical positions. Operating temperature -20 to 90 °C. Autoclavable (121 °C). Density 1.2 g/cm<sup>3</sup>. Will not float in waterbath. Racks are supplied in two-pieces (Ø 11 mm, for microcentrifuge tubes) or three-pieces (Ø 13 mm, for cryogenic tubes). The racks can be assembled securely and permanently with minimum handling. Generous spacing between positions, so that tubes with screw cap and snap lids can be positioned easily. Pack of 5.



for Ø up to mm	Positions	Length mm	Width mm	Height mm	white Cat. No.	blue Cat. No.	red Cat. No.	yellow Cat. No.
13	6 x 14	265	126	38	43410 00	43410 01	43410 02	43410 03
11	8 x 16	265	126	38	43410 50	43410 51	43410 52	43410 53

## PARAFILM® M Sealing film

### Practical features

Elastic PARAFILM® M sealing film always fits, whether for beakers or Erlenmeyer flasks, weighing bottles or graduated cylinders. It protects your samples from contamination or evaporation, and prevents leakage from overturned containers. PARAFILM® M can be stretched by up to 200%, and be sealed to irregular shapes and surfaces.

### Material

PARAFILM® M is free of plasticizers, and consists largely of polyolefins and paraffin waxes. If PARAFILM® M should come into contact with food, the guidelines of the locally valid food handling laws should be followed. PARAFILM® M complies with the general requirements of the FDA (Food and Drug Administration) for use under 55 °C, as well as satisfying GMP (Good Manufacturing Practice).

### Physical properties

Toxicity: non-toxic

Melting point: 60 °C

Flash point: 301 °C

Temperature range (continuous use):

-45 °C to +50 °C

Stretching ability: 200%

Elongation at tear: 300%

Gas permeability in 24 hours at 23 °C

with 50% relative humidity:

O<sub>2</sub> (oxygen): ≤ 350 cm<sup>3</sup>/m<sup>2</sup>

N<sub>2</sub> (nitrogen): ≤ 105 cm<sup>3</sup>/m<sup>2</sup>

CO<sub>2</sub> (carbon dioxide): ≤ 1100 cm<sup>3</sup>/m<sup>2</sup>

Water vapor permeability in 24 hours at

37 °C and 90% relative humidity: 0.8 g/m<sup>2</sup>

### Effects of 48 hours of exposure at 23 °C

Acids:	
Hydrochloric acid 36.5%	resistant
Sulphuric acid 98%	resistant
Nitric acid 95%	resistant*
Alkaline solutions:	
Sodium hydroxide 22%	resistant
Ammonia 28%	resistant
Saline solutions:	
Sodium chloride 20%	resistant
Potass. permanganate 5%	resistant*
Iodine solution 0.1 mol/l	resistant*
Organic solvents:	
Methanol	resistant
Ethanol	resistant
Isopropanol	resistant
Diethylether	not resistant
Chloroform	not resistant
Carbon tetrachloride	not resistant
Benzene	not resistant
Toluene	not resistant

\* Brown coloration

### Chemical resistance

PARAFILM® M is resistant up to 48 hours against many polar substances, e.g., saline solutions, inorganic acids and alkaline solutions. After this period embrittlement may occur.

### Storability

PARAFILM® M can be stored for at least 3 years without loss of quality under storage condition between 7 °C and 32 °C and a relative humidity of 50%.

### PARAFILM® M Sealing film

Width mm	Length m	Pack of	Cat. No.
50	75	24	7016 11
100	38	12	7016 05
100	75	12	7016 06
500	15	6	7015 01

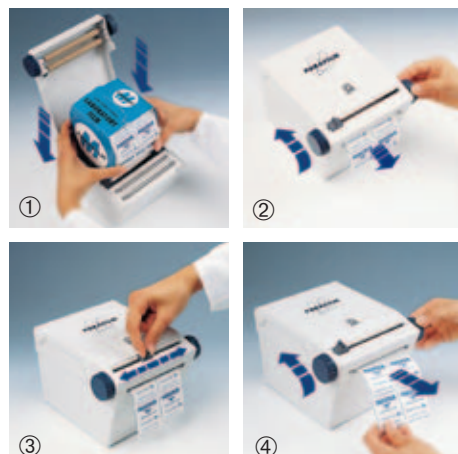
### PARAFILM® M Cutter

The handy PARAFILM® M Cutter is convenient for clean storage and cutting of PARAFILM® M sealing film. Suitable for 50 mm and 100 mm wide rolls. Pack of 1.

Cat. No.  7016 50



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## Pasteur pipettes

### disposable

PE-LD. Very good reproducibility of the number of drops per milliliter. Ideal for aliquots. Pasteur pipettes can be filled and deep-frozen, or changed into a closed vessel by heat-sealing the tip. The integrated pipetting bulb depresses easily, minimizing fatigue from frequent pipetting. Resistant to gas or gamma radiation sterilization.

Graduation/ Subdivision ml	Withdraw volume ml	Outer-Ø tip mm	Length mm	Drop quantity of ml	Pack of*	Cat. No.
–	3.0	2.8	152	25-27	5000	7477 50
1 / 0.25	3.5	3.4	151	25-30	5000	7477 55
3 / 0.5	3.5	3.2	152	21-28	5000	7477 60
2 / 0.5	2.0	3.3	152	22-26	5000	7477 65
–	4.0	1.0	148	60-75	5000	7477 70
–	1.0	1.0	105	50	3200	7477 75

\* Pack quantities: 5000 = 10 cartons of 500, 3200 = 8 cartons of 400.



## Dropping pipettes

### with integrated bellows

PE-LD. For sampling and decanting infectious or toxic liquids. Graduated. Pack of 100.

Capacity ml	Length mm	Cat. No.
1.5	133	1254 10
5	194	1254 20



## Dropping pipette

### with integrated pipetting bulb

PE-LD. Pack of 250.

Capacity ml	Length mm	Cat. No.
1.8	98	1254 00



## Pasteur pipettes

Soda-lime glass, ISO 7712. Long drawn-out capillary tip. Suction end with constriction for a cotton plug. Pack of 1000 = 4 boxes of 250.

Capacity ml	Inner-Ø tip mm	Outer-Ø mm	Length suction tube, mm	Length tip mm	Total length mm	Cat. No.
2	1.0	7	25	45	145	7477 15
2	1.0	7	25	120	225	7477 20

## Rubber cap

Natural rubber (NR). Pipetting aid for glass pasteur pipettes. Pack of 100.

Cat. No.	1247 00
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All products can also be found in our online catalog at: [www.brand.de](http://www.brand.de)





## Disposable micro-pipettes, intraMARK

### BLAUBRAND®, conformity certified, with ring mark

DIN ISO 7550. Conformity certified for volumes greater than 5 µl. Calibrated to contain (TC, In). Color code to ISO for clear identification. CE-marked according to IVD-Directive 98/79 EC. Pack quantity 1000 = 4 boxes of 250. 200 µl: Pack of 800 = 4 boxes of 200.

Mark(s) at µl	Color Code	Length mm	Accuracy ≤ ± %	Reproducibility ≤ %	Cat. No.
1/2/3/4/5*	white	125	0.30	0.6	7087 07
10	orange	125	0.25	0.5	7087 09
20	black	125	0.25	0.5	7087 18
25	2 x white	125	0.25	0.5	7087 22
20 + 40	2 x red	125	0.25	0.5	7087 28
40	2 x red	125	0.25	0.5	7087 27
50	green	125	0.25	0.5	7087 33
50 + 100	blue	125	0.25	0.5	7087 45
100	blue	125	0.25	0.5	7087 44
200	red	125	0.25	0.5	7087 57

\* conformity certified for 5 µl mark

## Disposable micro-pipettes, intraEND

### BLAUBRAND®, conformity certified, without ring mark

DIN ISO 7550. Conformity certified for volumes greater than 5 µl. Volume defined by end-to-end filling. Calibrated to contain (TC, In). CE-marked according to IVD-Directive 98/79 EC. Pack quantity 1000 = 4 boxes of 250. One pipetting aid, cat. no. 7091 10, included in each pack (> 1 µl).



Capacity µl	Length mm	Accuracy ≤ ± %	Reproducibility ≤ %	Cat. No.
1*	29	0.5	1.5	7091 01
2*	29	0.5	1.0	7091 03
3*	29	0.5	1.0	7091 05
5	29	0.5	1.0	7091 07
10	29	0.5	1.0	7091 09
20	29	0.5	1.0	7091 18
25	29	0.5	1.0	7091 22
50	29	0.5	1.0	7091 33
100	60	0.5	2.0	7091 44

\* not conformity certified

## Disposable Delbrück micropipettes, intraEND

### BLAUBRAND®, conformity certified, to Prof. Delbrück

DIN ISO 7550. Volume defined by end-to-end filling. Calibrated to contain (TC, In). Sodium-heparinized. Ideal for capillary blood sampling. With a length of only 30 mm, the pipette can be placed directly into a microcentrifuge tube, where it will release the sample during centrifugation. CE-marked according to IVD-Directive 98/79 EC. Pack quantity 1000 = 10 boxes of 100.



Capacity µl	Length mm	Accuracy ≤ ± %	Reproducibility ≤ %	Cat. No.
20	30	0.5	1.0	7086 60
50	30	0.5	1.0	7086 64

## Pipetting aid

For BLAUBRAND® intraEND micropipettes (> 1 µl). Consisting of the PET plastic tube, silicone adapter, and TPE suction bellows with venting hole. Pack of 10.

Cat. No. 7091 10

**Mouth pipetting is prohibited according to the Regulations for Accident Prevention in Germany.**



## Pipette holder

For intraEND and Delbrück micropipettes and test tubes (EASYCAL™). Pack of 10.

Cat. No. 7086 05



## Micro haematocrit capillaries

without calibration mark, heparinized or non-heparinized

DIN ISO 12772 and BS 4316-68. With color code. For use in haematocrit centrifuges. Heparinized: heparinized with sodium heparinate over internal surface, red color code, for capillary blood. Non-heparinized: Blue color code, for use with heparinized venous blood. CE-marked according to IVD-Directive 98/79 EC. Pack quantity 1000 = 10 glass boxes of 100.

Description	Color-Code	Length mm	Wall thickness mm	Inner-Ø mm	Outer-Ø mm	Cat. No.
heparinized	red	75 ± 1	0.2	1.1 - 1.2	1.5 - 1.6	7493 11
non-heparinized	blue	75 ± 1	0.2	1.1 - 1.2	1.5 - 1.6	7493 21



## Haematocrit sealing compound

Non-drying cement on a plastic plate. For quick sealing of micro-haematocrit capillaries. Up to 24 capillaries can be placed vertically in numbered positions along the sides of the tray. CE-marked according to IVD-Directive 98/79 EC. Pack of 10.

Cat. No. 7495 10



**Note:** Hold the capillaries (~ 2/3 full) near the empty end, and stick the empty end into the cement with a slight twist to seal it.



# Counting Chambers

Counting chambers serve to determine the number of particles per volume unit of a liquid. The particles (e.g., leucocytes, erythrocytes, thrombocytes, bacteria, fungus spores, pollen) are visually counted under a microscope.

## Counting chamber with spring clips



## Counting chamber without spring clips



## BLAU BRAND®-counting chambers

BLAU BRAND® counting chambers are precision measuring instruments. They conform to DIN 12847.

### Description of functional characteristics

The microscope-slide-sized base plate is made of special optical glass. Milled grooves divide the surface into two large fields (outside) and three narrow ridges (inside). The two outer fields are for inscriptions, whereas the ridges are ground and polished. The central ridge (= chamber bottom) has two engraved sets of rulings for counting, separated by a groove. Generally the chamber

bottom on the central ridge is 0.1 mm lower (= chamber depth) than the two outer ridges. Hence, when a cover glass is placed on top, there is a gap of 0.1 mm between the glass and the central ridge. The lateral boundaries of the volume to be counted are formed by the imaginary planes projected vertically onto the boundary lines of the ruling.

### Equation for particle determination (for general use)

$$\text{Particles per } \mu\text{l volume} = \frac{\text{Counted particles}}{\text{Counted surface (mm}^2\text{)} \cdot \text{Chamber depth (mm)} \cdot \text{Dilution}}$$

### Example: Erythrocytes

Chamber: Improved Neubauer

1. Counted particles: 528 erythrocytes
2. Counted surface: 5 group squares, equivalent to 0.2 mm<sup>2</sup>
3. Chamber depth: 0.1 mm
4. Dilution: 1:200

$$\begin{aligned} & \frac{528 \cdot 200}{0.2 \cdot 0.1 \cdot 1} \\ &= 5.28 \cdot 10^6 \text{ ery}/\mu\text{l blood} \\ &= \underline{5.28 \text{ Mio ery}/\mu\text{l blood}} \end{aligned}$$

### Pack quantities for all counting chambers:

- 1 Counting chamber, complete with
- 2 haemocytometer cover glasses, in transparent plastic box.

**Special chamber depth 0.02 and 0.05 mm**  
available on request!



BRAND counting chamber and haemocytometer cover glasses are CE-marked according to IVD-Directive 98/79 EC.

### Cleaning

For cleaning, we recommend the disinfectant cleaner Mucocit®-T (page 263).

## Improved Neubauer

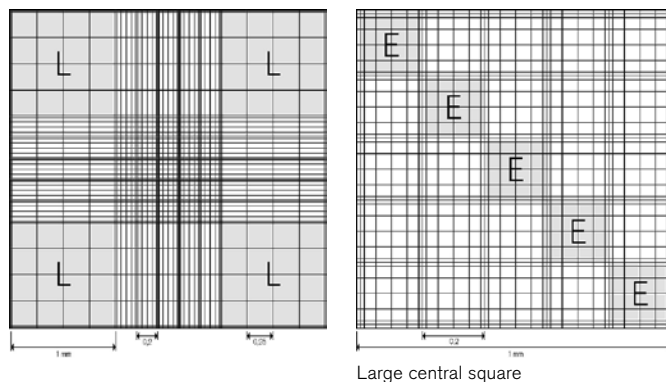
### double ruling, with or without spring clips

The ruling shows 9 large squares of 1 mm<sup>2</sup> each. The four large squares in the corners marked "L" for counting leucocytes are each subdivided into 16 squares with 0.25 mm sides.

The large square in the center is subdivided into 25 group squares of 0.2 mm sides. Each group square consists of 16 mini squares with 0.05 mm sides, each having an area of 0.0025 mm<sup>2</sup>.

The 5 group squares marked "E" are used for counting thrombocytes and erythrocytes.

All group squares have triple boundary lines on each side. The central line is the limiting line and determines whether cells in the marginal area shall be included in the count or not. CE-marked according to IVD-Directive 98/79 EC.

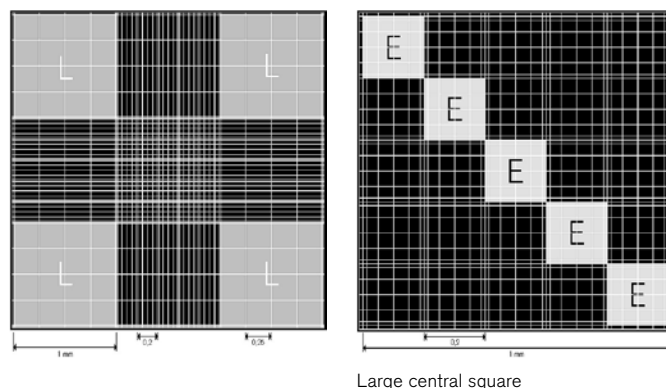


Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7178 05
with spring clips	0.1 mm	7178 20

## Improved Neubauer, bright-line

### double ruling, without spring clips

Same ruling as Improved Neubauer, but with rhodium-coated chamber bottom. Rulings are engraved into the rhodium layer and appear bright under normal microscope settings. By altering the contrast, the microscope image can be reversed, so that the rulings appear brighter or darker, as required. CE-marked according to IVD-Directive 98/79 EC.



Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7178 10

## Neubauer

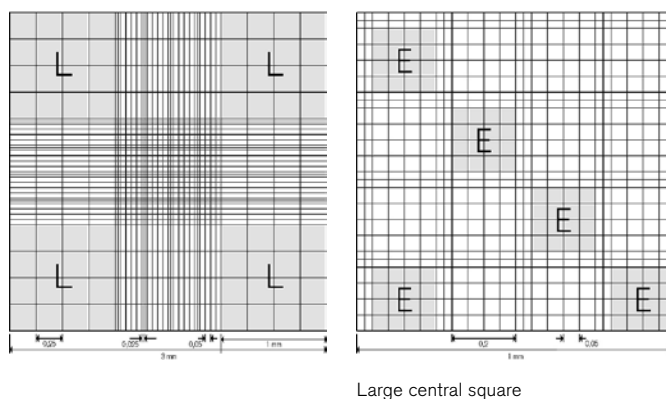
### double ruling, with or without spring clips

The ruling shows 9 large squares of 1 mm<sup>2</sup> each. The four large squares in the corners marked "L" for counting leucocytes are each subdivided into 16 squares with 0.25 mm sides.

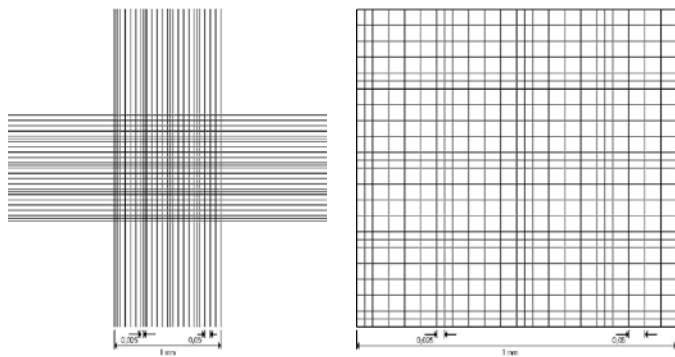
The large square in the center is subdivided into 16 group squares of 0.2 mm sides. Each group square consists of 16 mini squares with 0.05 mm sides, each having an area of 0.0025 mm<sup>2</sup>.

The 5 group squares marked "E" are used for counting thrombocytes and erythrocytes.

Contrary to the more advanced Improved Neubauer counting chambers, the counting area of each group square is limited by the outer one of the triple boundary lines. CE-marked according to IVD-Directive 98/79 EC.



Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7186 05
without spring clips	0.1 mm	7186 20



Large central square

Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7180 05
with spring clips	0.1 mm	7180 20

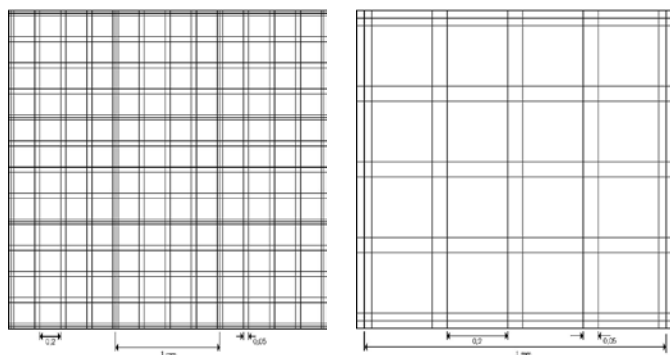
## Thoma

### double ruling, with or without spring clips

Rulings correspond to the central large square of the Neubauer chamber. The mini squares have an area of  $0.0025 \text{ mm}^2$  each. Since the outer large squares are not completed, the Thoma chamber is only used for counting thrombocytes and erythrocytes. CE-marked according to IVD-Directive 98/79 EC.

### Haemocytometer cover glasses for counting chambers see page 208.

We recommend in mm: 20 x 26 x 0.4 Haemocytometer cover glasses for all counting chambers in our range (except Fuchs-Rosenthal: size in mm: 24 x 24 x 0.4, Nageotte: size in mm: 22 x 30 x 0.4).



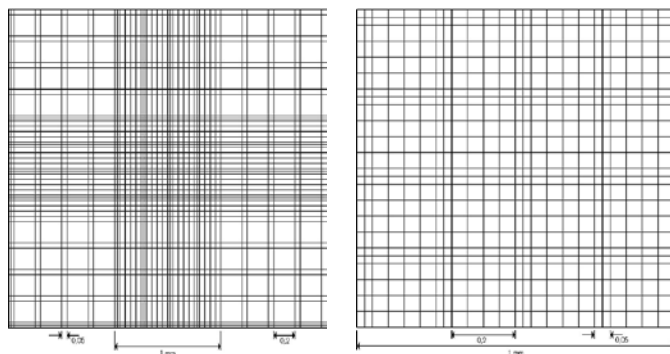
Large central square

Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7189 05
with spring clips	0.1 mm	7189 20

## Bürker

### double ruling, with or without spring clips

The ruling shows 9 large squares of  $1 \text{ mm}^2$  each. These are used for counting leucocytes. Each large square is subdivided by double lines ( $0.05 \text{ mm}$  apart) into 16 group squares with  $0.2 \text{ mm}$  sides. The group squares correspond in size to the Neubauer counting chamber, but have no further subdivisions. They are used for counting thrombocytes and erythrocytes. The double lines form mini squares with an area of  $0.0025 \text{ mm}^2$ . CE-marked according to IVD-Directive 98/79 EC.



Large central square

Description	Chamber depth	Cat. No.
without spring clips	0.1 mm	7195 05
with spring clips	0.1 mm	7195 20

## Bürker-Türk

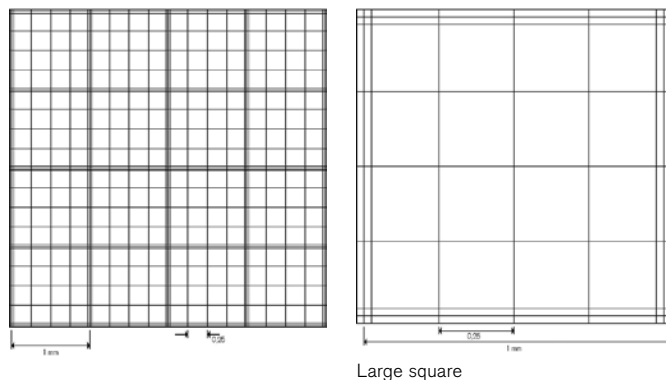
### double ruling, with or without spring clips

Combination of the Bürker and Thoma systems. The chamber depth is  $0.1 \text{ mm}$ . The ruling shows 9 large squares of  $1 \text{ mm}^2$  each. The large squares are subdivided into 16 group squares with  $0.2 \text{ mm}$  sides. In the central large square, each group square is subdivided into 16 mini squares with  $0.05 \text{ mm}$  sides ( $= 0.0025 \text{ mm}^2$ ). CE-marked according to IVD-Directive 98/79 EC.

## Fuchs-Rosenthal

### double ruling, with or without spring clips

The ruling differs from the customary systems for blood cell counts by its large area of 16 mm<sup>2</sup>. The ruling shows 16 large squares of 1 mm<sup>2</sup>. Each large square is subdivided into 16 mini squares with 0.25 mm sides and an area of 0.0625 mm<sup>2</sup>. This chamber is frequently used for counting cells in the cerebrospinal fluid. CE-marked according to IVD-Directive 98/79 EC.

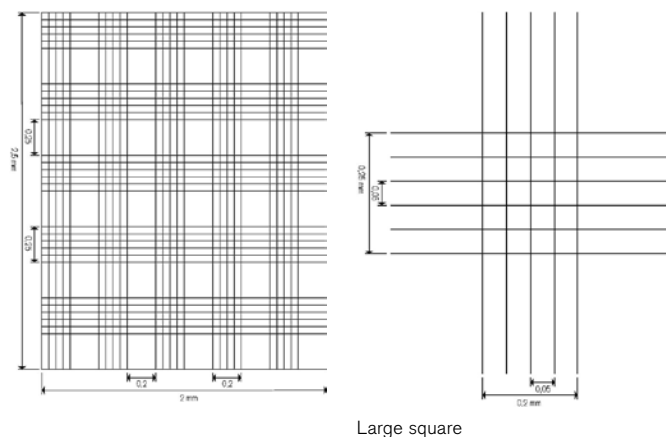


Description	Chamber depth	Cat. No.
without spring clips	0.2 mm	7198 05
with spring clips	0.2 mm	7198 20

## Malassez

### double ruling, without spring clips

The ruling is rectangular, covering an area of 5 mm<sup>2</sup>. The large rectangles measure 0.25 x 0.20 = 0.05 mm<sup>2</sup>. They are each subdivided into 20 mini squares with an area of 0.0025 mm<sup>2</sup>. This chamber is commonly used for counting cells in the cerebrospinal fluid, or for counting nematodes. CE-marked according to IVD-Directive 98/79 EC.

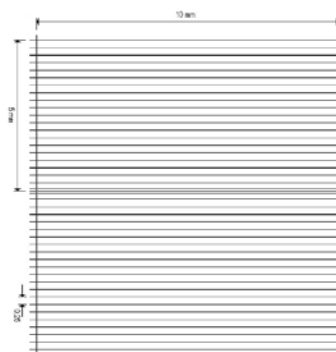


Description	Chamber depth	Cat. No.
without spring clips	0.2 mm	7190 05

## Nageotte

### double ruling, without spring clips

The chamber depth is 0.5 mm. The square area of 100 mm<sup>2</sup> is subdivided into 40 rectangles with an area of 0.25 x 10 = 2.5 mm<sup>2</sup> each. This chamber is commonly used for counting cells in the cerebrospinal fluid, or for counting nematodes. CE-marked according to IVD-Directive 98/79 EC.



Description	Chamber depth	Cat. No.
without spring clips	0.5 mm	7213 05

## Haemacytometer cover glasses

### for counting chambers

Borosilicate glass, DIN ISO 8255. Refractive index  $n_e = 1.52 \pm 0.01$ ; Abbe number  $v_e = 56.5 \pm 0.5$ . Flatness tolerance  $\pm 3 \mu\text{m}$ . They differ from ordinary cover glasses by their plain ground and polished surface. CE-marked according to IVD-Directive 98/79 EC. Packing: 2 cover glasses in a plastic bag, separated by tissue paper. Pack quantity: 10 boxes at 10 cover glasses = 100 cover glasses per carton.



Length mm	Width mm	Thickness mm	Cat. No.
24	24	0.4	7230 14
20	26	0.4	7230 15
22	30	0.4	7230 16

## Cover glasses for microscope slides

Pure white (clear) borosilicate glass, hydrolytic class 1, with excellent chemical resistance. Thickness No. 1 (0.13 to 0.17 mm). Refractive index  $n_e = 1.52 \pm 0.01$ , Abbe number  $v_e = 56.5 \pm 0.5$ . Full automat production guarantees "ready-for-use" quality – clean, dust and grease free, distortion-free, flatness within  $\pm 3 \mu\text{m}$ .

Pack quantities: Square shape: 2000 = 10 boxes of 200.

Rectangular shape: 1000 = 10 boxes of 100.



Description	Size mm	Cat. No.
square shape	18 x 18	4700 45
	20 x 20	4700 50
	22 x 22	4700 55
	24 x 24	4700 60
rectangular shape	24 x 40	4708 16
	24 x 50	4708 19
	24 x 60	4708 20

## Microscope slides

Half white. Optical glass, hydrolytic class 3. Thickness approx. 1 mm, size approx. 76 x 26 mm (DIN ISO 8037-1). **We recommend using slides with ground edges to reduce the risk of injury.** To protect against penetrating humidity the entire packing unit is also optionally available sealed in an aluminium bag. Pack quantity 2500 = 50 boxes of 50.



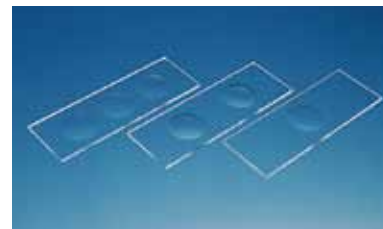
Description	Cat. No. Standard pack
ground edges	4747 43
ground edges, twin frosted end	4747 44
cut edges	4747 01
cut edges, twin frosted end	4747 02

**Note:** Not suitable for storage or transport at high humidity!

## Cavity slides

White (clear). Optical glass, hydrolytic class 3. Rectangular ground edges. Thickness 1.2 - 1.5 mm, size in mm: 76 x 26. Concavities of 15-18 mm Ø, depth 0.6 - 0.8 mm. Pack of 50.

Description	Cat. No.
1 concavity	4755 05
2 concavities	4755 35
3 concavities	4755 65



## Staining trough with tray

Soda-lime glass. For 10 slides, size in mm: 76 x 26. With lid. Please order staining trough, tray, and wire handle separately. Pack of 10.

Description	Length mm	Width mm	Height mm	Cat. No.
Staining trough with lid	105	85	70	4722 00
Tray for 10 slides	91	70	48	4720 00
Wire handle to move tray (stainless steel)				4731 00



## Staining trough, Hellendahl

Soda-lime glass. For 16 slides, size in mm: 76 x 26. Pack of 10.

Description	Length mm	Width mm	Height mm	Cat. No.
with lid	100	50	95	4726 00



## Staining trough, Hellendahl extended

Soda-lime glass. For 16 slides, size in mm: 76 x 26. Pack of 10.

Description	Length mm	Width mm	Height mm	Cat. No.
with lid	60	55	105	4727 00





## Staining trough, Schiefferdecker

Soda-lime glass. For 10 slides, size in mm: 76 x 26. Pack of 10.

Description	Length mm	Width mm	Height mm	Cat. No.
with lid	85	70	45	4725 00



## Staining trough, Coplin

Soda-lime glass. For 10 slides, size in mm: 76 x 26. Pack of 10.

Description	Ø mm	Height mm	Cat. No.
with lid	80	115	4728 00



## Staining trough, Hellendahl extended

PMP, transparent. For 16 slides, size in mm: 76 x 26 (8 pairs back-to-back). Pack of 4.

Description	Length mm	Width mm	Height mm	Cat. No.
with lid	57	57	90	4744 00



## Staining trough, Schiefferdecker

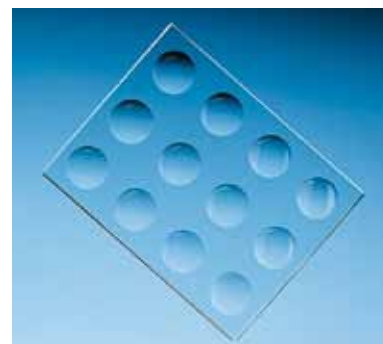
PMP, transparent. For 20 slides, size in mm: 76 x 26 (10 pairs back-to-back). Pack of 4.

Description	Length mm	Width mm	Height mm	Cat. No.
with lid	86	70	51	4744 10

## Spotting tile

Soda-lime glass. 12 polished cavities 20-22 mm Ø, depth 2 mm, capacity approx. 0.2 ml. Ground rectangular edges. Pack of 1.

Description	Length mm	Width mm	Height mm	Cat. No.
Capacity approx. 0.2 ml	130	100	6	4735 00



## Staining trough with tray

PMP. Transparent. With two lids: one to help protect against evaporation when not in use; one with a handle slot facilitating the staining process. Tray of polypropylene.

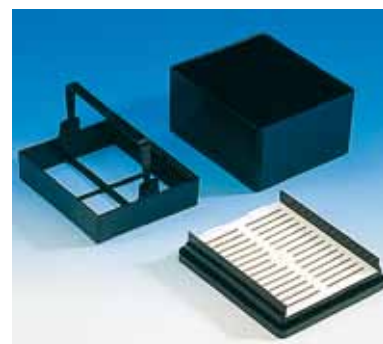
Description	Length mm	Width mm	Height mm	Pack of	Cat. No.
Staining trough, without tray	101	83	70	4	4743 00
Tray (PP) for 20 slides				2	4743 05

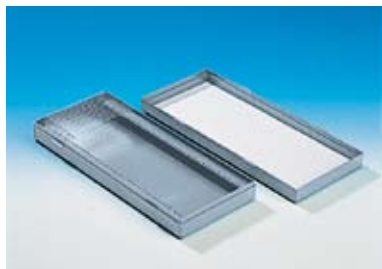


## Staining trough with tray

POM. For 25 slides, size (in mm) 76 x 26. The close-fitting lid helps protect against evaporation. Staining tray with fold down handle.

Description	Length mm	Width mm	Height mm	Pack of	Cat. No.
staining trough complete	98	88	52	5	4718 00
tray with handle	91	79	38	5	4714 00
trough	98	88	52	5	4715 00





## Slide boxes

PS. For slides, size (in mm) 76 x 26. Numbered slots in base. Lid with index card. Pack of 1.

For ... slides	Length mm	Width mm	Height mm	Cat. No.
25	120	96	35	4758 00
50	230	97	35	4759 00
100	230	187	35	4760 00



## Slide box

PP, sturdy design. Screw lid with sealing wire lug. Ideal for storing or shipping 5 thick or 10 thin slides. Slides protrude 10 mm above the box, to facilitate removal. Pack of 10.

Description	Cat. No.
Maximum internal dimensions Ø x H in mm: 45 x 90	4769 00