

Catalog

2019/2020



THINK! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Distributor

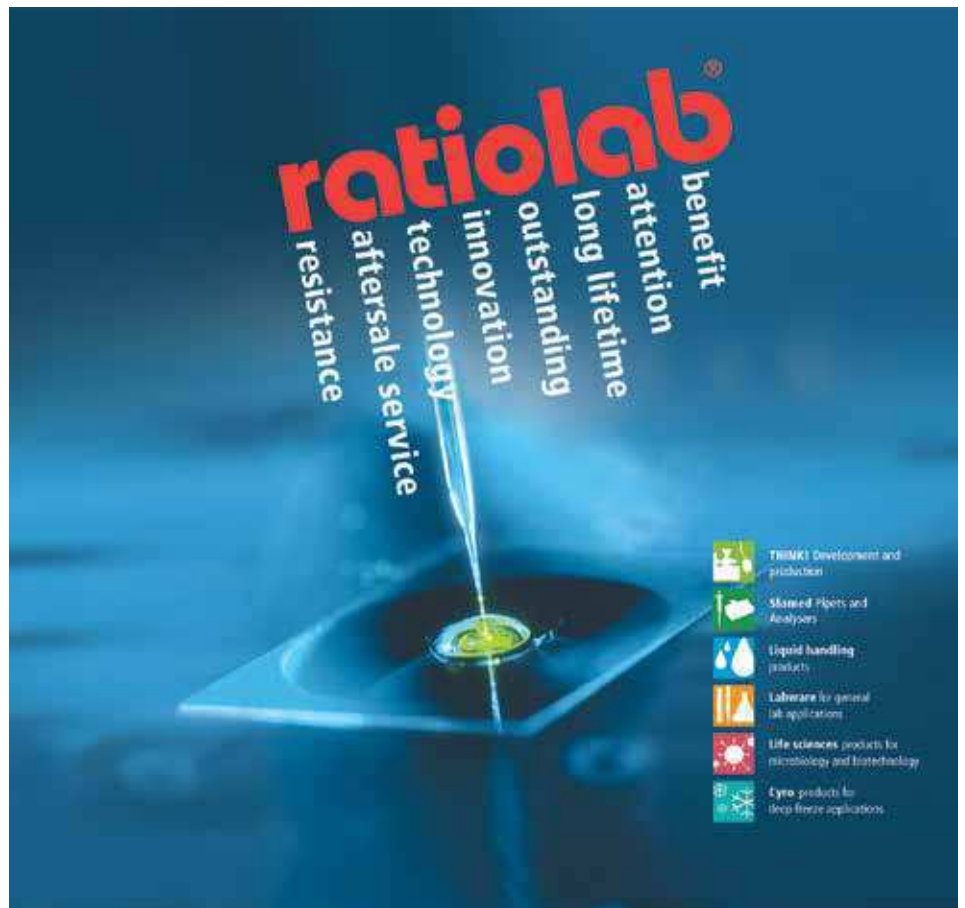


ratiolab[®]
disposables for sciences

ratiolab® was established in 1975 in Dreieich-Buchsschlag nearby Frankfurt. Since then, ratiolab® develops and produces high-quality plastic products for the laboratory and medicine.

Users from research, medical, science and industry appreciate and trust our products worldwide. These are characterized by a constantly high quality as well as a high level of efficiency and innovation.

We supply everything that facilitates daily work routines, increases accuracy and improves process safety – in fact, those items that help to make the laboratory all that more efficient!





THINK! Development and production of customized products

We can make your ideas become reality!	10
Joint development	11
Joint development	11
Intelligent tool design	12
Perfection in production	13
Reliable logistics	13



Slamed Pipets and Analysers

Single-channel pipet L	16
Single-channel pipet OLV	17
Single-channel pipet CP	18
Multichannel pipet ME/MT	19
Pipet stand New	19
ratiopetta® Pipet	20
Micro Centrifuge	22
Incubator	22
Digital Burette DB	23
Bottle-Top dispenser	23
Dispetta Dispenser	24
Pipetting Aids	25
Coagulometer K-3003 Chrom	26
Coagulometer CC-4000	27



Liquid handling products

Pipetting Reservoirs	30
Pipet Tips	31
Pipet Tips System and Refill System Multirack, MultiTray®, Multibox® plus and Multibox® ultra	32
Pipet Tips	34
aeroject® ultra Pipet Tips	37
ratiolab® Premium Tips New	38
ratiolab® aeroject® Premium Tips with Filter New	39
Serological Pipets	40
Dispenser Tips	41
Pasteur-Plast Pipets	42
Sterilizing Pipet Box	45



Labware for general lab applications

Cuvets	48
Multicell Cuvets	51
Analysis Beakers	52
Scintillation Vessels	52
Cell Counter Vials	53
Centrifuge Tubes	53
Microcentrifuge Tubes	54
Test Tubes	56
Stoppers	56
Multistand Rack	57
Rack for Centrifuge Tubes New	57
Rack for Microcentrifuge Tubes	57
Autoclavable Bags	58

Ear Tips	61
Ear Funnels	61
Multipurpose Beakers	62
Multi Purpose Beaker System	62
Multi Purpose Bottles	63
Petri Dishes	63
Inoculating Loops	63
Multipurpose Container	64
Multipurpose Container	65
Wide-neck bottle	65



Life science products for
microbiology and biotechnology

Micro Test Plates	68
Micro Test Plates	69
Spot Test Plates	69
Deep-Well-Plates	70
Closures for Deep-Well-Plates	72
Reagent Reservoirs	72
Cover Films for Micro Test and PCR Plates	73
Micro-Tubes System	74
PCR Tubes	76
PCR Plates	77
PCR-Racks	77



Cryo products for
deep-freeze applications

Cryo Boxes, Cardboard, Format 133 x 133 mm, Grid Inserts	80
Cryo Boxes, Cardboard, Format 130 x 62 mm	81
Rainbow Cryo Labels	81
Cryo Boxes, Cardboard, Format 136 x 136 mm Grid Inserts	82
Cryo Boxes, Cardboard, Format 134 x 67 mm; 75 x 75 mm	83
Format 136 x 136 x 75 mm; 148 x 148 x 130 mm	83
Cryo Boxes with Slip Lid, PP, Format 133 x 133 mm	84
Cryo Boxes with Grids, PP, Format 133 x 133 mm	85
Cryo Boxes and Grid Inserts, PP, Format 133 x 133 mm	86
Cryo Boxes with Grids, PC, Format 132 x 132 mm; 76 x 76	87
Cryo Tubes	88
Cryo Tubes Accessories	89
Cryo Racks for Freezer Chests	90
Cryo Racks for Freezer Cabinets	91
Cryo Racks Special Production	93

**Technical
information**

Chemical resistance of plastics	96
Order Number Index	100

Our Company



THINK! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

ratiolab® offers and solutions

Beside standardized consumables made from plastic, which you can find in our catalogues, ratiolab offers the individual development and production of plastic products.

This professional attitude results in products and solutions that laboratories in research, science and industry require in their daily work.

Please contact us, if you have a product idea or a product wish to make your work easier. Our staff will take care of a solution.



Quality Management

Our Quality Management System is certificated according to DIN EN ISO 9001:2015 and EN ISO 13485:2016; for only uniform high quality products guarantee the accuracy and reproducibility required in laboratories.



ratiolab® subsidiaries:

- In **Dreieich-Buchschlag, Germany**, the headquarters with development, sales, logistics and administration. Here a built-up area of 2.500 m² is available.
- In **Szada, Hungary**, the highly modern production of plastic injection mouldings is located. Here an area of overall 6.500 m² is available.
- In **Vác, Hungary**, our operation for assembly, refining and packaging is located.
- In **Dubai, United Arab Emirates** we have a distribution office for the MENA region.

Our approximately 60 employees are the basis foundations for our sustainable success. Their competence, motivation and a high degree of social competence are the guarantees for our future growth. Our team lives our values every day.



Dreieich-Buchschlag, Germany



Dreieich-Buchschlag, Germany

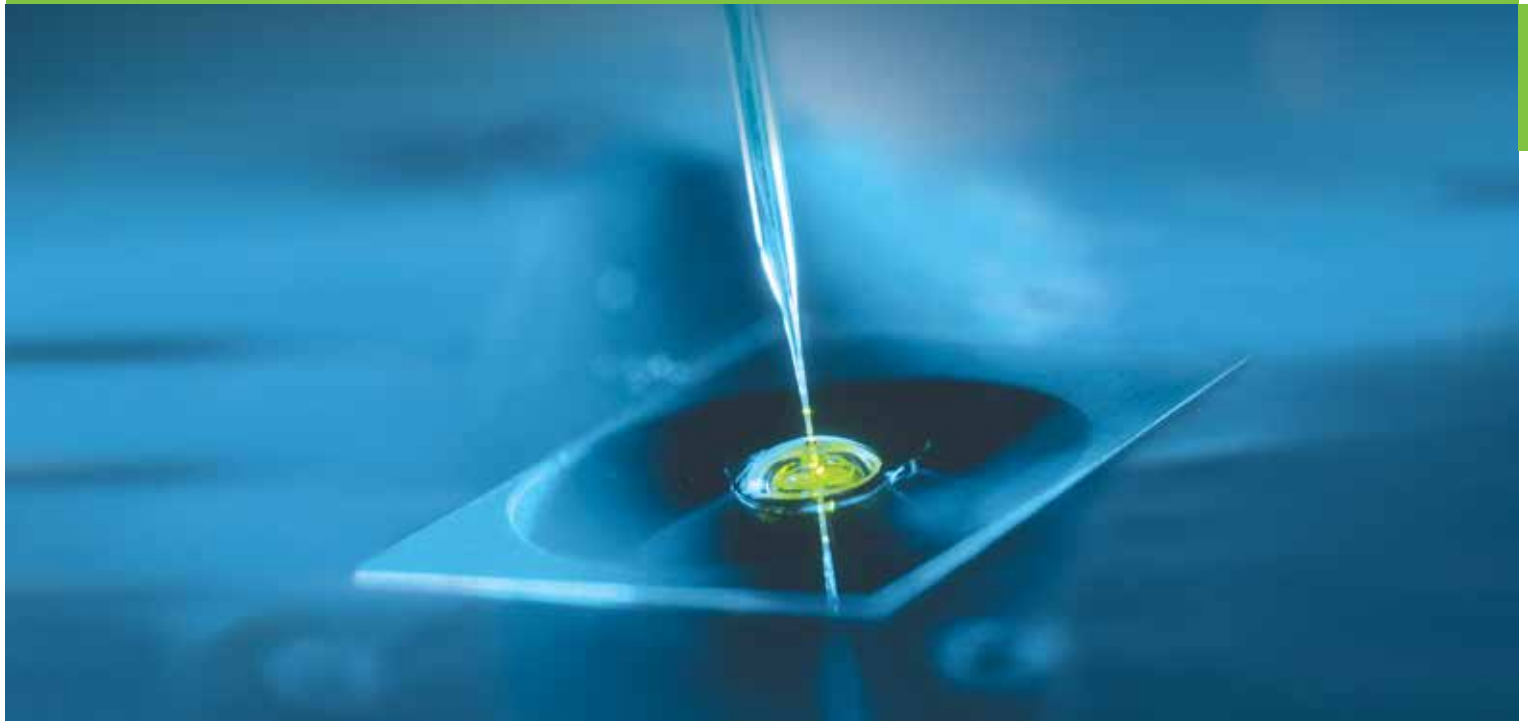


Szada, Hungary



Szada, Hungary

Think!



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Think!

We give reality to your ideas!

Disposable items often have to be individual and demanding just like your future application areas. Here we focus on our area „Think“ and develop high quality and individual plastic articles together with our clients.

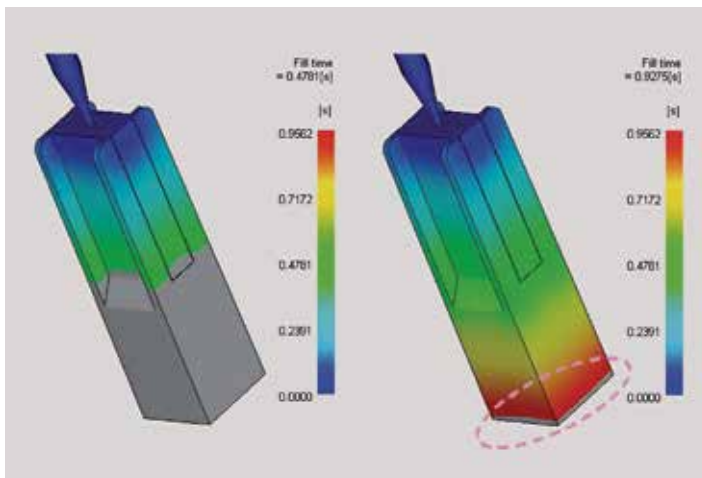
Therefore our entire know-how, years of experience and most modern technique are available to you. Our service spectrum includes the following sectors:



Development and design

We develop our products according to your ideas and requirements together with you. It is our aim to provide you with a design suitable and cost-conscious construction, considering your customer standards.

- consulting and know-how transfer through common workshops
- preparation of specifications on the basis of your requirements
- 3D-CAD construction using most modern programs
- prototyping – Production of first- and hand samples in 3D print and other selected procedures
- preparation of initial sample reports using 3D measuring machines



Tool and mold construction

Intelligently designed tools play a decisive role in the successful series production of the products. Specifically for consumables, which are manufactured in large numbers, factors such as process stability and long tool lifetime play a significant role.

- production of tools for the plastics processing
- fixture construction
- maintenance and repairing of tools



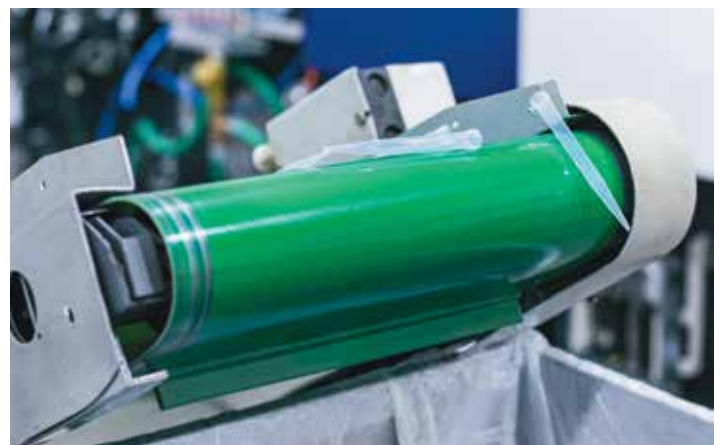
Think!

Plastics production

We produce complex and precise plastic products, from small to large series, with a highly modern machine park, in a controlled dust-free environment, in a 3-shift-production in our subsidiary in Szada.

Automated removals, as well as the subsequent handling of the products, are also our competency.

- plastic injection molding with a tonnage of 25-160 to. locking force
- most modern extraction systems ensure the secure handling of the products
- highly automated handling systems for efficient processing of the products in high quantities and rapid cycles



Assembly

Our assembly is situated in our subsidiary in Vác. Here we offer low-volume and large-volume production for the following services:

- quality controls
- packaging of bulk substances as well as the manual placement of packaging equipment
- pad-printing
- ultrasonic welding of plastic products



Logistics

We have a large, well-organized warehouse facility. Every day we pick and dispatch numerous shipments all over the world. We are happy to organize the shipping to you or directly to your customers!



Dreich-Buchsschlag, Germany



Szada, Hungary

Slamed



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Single-channel pipet L



Pipet L

CE IVD

The Pipet L meets all the demands for sterile liquid handling in microbiological and molecularbiological laboratories. It is fully autoclavable and resistant to UV-light. Easy volume setting by turning the pushbutton avoids jamming the gloves in the knurled screw.

Low spring forces of pipetting stroke and tip ejector accommodate the daily work without hand fatigue. With ten pipet models the volume range is covered from 0.1 µl up to 10 ml.

- perfect measuring results
- fully autoclavable and UV-light resistant
- volume settings by pushbutton
- grooved handle reduces the influence of hand warmth
- fatigue free operation because of ergonomic designed handle and reduced spring forces
- adjustable length of tip ejector enables the use of any brand of pipet tips
- maintenance free: components are manufactured from stainless steel and chemical resistant plastic
- filters in the shafts protect the 5 ml and 10 ml pipets against overfilling and contamination
- 3 years warranty

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0.1-2	L2	+1.5	0.7	1	47 70 001
0.5-10	L10	+0.5	0.4	1	47 70 002
2-20	L20	+0.8	0.3	1	47 70 003
5-50	L50	+0.8	0.4	1	47 70 004
10-100	L100	+0.8	0.2	1	47 70 005
20-200	L200	+0.6	0.2	1	47 70 006
50-250	L250	+0.6	0.3	1	47 70 007
100-1000	L1000	+0.6	0.15	1	47 70 008
1000-5000	L5000	+0.5	0.15	1	47 70 009
1000-10000	L10000	+0.5	0.2	1	47 70 010

Single-channel pipet OLV



Pipet OLV

CE IVD

The adjustable Pipet OLV is a robust and reliable tool for sample handling in medical and chemical laboratories.

The volume range of samples from 0.1 µl up to 10 ml is covered by ten pipets models. An ergonomic shaped handle and low spring forces contribute to reducing hand fatigue.

- perfect measuring results
- clear reading of the counter display
- grooved handle reduces the influence of the hand warmth
- less hand fatigue because of ergonomic design and low spring forces
- adjustable length of tip ejector
- maintenance free: components are manufactured of stainless steel, chemical and UV-light resistant components
- filters protect the 5 and 10 ml pipets against overfilling and contamination
- 3 years warranty

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0.1-2.0	OLV2	1.5	0.7	1	47 70 011
0.5-10	OLV10	0.5	0.4	1	47 70 012
2-20	OLV20	0.8	0.3	1	47 70 013
5-50	OLV50	0.8	0.4	1	47 70 014
10-100	OLV100	0.8	0.2	1	47 70 015
20-200	OLV200	0.6	0.2	1	47 70 016
50-250	OLV250	0.6	0.3	1	47 70 017
100-1000	OLV1000	0.6	0.15	1	47 70 018
1000-5000	OLV5000	0.5	0.15	1	47 70 019
1000-10000	OLV10000	0.5	0.2	1	47 70 020

Single-channel pipet CP



Pipet CP

CE IVD

Fixed volume pipet with tip ejector. For every laboratory in every field. Highest performance for the best price.

33 Pipet CP models within the range 2 to 1000 µl.

- excellent precision and accuracy in measurement of liquids
- ergonomic design of handle for easy and pleasant work
- easy removal of tip ejector when working with narrow test tubes
- piston made of chemically resistant material
- built in special system eliminating pipetting error
- maintenance free
- fully autoclavable
- individual quality certificate with each unit
- the pipet is made of materials resistant to corrosive agents
- 3 years warranty

Volume range µl	Model	Accuracy < ± %	Precision < %	Quantity per Pack	Order No.
2	CP2	3.0	1.5	1	47 70 031
5	CP5	2.0	1.0	1	47 70 032
7	CP7	1.5	0.7	1	47 70 033
10	CP10	1.2	0.5	1	47 70 034
15	CP15	1.0	0.5	1	47 70 035
20	CP20	0.9	0.4	1	47 70 036
25	CP25	0.9	0.4	1	47 70 037
30	CP30	0.9	0.3	1	47 70 038
40	CP40	0.9	0.3	1	47 70 039
44.7	CP44.7	0.9	0.3	1	47 70 040
50	CP50	0.9	0.3	1	47 70 041
60	CP60	0.9	0.3	1	47 70 042
70	CP70	0.9	0.3	1	47 70 043
75	CP75	0.9	0.3	1	47 70 044
80	CP80	0.9	0.3	1	47 70 045
90	CP90	0.9	0.3	1	47 70 046
100	CP100	0.9	0.3	1	47 70 047
120	CP120	0.8	0.3	1	47 70 048
150	CP150	0.7	0.3	1	47 70 049
200	CP200	0.6	0.2	1	47 70 050
200	CP200A	0.6	0.2	1	47 70 051
220	CP220	0.6	0.2	1	47 70 052
250	CP250	0.6	0.2	1	47 70 053
300	CP300	0.6	0.2	1	47 70 054
400	CP400	0.6	0.2	1	47 70 055
450	CP450	0.6	0.2	1	47 70 056
500	CP500	0.6	0.2	1	47 70 057
600	CP600	0.6	0.2	1	47 70 058
700	CP700	0.6	0.2	1	47 70 059
750	CP750	0.6	0.2	1	47 70 060
800	CP800	0.6	0.2	1	47 70 061
900	CP900	0.6	0.2	1	47 70 062
1000	CP1000	0.6	0.2	1	47 70 063

Multichannel pipet ME/MT and Pipet stand



Multichannel pipet ME/MT

CE IVD

The fully autoclavable Pipets ME/MT are specially designed for working with gloves under sterile conditions. The volume range from 1µl to 300 µl is covered by 4 models each in the 8- and 12-channel versions.

The patented manifold system ensures individual tight sealing of the pipet tips on each channel.

- perfect measuring results
- fully autoclavable and UV-light resistant
- volume settings by pushbutton avoids snatching the gloves
- ergonomic design, handle can be turned to an individual convenient position
- patented system makes manual corrections of the tip sealing redundant
- maintenance free: components are manufactured from stainless steel or chemical resistant plastics
- each pipet comes with quality certificate, holder and calibration key
- 3 years warranty

8-channel-pipet ME

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
1-10	ME10	2.0	1.2	1	47 70 064
5-50	ME50	1.6	0.6	1	47 70 065
20-200	ME200	1.0	0.6	1	47 70 066
50-300	ME300	1.0	0.6	1	47 70 067

12-channel-pipet MT

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
1-10	MT10	2.0	1.2	1	47 70 068
5-50	MT50	1.6	0.6	1	47 70 069
20-200	MT200	1.0	0.6	1	47 70 070
50-300	MT300	1.0	0.6	1	47 70 071

Pipet stand slamed®

Convenient and safe storage of pipets.

- rotating stand for up to 6 pipets
- pipet stand made of plexiglas for multichannel pipets and up to 4 pipets

Product	Fig. No.	Quantity per Pack	Order No.
Pipet stand for 6 pipets	1	1	94 20 025
Pipet stand for 4 pipets	2	1	94 20 026
Pipet stand for multichannel pipet	3	1	94 20 027



ratiopetta®

Pipetting is one of the most frequently used applications in laboratories. This is not only where precision and reliability are important, users also need products that are ergonomic, light and convenient. The ratiopetta® from ratiolab® meets these demands while offering outstanding value for money.

Product properties

- obtainable in volumes from 0.1 µl – 5000 µl
- full autoclavable, 20 min, 121°C
- universal cone for standard pipet tips
- easy volume setting by smooth-running setting ring
- fatigue-free work possible for the analyst over longer pipetting series
- touch-sensitive pressure points for pipetting and discharging
- modern, innovative materials
- individual checking according to ISO8655/DIN12650
- delivery includes a test certificate
- individual serial numbers
- suitable for right- and left-handers
- easy to calibrate
- corrosion-resistant piston and tip ejector
- 2 years guarantee

Delivery includes:

- pipet
- certificate of calibration
- operating instructions
- bench rack
- calibration key
- lubricant

Matching pipet tips can be found on pages 34-39.





Single-channel Precision Pipet ratiopetta®

CE IVD

Volume Range μ l	Accuracy* $< \pm$ %	Precision* $<$ %	Quantity per Pack	Order No.
0.1 – 2.5	3.00	3,00	1	47 80 025
0.5 – 10	1.50	1.50	1	47 80 010
2.0 – 20	1.20	1,00	1	47 80 020
10 – 100	1.00	0.40	1	47 80 100
20 – 200	0.80	0.40	1	47 80 200
100 – 1000	0,70	0.25	1	47 81 000
1000 – 5000	0.60	0.30	1	47 85 000

8-channel Precision Pipet ratiopetta®

CE IVD

Volume Range μ l	Accuracy* $< \pm$ %	Precision* $<$ %	Quantity per Pack	Order No.
0.5 – 10	2.50	2.50	1	47 80 018
5.0 – 50	1.50	1.00	1	47 80 058
50 – 300	1.00	0.50	1	47 80 308

12-channel Precision Pipet ratiopetta®

CE IVD

Volume Range μ l	Accuracy* $< \pm$ %	Precision* $<$ %	Quantity per Pack	Order No.
0.5 – 10	2.50	2.50	1	47 80 012
5.0 – 50	1.50	1.00	1	47 90 052
50 – 300	1.00	0.50	1	47 90 302

Matching pipet tips can be found on pages 34-39.

Pipettor stands ratiopetta®

- for the clearly laid out storing of up to 5 pipettors of different brands with finger rest
- compatible with most multi-channel-pipettors with finger rest

Product	Quantity per Pack	Order No.
pipettor stand for ratiopetta®	1	94 20 024

* Three measurements were carried out for all the pipets: minimum, maximum and mean volumes. The data shown are based on the mean volumes. On request, we can provide you with all of the results that were measured for your pipet. Please let us know the order number and the serial number of your ratiopetta.

Micro Centrifuge and Thermocult Incubator



Micro Centrifuge for PCR Strips and Microcentrifuge Tubes



Space- and energy-saving micro centrifuge with adequate power for routine centrifugations.

- speed 7000/ min, max RCF 2680 x g
- lid must be closed for operation mode
- safety: the lid can only be opened when the rotor is not rotating
- rapid start and stop within seconds
- power supply AC100-240V/50Hz/60Hz
- diameter 150 mm, height 117 mm, weight 0.5 kg
- 1 year guarantee
- supplied complete with two rotors:
 - rotor 1 for: 8 microcentrifuge tubes 0.5 ml till 2.0ml
 - rotor 2 for: 16 microcentrifuge tubes 0.2 ml or two pcr strips of 8 tubes 0.2 ml

Product	Quantity per Pack	Order No.
Micro Centrifuge with two rotors	1	71 00 007

Thermocult Incubator



Compact incubator for bacteriology. Fixed temperature setting at 35 ± 2°C, adjustable up to 42°C, with built-in control thermometer. Glass-clear plasticdoor for visual control. The incubator can be placed on work benches or set up on walls.



- inside size (W x D x H): 210 x 145 x 110 mm, for up to 20 tissue cultures or 8 petri dishes
- outside size (W x D x H): 300 x 170 x 150 mm
- weight: approx. 1.3 kg, power: 230 V, 30 W
- shelf available separately
- 2 year guarantee

Product	Quantity per Pack	Order No.
Thermocult Incubator	1	90 22 000
shelf	1	90 22 001

5-Channel Coagulometer CC-4000



Coagulometer CC-4000

CE IVD

We present 5 channels coagulometer CC-4000, which executes all basic coagulational determination by chronometrical method, method of the usage of chrom substrate and immunochemical method (D-dimer).

Range of Determinations:

1. Basic coagulology:

- PT (time, index PT, index Quick, INR, Fibrinogen with PT)
- APTT (time, ratio)
- TT (time, ratio)
- Fibrinogen (Clauss method - g/l, mg/dl)
- Factors.

2. Chrome substrate:

- AT III (% activity)
- Plasminogen
- Protein C
- Alfa-2-antiplasmin (α_2 -AP)

3. D-Dimer

- ($\mu\text{g/l}$)

For all determinations the tested material (sample) is taken and prepared as in case of the typical coagulational determinations.

- measurements: length of the light wave: 405 nm, „micro-method“ - 50 μl of the sample and the reagents
- automatic reading of the result
- automatic zero rotation
- storage of 4000 final results, 34 various calibration curves and referential values in the memory supply after the disconnection
- automatic systems of the turbidity compensation (the possibility of the determination of lipemic, hemolysed and icteric plasmas)
- compensation of the sample and cuvette fogging
- short period of the determination for substrata and D-dimer: 30-180s
- programming of the measures, types of results and prints
- display: graphic in English, 4 stop-watches of the incubation, built-in clock with date-marker, „Stand-by“ functions
- printer: built-in quick thermal printer 110 mm, printing of the summary, field results, calibration curves, course of the reaction, control and norms time, indexation of the beyond standards
- interfaces RS232 for the connection with computer's network
- connector USB for barcode leader
- dimensions and weight: 43 x 37 x 12 cm, 5 kg
- 2 years warranty

Product	Quantity per Pack	Order No.
Coagulometer CC-4000	1	90 22 028
Test cuvetts	1000	90 22 030

Digital Burette DB



Digital Burette DB



A Digital Burette, which meets the demands of modern titration practice:

- fast titration, because the operator himself controls the velocity of the piston stroke
- exact titration with the resolution 0.01 ml and accuracy of 0.2%
- large titration volume range up to 99.99 ml
- the internal memory can store up to 500 measuring values of serial titration
- refilling and air purging performance without loss of reagent.
- push button selection for either „Titration“ or „Dispense“ function
- titration display: 99.99 ml
- temperature: 15-40°C

Remarks: Not to be used with hydrofluoric acid or solutions which are aggressive to Platinum-Iridium, PTFE, FEP or Tefzel. Avoid crystallising or corpuscular liquids.

Volume ml	Subdivision ml	Accuracy %	Precision %	Quantity per Pack	Order No.
50	0.01	0.2	0.1	1	29 70 014

Bottle-top Dispenser



Bottle-Top Dispenser

Bottle-Top Dispenser for accurate and rapid dispensing of small and large volumes directly from any original reagent bottle.

The precise bottle dosing apparatus with outparallax errors in volume adjustment.

Six models within the range 0.25ml to 100 ml

- easy and reliable volume adjustment, protected against unintended alteration
- the valve block is 360° rotatable
- 100% drip free system for your safety at work: just turn the discharge tube at 180° to drain it and avoid the further uncontrolled flow of liquid
- fully autoclavable at 121°C, can be completely disassembled for cleaning
- the components directly in contact with the reagent are made of chemical resistant materials: platinum spring, ceramic valve balls, PTFE piston, borosilicate glass 3.3 cylinder
- use for nearly all liquids
- do not use for PTFE swelling solvents, hydrofluoric acid, chemical solutions which react with platinum-iridium alloys
- each device is tested individually and delivered with conformity certificate

Volume settings ml	Model	Subdivision ml	A < ± %	P < %	Quantity per Pack	Order No.
0.25-2.5	D1	0.05	0.012	0.002	1	29 70 001
0.5-5	D2	0.10	0.03	0.005	1	29 70 002
1-10	D3	0.20	0.06	0.01	1	29 70 003
2.5-25	D4	0.50	0.15	0.025	1	29 70 004
5-50	D5	1.00	0.3	0.05	1	29 70 005
10-100	D6	2.00	0.5	0.1	1	29 70 006

A = Accuracy, P = Precision

Dispetta Dispenser



Dispetta Pipettor for Serial Dispensing

CE IVD

The convenient and robust instrument for serial dispensing with Dispenser Tips.

Five volume settings combined with seven Dispenser Tips sizes result in 35 different volumes from 10 µl to 5 ml.

The Dispenser Tip is filled similar to a syringe. After preselecting the dispensing volume the pipet button has to be pressed for each dispensing step.

- ergonomic design and lightweight for convenient handling
- smooth and fatigue-free operation even with long series
- precise and convenient volume setting
- clearly visible volume adjustment, optimized readability
- table with a volume scale fixed directly onto the instrument
- precise gear mechanism for accurate and reproducible pipetting
- safe, rapid and easy exchange of Dispenser Tips
- maintenance-free
- long life due to robust design
- manual dispenser without electronic parts
- 2 years guarantee

Suitable dispenser tips see on page 41.

Product	Quantity per Pack	Order No.
ratiolab® dispetta dispenser	1	29 80 200



ratiolab® Accupetta Electronic Pipetting Aid

CE IVD

- can fill 25 ml pipet in less than 4 seconds
- safety valve and hydrophobic filters provide double protection against fluid penetration
- two different speed modes – high & low along with gravity drain
- the pump speed can also be fine-tuned by varying finger pressure on operating knobs for better control of speed
- cadmium-free environment-friendly NiMH batteries
- intelligent charger prevents over-charging/heating of batteries
- low battery indicator, power 2 x 1.2 V/1000 mAh
- battery service life: 8 hours continuous use
- battery charging time: 2 – 3 hours
- volumetric range: plastic or glass pipets from 0.1 ml to 100 ml
- autoclavable pipet cone
- 1 year guarantee

Order No. 32 00 300 Accupetta contains:

- 1x Accupetta
- 2x Rechargeable battery
- 1x Adapter for battery charger
- 2x Spare filter 0,45 µm
- 1x Wall mount for Accupetta

Suitable serological pipets see on page 40.

Product	Quantity per Pack	Order No.
ratiolab® Accupetta	1	32 00 300
Accessories:		
Spare silicone pipet adapter	1	32 00 301
Spare filter hydrophobic, non-sterile, 0.2 µm	1	32 00 302
Spare filter hydrophobic, non-sterile, 0.45 µm	1	32 00 303
Battery for Accupetta, set of 2	1	32 00 306
Battery charger for Accupetta	1	32 00 309
Adapter for battery charger	1	32 00 311
Wall mount for Accupetta	1	32 00 312

Liquid handling



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Pipetting Reservoirs

Pipetting reservoirs

The ratiolab® pipet reservoirs made of white polystyrene (PS) are ideal for the repetitive filling of single and multi-channel pipets. Because of the innovative design, these disposable items are both space-saving and stackable. Their broad edges give them a firm and safe stand. They are thus an uncomplicated and clean alternative to reusable reservoirs. The ratiolab® pipet reservoirs are produced in Germany and the material is recyclable.

This product line is available in four application-oriented versions:

Version -Figure- 1

- single reservoir with max. volume 50 ml
- angled bottom for practically complete withdrawal of sample and hence economical in use
- groove graduations at 10, 15, 20 and 25 ml
- labeling area

Version -Figure- 2

- extra large single reservoir with max. volume 100 ml
- graduations at 50 and 100 ml
- conical bottom for economy due to minimum loss of medium

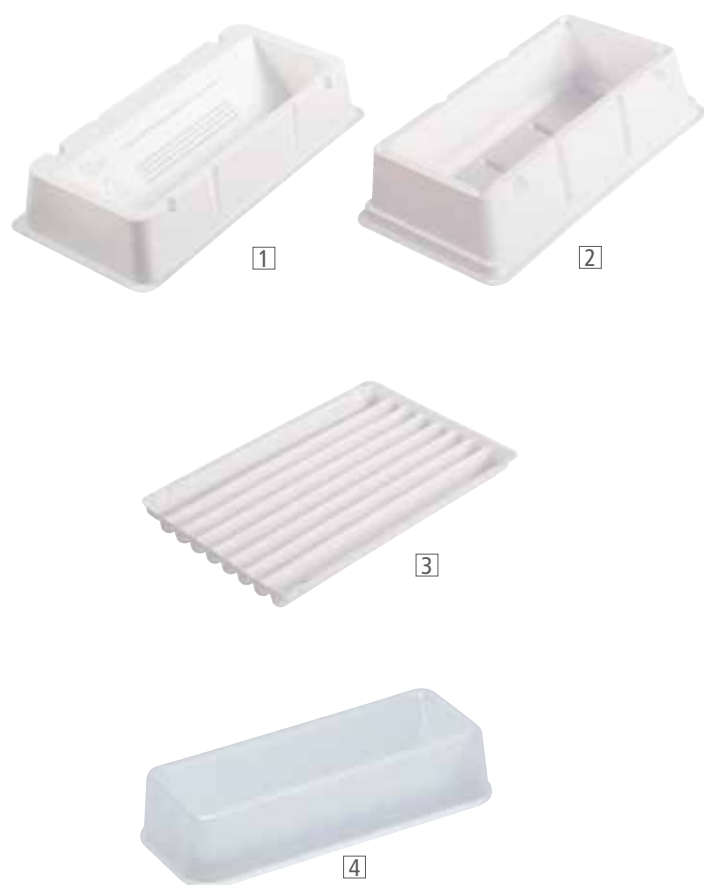
Version -Figure- 3

- specially designed for use with 8-channel pipets
- 8 separate channels of 6 ml volume (= 48 ml total)

Version -Figure- 4

- polypropylene (PP)
- max. volume 50 ml
- autoclavable

Versions 1–3 are available gamma-sterilized or non-sterile.



Pipetting reservoirs made of PS

Volume	Fig. No.	Sterilized	Quantity per Pack	Order No.
50 ml	1	–	bags 20 x 5	94 20 018
50 ml	1	■	bags 20 x 5	94 25 518
100 ml	2	–	bags 20 x 5	94 20 017
100 ml	2	■	bags 20 x 5	94 25 517

Pipetting reservoirs made of PS for 8-channel precision pipetting

Volume	Fig. No.	Sterilized	Quantity per Pack	Order No.
6 ml	3	–	bags 20 x 5	94 20 016
6 ml	3	■	bags 20 x 5	94 25 516

Pipetting reservoirs made of PP

Volume	Fig. No.	Sterilized	Quantity per Pack	Order No.
50 ml	4	–	10	94 20 019

Pipet Tips

Pipet tips

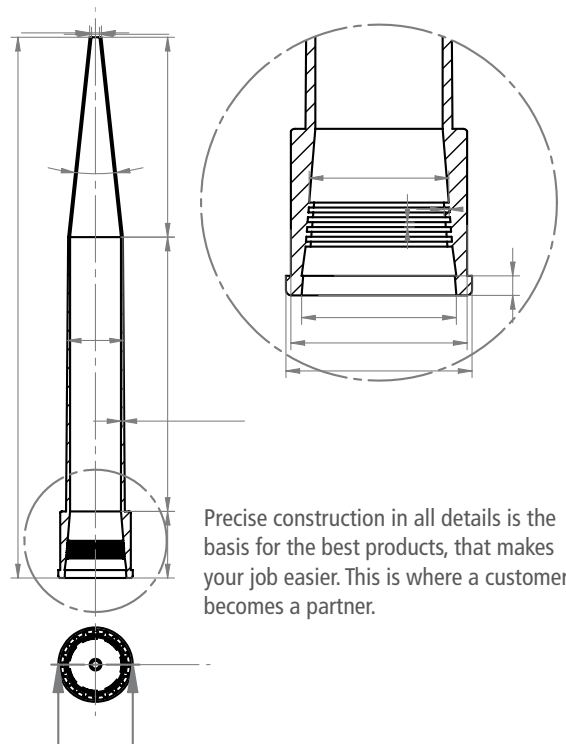
ratiolab® pipet tips are ideal for all commercially available pipets. Their uniform high quality and precision make today's pipets fully effective. Together with specially developed Multitrack, Refill System and the ratiolab® Multibox® with the associated pipet tips in Multitray®, they make pipetting much simpler and safe, also in the most sensitive applications. Our pipet tips are perfectly fit for manual or electronic, single or multichannel pipets.



Precision in each and every detail – a guarantee for highest quality.

- made of high quality polypropylene
- tight fit due to the precisely fitting cone
- optimal handling due to the stable shape
- autoclavable
- guaranteed dust-free due to special ionization treatment
- available pre-sterilized or non-sterile
- excellent transparency due to the high quality surfaces
- minimal residual wetting due to controlled quality of raw materials
- excellent volume accuracy due to precise tip orifice
- practice-oriented tip volumes
- aroject® tips with special filters made of hydrophobic HD-PE as an aerosol barrier and for protection against contamination
- suitable for all commonly used pipet types

This is why ratiolab® pipet tips always provide perfect results.



Precise construction in all details is the basis for the best products, that makes your job easier. This is where a customer becomes a partner.

Pipet Tips System and Refill System



Pipet Tips System

Multirack

The new ratiolab® Multiracks provide even more time saving, perfect hygienic conditions and simple operation.

- the pipet tips are placed on a robust matrix, in an 8 x 12 format for all tips up to 300 µl, and in a 6 x 10 format for tip size 100 – 1200 µl
- the tips can be picked up by 1, 8 or 12-channel pipettors as well as by pipetting robots contamination-free and without any hand contact
- the Multiracks are durable and steady, and the hinged cover can be opened up to 180°
- after work, the Multibox® can be closed firmly by means of a click closure to protect the tips from dust
- the Multiracks are completely autoclavable at 121 °C, 20 min
- Multiracks are available in sterile and non-sterile packs

Order information on the pages 34-36.

Pipet Tips Refill System

Multibox®plus and -ultra/MultiTray® System

The new ratiolab® Multibox®plus and -ultra/MultiTray® system simplifies the handling of pipet tips and provides more safety.

MultiTray®, the dust-proof refill packs made of plastics for ratiolab® pipet tips, hold the tips in plastic matrices. Up to five plastic matrices filled with tips are stacked on top of each other in the space-saving MultiTray®. For tips up to 300 µl the matrices contain 96 pipet tips in the 8 x 12 standard format. All 100 – 1200 µl tips are in a 6 x 10 format on the matrices. The matrices can simply be removed from the Multibox® with the two finger tabs.

The MultiTray® matrices fit securely into the Multibox®plus and -ultra with a soft click. The framework of the Multibox®plus and -ultra provides full support for the MultiTray® matrices – resulting in convenient and safe tip pick-up, even with 8- and 12-channel pipetors. For tip removal the dustproof, hinged cover of the Multibox®plus and -ultra may be opened completely or partially by using the additional sliding mechanism. For cleaning the cover can be removed.

The ratiolab® Multibox®plus and -ultra/MultiTray® system is space- and cost-saving. It clearly reduces the amount of waste, and it provides more convenient and safe pipetting and sterilization.



Pipet Tips Refill System

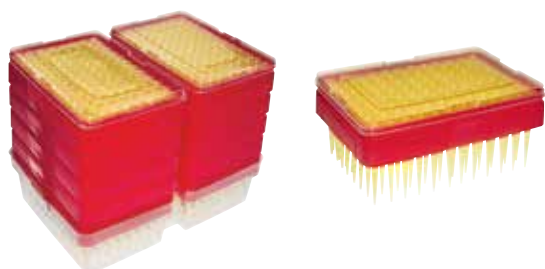


Multibox® plus and -ultra for MultiTray® pipet tips

Reusable pipet tip boxes for the ratiolab® MultiTray® refill systems.

- Multibox® plus, PC, with dust-proof hinged and sliding lid, completely removable
- Multibox® ultra, PP, with hinged lid
- can be autoclaved several times at 121 °C, 20 min
- quantity per pack: 1 pc.
- deliver: Multibox®plus or -ultra without MultiTray® and without pipet tips

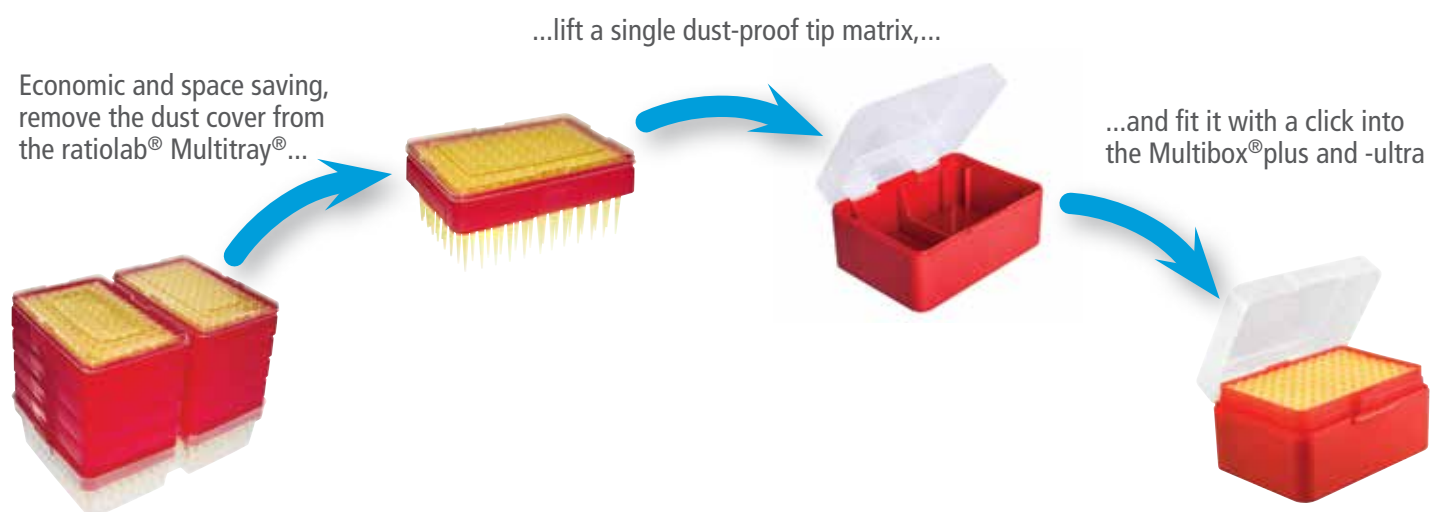
Product	Fig. No.	Volume	Order No.
ratiolab® Multibox® plus, PC, empty, for all MultiTray® pipet tips	1	up to 1200 µl	80 10 161
ratiolab® Multibox® ultra PP, empty, for all MultiTray® pipet tips	2	up to 300 µl	80 30 160
ratiolab® Multibox® ultra PP, empty, for all MultiTray® pipet tips	3	up to 1200 µl	80 30 170



MultiTray® for Multibox®plus and Multibox®ultra

- dust-proof refill pack with several plastic matrices filled with tips
- the most functional, environmentally-friendly, space and cost-saving packaging









Order information on the pages 34-36.



Pipet Tips

Pipet Tips

CE IVD

Type	Volume Range μ l	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Crystal pipet tip "E", for ratiopetta [®] , slamed [®] and all commonly used pipets 	0,5-20	45,80	bag 1 x 1000	1	1000	25 00 170
			Multiracks 10 x 96	2	960	25 13 172
			Multiracks, sterilized 10 x 96	2	960	25 53 172
			MultiTray [®] 10 x 96	3	960	25 30 172
Crystal pipet tip "G", for ratiopetta [®] , slamed [®] and all commonly used pipets 	0,1-10	38,30	bag 1 x 1000	1	1000	25 00 190
			Multiracks 10 x 96	2	960	25 13 192
			Multiracks, sterilized 10 x 96	2	960	25 53 192
			MultiTray [®] 10 x 96	3	960	25 30 192
Crystal pipet tip xl, for ratiopetta [®] , slamed [®] and all commonly used pipets 	0,1-10	45,50	bag 1 x 1000	1	1000	21 00 500
			Multiracks 10 x 96	2	960	25 13 502
			Multiracks, sterilized 10 x 96	2	960	25 53 502
			MultiTray [®] 10 x 96	3	960	25 30 173
Yellow pipet tip "E", for ratiopetta [®] , slamed [®] and all commonly used pipets 	1-200	49,50	bag 1 x 1000	1	1000	21 00 600
			Multiracks 10 x 96	2	960	21 13 602
			Multiracks, sterilized 10 x 96	2	960	21 53 602
			MultiTray [®] 10 x 96	3	960	21 30 602
Colorless pipet tip "E", for ratiopetta [®] , slamed [®] and all commonly used pipets 	1-200	49,50	bag 1 x 1000	1	1000	24 00 600
			Multiracks 10 x 96	2	960	24 13 602
			Multiracks, sterilized 10 x 96	2	960	24 53 602
			MultiTray [®] 10 x 96	3	960	24 30 602
Yellow pipet tip "universal", for ratiopetta [®] , slamed [®] and all commonly used pipets 	1-250	51,20	bag 1 x 1000	1	1000	25 00 160
			Multiracks 10 x 96	2	960	25 13 162
			Multiracks, sterilized 10 x 96	2	960	25 53 162
			MultiTray [®] 10 x 96	3	960	25 30 162
Colorless pipet tip "universal", for ratiopetta [®] , slamed [®] and all commonly used pipets 	1-250	50,00	bag 1 x 1000	1	1000	25 00 163
			Multiracks 10 x 96	2	960	25 13 163
			Multiracks, sterilized 10 x 96	2	960	25 53 163
			MultiTray [®] 10 x 96	3	960	25 30 163
Pipet tip "Oxford", for all commonly used pipets 	1-200	65,30	bag 1 x 1000	1	1000	25 00 110

On request we can send you the suitability.

Pipet Tips

Pipet Tips

CE IVD

Type	Volume Range µl	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Pipet tip "MLA", for all commonly used pipets	1-200	47,50	bag 1 x 1000	1	1000	25 00 140
Pipet tip "wide bore", for all commonly used pipets, ratiopetta®	1-200	50,50	bag 1 x 1000	1	1000	21 00 553
Blue pipet tip "E", for ratiopetta®, slamed® and all commonly used pipets	100-1200	70,94	bag 1 x 1000	1	1000	21 00 610
			Multiracks 10 x 60	2	600	21 13 612
			Multiracks, sterilized 10 x 60	2	600	21 53 612
			MultiTray® 16 x 60	3	960	21 30 612
Colorless pipet tip "E", for ratiopetta®, slamed® and all commonly used pipets	100-1200	70,94	bag 1 x 1000	1	1000	24 00 610
			Multiracks 10 x 60	2	600	24 13 612
			Multiracks, sterilized 10 x 60	2	600	24 53 612
			MultiTray® 16 x 60	3	960	24 30 612
Pipet tip "MLA", for all commonly used pipets	100-1000	86,30	bag 1 x 1000	1	1000	25 00 150
Pipet tip "wide bore", for ratiopetta®, slamed® and all commonly used pipets	100-1000	85,40	bag 1 x 1000	1	1000	21 00 555
Pipet Tip Dr. Lange, for Dr. Lange pipets	100-1000	86,30	bag 1 x 1000	1	1000	25 00 130


On request we can send you the suitability.



Pipet Tips

Pipet Tips

CE IVD

Type	Volume Range μ l	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Colorless pipet tip "ES", for Pipets Socorex Calibra®	500-2500	115,00	bag 1 x 250	1	250	25 00 180
						
Pipet Tip "Finntip", for Pipets Thermo Scientific®, Dr. Lange®, Brand®	1000-5000	147,60	box 1 x 75	4	75	24 00 620
			bag 1 x 1000	1	1000	24 00 622
			bag 1 x 3000	1	3000	24 00 623
			bag 1 x 500	1	500	24 00 624
			rack 1 x 50	5	50	24 10 620
rack, sterilized 1 x 50	5	50	24 53 620			
Pipet Tip "Makro", for Pipets Eppendorf Research® Plus, Gilson®, Pipetman®, ratiopetta®	1000-5000	119,70	bag 1 x 250	1	250	24 00 630
			rack 1 x 50	6	50	24 10 630
			rack, sterilized 1 x 50	6	50	24 53 630
Pipet Tip "Makro II", for Pipets Socorex Accura®	1000-5000	126,00	bag 1 x 300	1	300	24 00 650
			rack 1 x 50	5	50	24 10 650
			rack, sterilized 1 x 50	5	50	24 53 650
Pipet Tip "Makro III", for Pipets Eppendorf Research® plus,	1000-5000	133,30	bag 1 x 300	1	300	24 00 653
			rack 1 x 50	5	50	24 10 653
			rack, sterilized 1 x 50	5	50	24 53 653
Pipet Tip "Finntip", for Pipets Thermo Scientific®, Socorex Acura®, Gilson®	2000-10000	150,20	bag 1 x 100	1	100	24 00 640
			rack 1 x 25	5	25	24 10 640
			rack, sterilized 1 x 25	5	25	24 53 640
Pipet Tip, for Pipets Brand®, Socorex Acura®, Gilson®	1000-10000	153,60	bag 1 x 100	1	100	24 00 642
			rack 1 x 25	5	25	24 10 642
			rack, sterilized 1 x 25	5	25	24 53 642

1



4



5



6



aeroject® ultra Pipet Filter Tips

free of DNA, DNase,
pyrogens and ATP









aeroject® ultra filter tips – Pipet Tips with Aerosol Barrier

CE IVD

Pipet tips with special filters, to effectively prevent the pipettor shaft from contamination with aerosols and liquids to be sucked into the pipettor.

- sterilized
- free of RNase-, DNase-, DNA-, pyrogens and ATP
- free of human DNA and PCR inhibitors
- pipet tips and aerosol filters made of ultra-hydrophobic HD-PE
- minimized retention due to special surface treatment
- perfect and tight fit on all major pipettor brands
- aeroject® ultra 17 70 010 and 17 71 000xl with extended length for operation with narrow vessels and reduced risk of cross-contamination
- packed in plastic racks with hinged lids

Type	Volume Range μ l	Length mm	Packaging	Quantity per Pack	Order No.
Pipet Tip aeroject® ultra tips xl, for all commonly used pipets, ratiopetta®	0,1-10	45,20	Racks 10 x 96	960	17 70 010
					
Pipet Tip aeroject® ultra tips, for all commonly used pipets, ratiopetta®	1-20	50,80	Racks 10 x 96	960	17 70 020
					
Pipet Tip aeroject® ultra tips, for all commonly used pipets, ratiopetta®	1-100	50,80	Racks 10 x 96	960	17 70 100
					
Pipet Tip aeroject® ultra tips, for all commonly used pipets, ratiopetta®	1-200	50,80	Racks 10 x 96	960	17 70 200
					
Pipet Tip aeroject® ultra tips, for all commonly used pipets, ratiopetta®	100-1.000	70,10	Racks 10 x 60	600	17 71 000
					
Pipet Tip aeroject® ultra tips, for all commonly used pipets, ratiopetta®	100-1.000	86,00	Racks 10 x 96	960	17 71 000xl
					

ratiolab® Premium Tips

free of RNase, DNase, endotoxin, pyrogens, human DNA, heavy metal and PCR inhibitors







ratiolab® Premium Tips

CE IVD

The Premium Line tips are made of polypropylene. These high quality pipet tips can be exploited when work requires higher standards.

The new premium line pipet tip fits perfectly into the overall pipet.

- made of high quality polypropylene
- tight fit due to the precisely fitting cone
- optimal handling due to the stable shape
- autoclavable
- low sampling loss due to special surface treatment
- sterilized and unsterilized
- certified free of RNase, DNase, endotoxin, pyrogens, human DNA, heavy metal and PCR Inhibitors
- packed in design plastic rack with hinged lid
- easy identification of tip volume by colored plates
- the label contains all necessary specifications and easy readable volume information

Type	Volume Range μ l	Length mm	Packaging	Quantity per Pack	Order No.
ratiolab® premium tips xl, for all commonly used pipets, ratiopetta® 	0,1-10	45,75	bag 1 x 1000	1000	New 17 80 013
			Racks 10 x 96	960	New 17 80 012
			Racks, sterilized 10 x 96	960	New 17 80 011
ratiolab® premium tips, for all commonly used pipets, ratiopetta® 	1-200	53,40	bag 1 x 1000	1000	New 17 80 203
			Racks 10 x 96	960	New 17 80 202
			Racks, sterilized 10 x 96	960	New 17 80 201
ratiolab® premium tips, for all commonly used pipets, ratiopetta® 	100-1.000	83,50	bag 1 x 1000	1000	New 17 81 003
			Racks 6 x 96	576	New 17 81 002
			Racks, sterilized 6 x 96	576	New 17 81 001
ratiolab® premium tips, for all commonly used pipets, ratiopetta® 	100-1.250	98,20	bag 1 x 500	500	New 17 81 253
			Racks 6 x 96	576	New 17 81 252
			Racks, sterilized 6 x 96	576	New 17 81 251

ratiolab® aeroject® Premium Tips with Filter

free of RNase, DNase, endotoxin,
pyrogens, human DNA, heavy
metal and PCR inhibitors



ratiolab® aeroject® Premium Tips







CE IVD

The Premium Line filter tips with specially small-pored filters are suitable for highly sensitive applications such as PCR, appropriate to work with infectious and radioactive materials.

The special filter keeps safely back the sample, that was inadvertently absorbed.

The filter tips are free of chemical additives. The high quality polyethylene filter effectively prevents aerosol contamination.

- low sampling loss due to special surface treatment
- sterilized
- certified free of RNase, DNase, endotoxin, pyrogens, human DNA, heavy metal and PCR Inhibitors
- packed in design plastic rack with hinged lid
- easy identification of tip volume by colored plates
- the label contains all necessary specifications and easy readable volume information

Type	Volume Range µl	Length mm	Packaging	Quantity per Pack	Order No.
ratiolab® aeroject® premium tips xl, for all commonly used pipets, ratiopetta®	0,1-10	45,75	Racks 10 x 96	960	New 17 80 010
					
ratiolab® aeroject® premium tips, for all commonly used pipets, ratiopetta®	1-20	53,40	Racks 10 x 96	960	New 17 80 020
					
ratiolab® aeroject® premium tips, for all commonly used pipets, ratiopetta®	1-100	53,40	Racks 10 x 96	960	New 17 80 100
					
ratiolab® aeroject® premium tips, for all commonly used pipets, ratiopetta®	1-200	53,40	Racks 10 x 96	960	New 17 80 200
					
ratiolab® aeroject® premium tips, for all commonly used pipets, ratiopetta®	100-1.000	83,50	Racks 6 x 96	576	New 17 81 000
					
ratiolab® aeroject® premium tips, for all commonly used pipets, ratiopetta®	100-1.250	98,20	Racks 6 x 96	576	New 17 81 250
					

Serological Pipets

Serological Pipets









Glass-clear polystyrene (PS).

- free of RNase-, DNase-, DNA-, pyrogens
- non-toxic, TSE/BSE free
- permanent black-embossed graduations
- with color-coded ring for convenient identification, standard color code
- sterile, individually packed
- packed: plastic/paper
- negative graduation for additional capacity
- accuracy is +/- 2-3%.



Positive Volume ml	Fig. No.	Negative Volume ml	Graduation ml	Length mm	Quantity per Pack	Order No.
1	1	0.04	0.01	279.40	1000	31 01 011
2	2	0.08	0.01	282.58	1000	31 02 011
5	3	2.5	0.1	348.15	200	31 05 011
10	4	3.0	0.1	346.81	200	31 10 011
25	5	7.0	0.25	310.90	200	31 25 011
50	6	10.0	1.0	368.17	100	31 50 011

Dispenser Tips

	Volume setting				
	1	2	3	4	5
 1	1	2	3	4	5µl
 2	10	20	30	40	50µl
 3	25	50	75	100	125µl
 4	50	100	150	200	250µl
 5	0.25	0.5	0.75	1.0	1.25ml
 6	0.5	1.0	1.5	2.0	2.5ml
 7	1	2	3	4	5ml
 8					

Dispenser Tips

CE IVD

For serial pipettings

Dispenser Tips fit onto ratiolab® dispetta and Eppendorf Multipipette® 4780, Ritter Dispenser, Gilson Distriman and Brand HandyStep S. Not autoclavable.

8 Adapters for 25 ml and 50 ml Dispenser Tips must be ordered separately.

Volume ml	Fig. No.	Description	Quantity per Pack	Order No.
0.5	1	non-sterile	100	29 00 101
1.25	2	non-sterile	100	29 00 102
2.5	3	non-sterile	100	29 00 103
5.0	4	non-sterile	100	29 00 104
12.5	5	non-sterile	100	29 00 105
25	6	non-sterile	50	29 00 109
50	7	non-sterile	25	29 00 106
Adapter	8	non-sterile	10	29 00 107

0.5	1	sterile, individually packed	100	29 10 101
1.25	2	sterile, individually packed	100	29 10 102
2.5	3	sterile, individually packed	100	29 10 103
5.0	4	sterile, individually packed	100	29 10 104
12.5	5	sterile, individually packed	100	29 10 105
25	6	sterile, individually packed	25	29 10 109
50	7	sterile, individually packed	25	29 10 106
Adapter	8	sterile, individually packed	5	29 10 107

Pasteur-Plast Pipets

Pasteur-plast pipets

Pasteur-plast pipets render liquid handling simple and safe. Cross-contamination and carry-over simply cannot occur so that tedious clean-ups are unnecessary. In addition, there is no danger of glass breakage with the resulting danger of infectious material escaping. The pasteur-plast pipets are made of transparent polyethylene. They are inert to biological fluids and most acids. The low affinity of the surface reduces the loss of cells and valuable proteins through binding.

- soft, elastic bulb
- unbreakable – thus reduced risk of glass injury
- burr-free orifice for neat, clean and precise dispensing
- only external graduated pasteur-plast pipets with clearly visible embossed graduations
- sterile pasteur-plast pipets are gas-sterilized and individually packaged
- BSE-free
- can be used for food
- made of LD-PE
- usable up to medium temperature 70°C



Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
0.1	1	0.1	–	–	–	82	–	–	1000	26 00 260
0.2	2	0.25	–	–	–	130	40±4	–	500	26 00 145
0.5	3	0.5	1.5	0.5	■	85	25±3	–	1000	26 00 125
0.8 Mini	4	0.8	2	0.5	■	112	25±3	–	1000	26 00 230
0.8 Mini	4	0.8	2	0.5	■	112	25±3	■	500 x 1	26 55 230
1.0 Micro	5	1	5	–	–	149	50±5	–	500	26 00 240
1.0 Micro	5	1	5	–	–	149	50±5	■	500 x 1	26 55 240
1.0 Kapillare	6	0.5	1.5	–	–	104	50±5	–	400	26 00 155
1.0	7	1.0	5.5	1	■	153	30±3	–	500	26 00 171
1.0	7	1.0	5.5	1	■	153	30±3	■	500 x 1	26 55 171
1.0	7	1.0	5.5	1	■	153	30±3	■	50 x 10	26 56 171
1.0	8	1.0	3.5	1	■	140	25±3	–	500	26 00 119
1.0 Kapillare	9	1.0	5.5	1	■	150	50±5	–	500	26 00 181
1.0 Kapillare	9	1.0	5.5	1	■	150	50±5	■	500 x 1	26 55 181

Pasteur-Plast Pipets

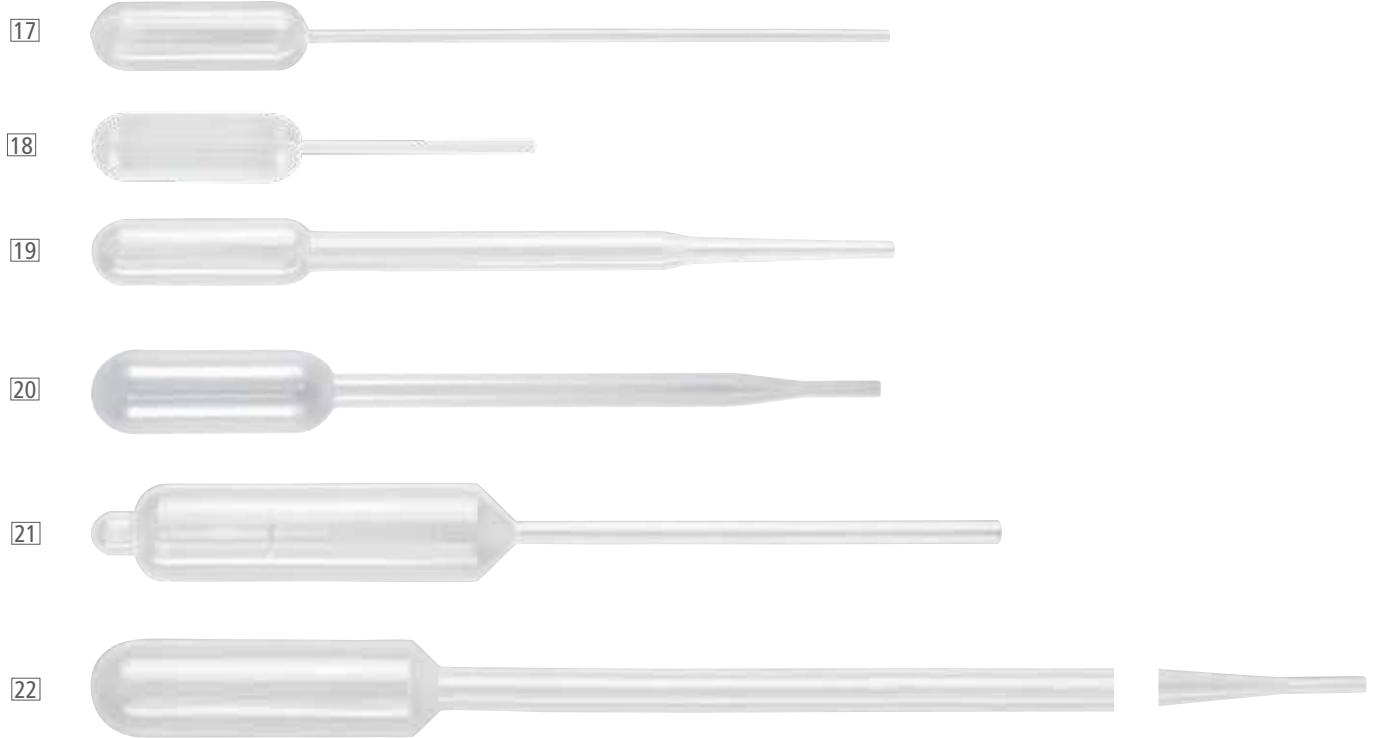


Especially for urine analysis

Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
1.2	10	1.2	–	–	–	63	–	–	500	26 00 160
1.3	11	1	–	–	–	140	25±3	–	500	26 00 220
1.5	12	2	6	1.5	–	228	22±2	–	400	26 00 120
1.5	12	2	6	1.5	–	228	22±2	■	250 x 1	26 55 120
2.0	13	2.0	5	2	■	152	25±3	–	500	26 00 135
2.0	13	2.0	5	2	■	152	25±3	■	500 x 1	26 55 135
2.0	13	2.0	5	2	■	152	25±3	■	50 x 10	26 56 135
2.5	14	2.5	6.5	2.5	■	152	25±3	–	500	26 00 131
2.5	14	2.5	6.5	2.5	■	152	25±3	■	500 x 1	26 55 131
3.0	15	3	7	3	■	160	25±3	–	500	26 00 250
3.0 Makro	16	3.0	7	3	■	158	25±3	–	500	26 00 111
3.0 Makro	16	3.0	7	3	■	158	25±3	■	500 x 1	26 55 111
3.0 Makro	16	3.0	7	3	■	158	25±3	■	50 x 10	26 56 111

New

Pasteur-Plast Pipets



Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
3.0 Mikro	17	0.1	3.7	–	–	152	30±3	–	500	26 00 151
3.0 Mikro	17	0.1	3.7	–	–	152	30±3	■	500 x 1	26 55 151
4.0	18	0.05	4.05	–	–	86	30±3	–	500	26 00 165
4.0	19	3	7	–	–	147	25±3	–	500	26 00 216
6.0 Makro	20	1.8	8.3	–	–	148	22±2	–	400	26 00 206
6.0 Makro	20	1.8	8.3	–	–	148	22±2	■	400 x 1	26 55 206
10.0	21	0.6	15	–	–	169	17±2	–	200	26 00 190
10.0	22	7.5	23	–	–	301	25±3	–	100	26 00 195

Sterilizing Pipet Box



Sterilizing Pipet Box

Aluminium.

Pipet boxes with optimized easy handling in every day's work. The cylindrical pipet boxes are the best option for autoclaving various glass items with a length from 150 to 480 mm like mixing rods, pasteur-, volumetric and graduated pipets.

- autoclaving: the new construction guarantees the entrance of steam into the container and optimizes the process of autoclaving
- opening and closing: soft sliding performance of top section onto the base section makes working easy
- base- and top section are filled with a silicon layer at the bottom as shock absorber to protect the glass items from splintering
- the sterilizing pipet boxes are available in 4 various lengths
- bottom: inside dimensions: 60 x 60 mm, external dimensions: 62 x 62 mm
- top: inside dimensions: 62,75 x 62,75 mm, outer dimensions: 68,70 x 68,70 mm

Stainless steel holder for 4 ratiolab® pipet box

- for practical storage up to 4 pipet box
- space-saving and safe storage of pipet boxes
- size D x W x H: 265 x 250 x 120 mm



Product	Lenght mm	Quantity per Pack	Order No.
Pipet box	160-200	1	31 70 200
Pipet box	235-305	1	31 70 305
Pipet box	315-385	1	31 70 385
Pipet box	315-485	1	31 70 485
Pipet box holder	-	1	31 70 100

Labware



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Cuvets

Cuvets

Disposable cuvetts have long replaced cuvetts once normally made of glass. New plastics coupled with modern methods of production allow photometric measurement well into the UV range.

Ultra-precision molds with several cavities – one per cuvette – are used for producing ratiolab® Q-VETTES and ratiolab® CUVETTES under controlled room conditions. Thus, in any one injection molding run several cuvetts are produced

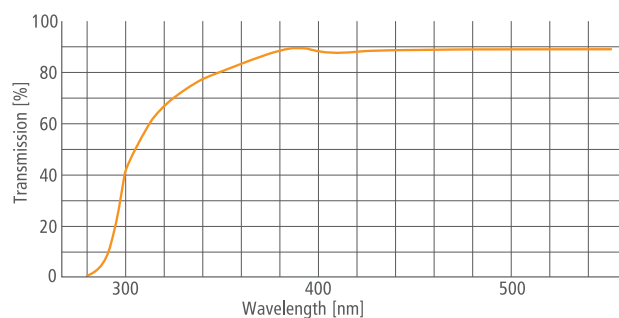
simultaneously. In order to prevent deviations in extinction coefficient values from occurring in any one run due to increased stray light, the cuvetts are automatically sorted according to their numbered cavities of origin. Each package shows the corresponding local production number of the cuvetts position in the net. So all cuvetts inside one styrofoam box are technical wise identical. Any measurement done with those identical cuvetts insures a high accuracy.



Q-VETTES

The new generation of cuvetts with clearly improved photometric properties. The optimized form and the small wall thickness of the cuvetts provides increased heat transfer resulting in more constant sample temperatures during photometric measurements.

- glass-clear polystyrene (PS)
- applicable wavelength range 340 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvetts in a styrofoam box with closable lid



Transmission: Q-VETTES
— semi-micro and macro

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® Q-VETTES semi-micro	PS	1.6	styrofoam racks 10 x 100	1000	27 12 120
ratiolab® Q-VETTES macro	PS	4.0	styrofoam racks 10 x 100	1000	27 11 110

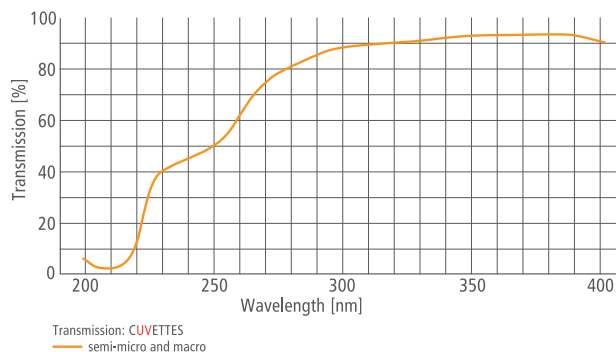


CUVETTES

For photometric measurements even in the UV range 220 nm

Due to the special plastic material and the excellent manufacturing process, the cuvettes can also be used in photometric ranges reserved for UV glass cuvettes in the past.

- applicable wavelength range 220 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover



Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® CUVETTES semi-micro	UV	1.6	styrofoam rack 1 x 100	100	27 22 120
ratiolab® CUVETTES macro	UV	4.0	styrofoam rack 1 x 100	100	27 22 110



UV Micro Cuvets

For photometric measurements of proteins, ssDNA, dsDNA, RNA and oligonucleotides.

- application wavelength range 260 nm to 900 nm.
- suitable for measurements at 260 nm, 280 nm and within visible wavelength range
- applicable with low volumes from 70 µl
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- two different center heights of 8.5 and 15 mm facilitate the application without any adaptor in all most commonly used spectro-photometers like Eppendorf® WPA, Analytik Jena, Biochrom and others.
- round caps 2812010 for safe closing and sample storage until -20°C
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover

Product	Material	Center height mm	Volume µl	Packaging	Quantity per Pack	Order No.
CUVETTES micro	UV	8,5	70-850	styrofoam rack 1 x 100	100	27 22 130
CUVETTES micro	UV	15	70-550	styrofoam rack 1 x 100	100	27 22 131

Cuvets



Cuvets of PMMA

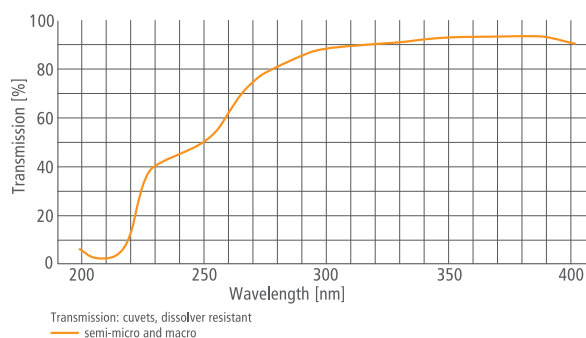
- cuvettes of polymethylmethacrylate (PMMA)
- applicable wavelength range 300 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® semi-micro cuvettes	PMMA	1.6	styrofoam racks 10 x 100	1000	28 10 100
ratiolab® macro cuvettes	PMMA	4.0	styrofoam racks 10 x 100	1000	28 11 110

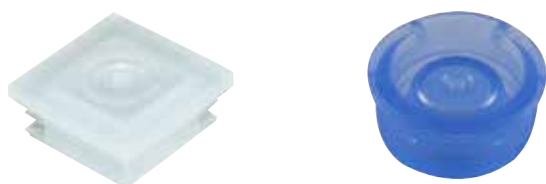


Cuvets, Solvent Resistant

- resistant against polar solvents
- applicable wavelength range 220 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- embossed areas aside the measuring fields reduces the risks of damaging the cuvette by the cuvette holder.
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover



Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® semi-micro cuvettes	solvent resistant	1.6	styrofoam rack 1 x 100	100	27 25 120
ratiolab® macro cuvettes	solvent resistant	4.0	styrofoam rack 1 x 100	100	27 25 110



Stopper for Cuvets

Polypropylene (PP), or polyethylene (PE).

- stopper 2812010 suitable to UV-Cuvets Micro 2722130 and 2722131

Type	Material	Color	Packaging	Quantity per Pack	Order No.
for all ratiolab® Cuvets	PP	natural	bag 1 x 1000	1000	28 12 011
for UV-Cuvets micro	PE	blue	bag 1 x 100	100	28 12 010

Multicell Cuvets

Multicell Cuvets of PMMA

CE IVD

Ratiolab 12-cavity multicell cuvetts – suitable for analysers Thermo Scientific: Arena 20, 20XT, 30 and 60.

Arena applications cover processes from food / beverage industry, biochemical and pharmaceutical tests.

Fields of analysing:

- food (milk, meat, honey)
- beverages (wine, beer, juice)
- customised applications



Product	Material	Packaging	Quantity per Pack	Order No.
12-cavity multicell cuvetts	PMMA	packs 40 x 25	1000	28 12 012

Analysis Beakers and Scintillation Vessels

Analysis Beakers

CE IVD*

Clear polystyrene (PS).

- high-precision design for use with robotic analytical systems Technicon T1 / T2; Gemaec G1 / Hitachi H1



Product	Fig. No.	Volume ml	Packaging	Quantity per Pack	Order No.
analysis beakers Technicon T1	1	2.0	1 x 1000	1000	57 00 110
analysis beakers Technicon T2	2	3.5	1 x 1000	1000	57 00 120
analysis beakers Gemaec G1	3	0.5	1 x 1000	1000	57 00 200
analysis beakers Hitachi H1	4	3.0	1 x 1000	1000	57 00 401

*except 5700120, 5700200



Scintillation Vessels

Natural polyethylene (HD-PE).

- high-precision design for use with robotic analytical systems
- insert tubes with special leakproof cap
- convenient opening and closing

Product	Fig. No.	Volume ml	Ø x H mm	Packaging	Quantity per Pack	Order No.
scintillation bottles with cap	1	20	27 x 60	cardboard box 1 x 1000	1000	58 10 100
caps for scintillation bottles	–	–	–	bag 1 x 1000	1000	58 10 10D
insert tubes with caps for scintillation bottles	2	5	14 x 56	cardboard box 2 x 1000	2000	58 10 110

Cell Counter Vials and Centrifuge Tubes



Cell Counter Vials

Cell counter vials made of clear polystyrene (PS).

- high-precision design for use with robotic analytical systems

Product	Fig. No.	Volume ml	Material	Packaging	Quantity per Pack	Order No.
for Coulter® and Hycel® cell counter systems						
Cell Counter Vial 1 with lid	1	25	PS	PS-tray 20 x 50	1000	55 15 010
Cell Counter Vial 1 with lid	1	25	PS	bags 4 x 250	1000	55 15 040
Cell Counter Vial 1 without lid	–	25	PS	bags 4 x 250	1000	55 15 041
lids for Cell Counter Vial 1	–	–	PE	bag 1 x 1000	1000	55 15 04D
for cell counter systems with cylindrical containers, e.g. Al® and Linson®						
Cell Counter Vial 2 without lid	2	20	PS	bag 1 x 1000	1000	55 15 051
Cell Counter Vial 3 with lid	3	13	PS	bags 4 x 500	2000	55 15 060
Cell Counter Vial 3 without lid	–	13	PS	bags 4 x 500	2000	55 15 061
lids for Cell Counter Vial 3	–	–	PE	bag 1 x 1000	1000	55 15 06D



Centrifuge Tubes

Polypropylene (PP).

- free of RNase-, DNase-, endoxin-, pyrogen- and ATP*
- with round, conical bottom or self-standing
- centrifuge tubes with red cap available with printed graduations and frosted writing field
- available non-sterile or sterile
- with red screw cap or closure
- temperature withstand -80°C to 121°C

CE IVD*

Volume ml	Fig No.	Bottom	Centrifugable g	Sterilized	Ø x H mm	Packaging	Quantity per Pack	Order No.
12	1	round	30000	–	18 x 98	bag 1 x 100	100	38 14 020
15	2	conical	17000	–	17 x 120	bags 30 x 25	750	33 00 005
15	2	conical	17000	■	17 x 120	bags 30 x 25	750	33 00 006
50	3	conical	20000	–	30 x 115	bags 12 x 25	300	33 00 001
50	3	conical	20000	■	30 x 115	bags 12 x 25	300	33 00 002
50	4	self-standing	7000	–	30 x 115	bags 10 x 25	250	33 00 003
50	4	self-standing	7000	■	30 x 115	bags 10 x 25	250	33 00 004

*except 3814020

Microcentrifuge Tubes

Microcentrifuge Tubes

Polypropylene (PP) or translucent Polyethylene (LD-PE).

- autoclavable with opened cap at 121 °C, 20 min, (except 5615400)
- natural color or different colors for comfortable identification
- tight sealing cap
- safe and easy to be opened and closed

- 5615005 and 5615106: free of DNase-, RNase-, pyrogens-, Human DNA-, PCR inhibitors
- 5615005 and 5615106: centrifugable up to 25.000 x g

CE IVD*



Volume ml	Fig. No.	Material	Cap	Color	Packaging	Quantity per Pack	Order No.
0.4 Beckman	1	PE	■	natural	1 x 1000	1000	56 15 400
0.5	2	PP	■	natural	1 x 1000	1000	56 15 030
1.5	3	PP	■	natural	2 x 500	1000	56 15 000
1.5	3	PP	■	natural	1 x 1000	1000	56 15 005
1.5	4	PP	■	yellow	2 x 500	1000	56 15 001
1.5	5	PP	■	green	2 x 500	1000	56 15 002
1.5	6	PP	■	red	2 x 500	1000	56 15 003
1.5	7	PP	■	blue	2 x 500	1000	56 15 004
1.5	8	PP	—	natural	1 x 1000	1000	56 15 020
2.0	9	PP	■	natural	1 x 1000	1000	56 15 101
2.0	9	PP	■	natural	1 x 1000	1000	56 15 106

*except 5615030

Microcentrifuge Tubes

Safety-Cap Microcentrifuge Tubes

Polypropylene (PP).

The new cap sealing of test tubes ensures an extreme tightness, which is essential for applications with valuable samples, radioactive materials and DNA.

- autoclavable with opened cap at 121 °C, 20 min
- certified free of RNase, DNase, human DNA, PCR inhibitors, pyrogens and ATP
- produced in microbiologically controlled clean room ISO 8

- optimal tightness due to tight serration at the cap and tight channel at the tube; thereby a low evaporation is guaranteed
- secured shut due to form-closed cap lock; accidental opening of the lid during incubation is not possible
- high chemical resistance
- labeling areas on the cap and tube
- graduated for easy determination of the volume
- temperature of use: -80°C +100°C

free of RNase, DNase, human DNA, PCR inhibitors, ATP and pyrogens



The additional safety lock prevents uncontrolled opening of the tubes.



Volume ml	Fig. No.	Centrifugable g	Sterilized	Packaging	Quantity per Pack	Order No.
0,5	1	30000	–	2 x 500	1000	56 15 038
0,5	1	30000	■	50 x 1	50	New 56 15 039
1,5	2	30000	–	1 x 1000	1000	56 15 008
1,5	2	30000	■	100 x 1	100	New 56 15 009
2,0	3	30000	–	2 x 500	1000	56 15 108
2,0	3	30000	■	100 x 1	100	New 56 15 109
5,0	4	21000	–	1 x 100	100	New 56 15 158
5,0	4	21000	■	50 x 1	50	New 56 15 159

free of DNase/RNase, and pyrogens

Microcentrifuge tubes with screw cap and O-Ring Seal

Polypropylene (PP).

- with conical bottom or additional self-standing
- sterilized
- centrifugable up to approx. 25.000 g
- temperature-resistant from -80 °C to +121 °C
- autoclavable up to +121 °C
- Ø x H: 13.1 x 48 mm
- re-sealable bags



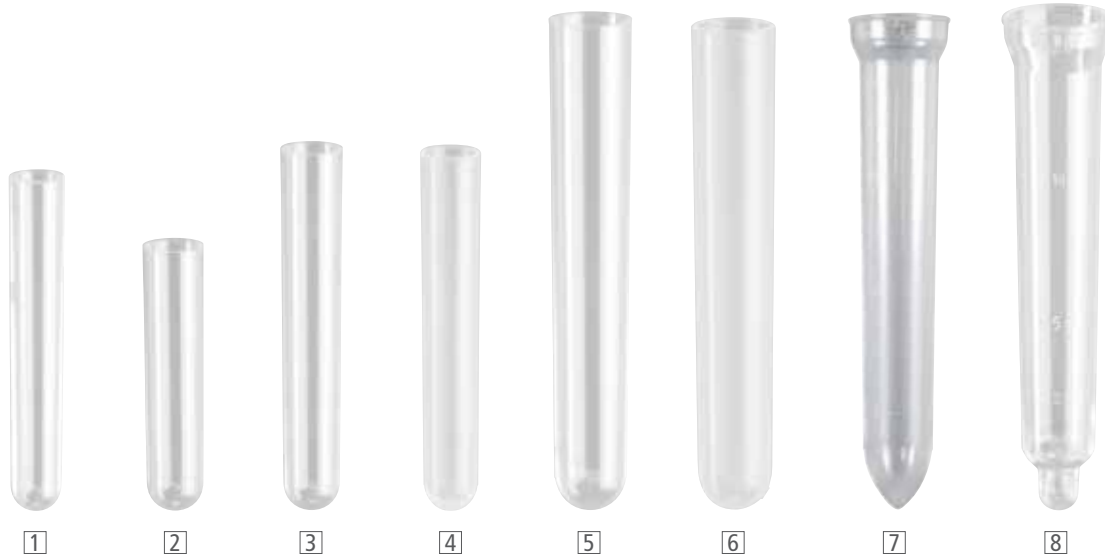
Volume ml	Fig. No.	Bottom	Labeling Area	Sterilized	Packaging	Quantity per Pack	Order No.
0.5	1	self-standing	–	■	2 x 500	1000	56 16 021
0.5	2	conical	–	■	2 x 500	1000	56 16 023
1.5	3	self-standing	■	■	2 x 500	1000	56 16 022
1.5	4	conical	■	■	2 x 500	1000	56 16 027
2.0	5	self-standing	■	■	2 x 500	1000	56 16 026
2.0	6	conical	■	■	2 x 500	1000	56 16 025

Test Tubes and Stoppers

CE IVD*

Test Tubes

Clear polystyrene (PS) or translucent polypropylene (PP).



Product	Fig. No.	Ø x H mm	Material	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
RIA tubes	1	11 x 70	PS	4	round	bags 4 x 250	1000	35 14 040
coagulometer tubes	2	12 x 55	PS	4	round	bag 1 x 1000	1000	30 14 030
test tubes	3	12 x 75	PS	5	round	bag 1 x 1000	1000	35 14 030
test tubes	4	12 x 75	PP	5	round	bag 1 x 1000	1000	35 14 031
test tubes	3	13 x 75	PS	5.1	round	bag 1 x 1000	1000	35 14 032
test tubes	4	13 x 75	PP	5.1	round	bag 1 x 1000	1000	35 14 033
test tubes	5	16 x 100	PS	12	round	bag 1 x 1000	1000	37 14 010
test tubes	6	16 x 100	PP	12	round	bag 1 x 1000	1000	38 14 010
test tubes	7	18 x 105	PS	12	conical	bag 1 x 1500	1500	35 20 000
test tubes	8	18 x 105	PS	12	round	bag 1 x 1500	1500	36 22 000

*except 3014030, 3714010

Stoppers for test tubes, Ø 11 – 12 mm

Polyethylene (PE).

- very tight seal due to 2 sealing rings
- available in natural and 4 more colors
- fit to test tube: figure 1-4



Color	Packaging	Quantity per Pack	Order No.
natural	bag 1 x 1000	1000	35 14 900
blue	bag 1 x 1000	1000	35 14 90B
green	bag 1 x 1000	1000	35 14 90G
red	bag 1 x 1000	1000	35 14 90R
yellow	bag 1 x 1000	1000	35 14 90Y

Stoppers for test tubes, Ø 16 – 17 mm

Polyethylene (PE).

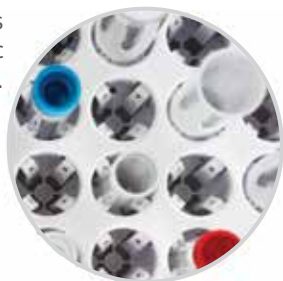
- very tight seal due to 2 sealing rings
- available in natural and 4 more colors
- fit to test tube: figure 5-6



Color	Packaging	Quantity per Pack	Order No.
natural	bag 1 x 1000	1000	39 14 900
blue	bag 1 x 1000	1000	39 14 90B
green	bag 1 x 1000	1000	39 14 90G
red	bag 1 x 1000	1000	39 14 90R
yellow	bag 1 x 1000	1000	39 14 90Y

Multistand Rack, Rack for Centrifuge Tubes and Rack for Microcentrifuge Tubes

The special designed inner clamps (patent) fixes the test tubes centric and vertical at any time.



Multistand Rack

Polyoxymethylen (POM).

With the ratiolab® Multistand you have the opportunity to use it with several microcentrifuge tubes, cryo tubes and test tubes with different diameters through the patented holder to fix safely.

- for tubes Ø 10 to Ø 17 mm
- dishwasher safe
- max. working temperature: 90 °C

Color	Positions	W x D x H mm	Quantity per Pack	Order No.
white	5 x 5	105 x 105 x 42	1	37 12 101

Rack for Centrifuge Tubes

Polypropylene (PP).

Suitable for 15 ml and 50 ml tubes.

- holes are keyed with molded in numbers and letters for easy identification
- ergonomics design facilitates easy handling
- DNase, RNase, and Pyrogen Free
- superior chemicals resistance
- temperature-resistant from – 20 °C to +121 °C
- autoclavable at 121 °C for 20 minutes
- Test Tube Rack is available in yellow & blue color



Color	For Centrifuge Tube	Positions	Quantity per Pack	Order No.
blue	15 ml	2 x 10	4	New 37 12 201
yellow	15 ml	2 x 10	4	New 37 12 202
blue	50 ml	2 x 6	4	New 37 12 203
yellow	50 ml	2 x 6	4	New 37 12 204

Rack for Microcentrifuge Tubes

Polypropylene (PP).

Ideal for the secure handling of reaction vessels. Space-saving on the laboratory bench due to its narrow form. Practical side grips.

- for tubes up to Ø 11 mm
- autoclavable at 121 °C
- temperature-resistant from – 80 °C to +121 °C
- 225 mm x 65 mm x 28 mm (LxWxH)

Color	For Micro Tubes	Positions	Quantity per Pack	Order No.
green	1.5 – 2.0 ml	5 x 16	5	37 12 006
pink	1.5 – 2.0 ml	5 x 16	5	37 12 008
blue	1.5 – 2.0 ml	5 x 16	5	37 12 005
orange	1.5 – 2.0 ml	5 x 16	5	37 12 007
yellow	1.5 – 2.0 ml	5 x 16	5	37 12 009



Autoclavable Bags, Autoclavable Bags BIOHAZARD

Autoclavable bags, dispenser box

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- Volume approx. 1.5l, film thickness 50 µm
- for autoclaving, the bag must not be completely closed
- for bag size 200 x 300 mm: practical bench-top stand, plastic-coated, with 3 rubber feet



W x H mm	Bag	Autoclavable	Packaging	Quantity per Pack	Order No.
200 x 300	standard	at 134°C	dispenser 1 x 100	100	70 01 000
200 x 300	high transparency	at 121°C	dispenser 1 x 100	100	70 01 005
bench-top stand for waste disposal bags 200 x 300 mm, High 25 cm				1	70 01 400
Set consisting of bench-top stand and 100 waste disposal bags (standard) 200 x 300 mm				1	70 01 401
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 200 x 300 mm				1	70 01 405

Autoclavable bags, Standard

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 134°C, 20 min, for autoclaving, the bag must not be completely closed



W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	6	50 µm	cardboard box 1 x 500	500	70 01 100
400 x 780	22	50 µm	cardboard box 1 x 500	500	70 01 150
600 x 800	32	50 µm	cardboard box 1 x 500	500	70 01 200
600 x 800	32	50 µm	cardboard box 1 x 100	100	70 01 210
600 x 800	32	100 µm	cardboard box 1 x 125	125	70 01 212
700 x 1100	72	50 µm	cardboard box 1 x 350	350	70 01 300
700 x 1100	72	50 µm	cardboard box 1 x 75	75	70 01 310
700 x 1100	72	100 µm	cardboard box 1 x 75	75	70 01 311



Autoclavable bags, High Transparency

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 121°C, 20 min, for autoclaving, the bag must not be completely closed

W x H mm	Volumen approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	6	50 µm	cardboard box 1 x 500	500	70 01 105
400 x 780	22	50 µm	cardboard box 1 x 500	500	70 01 155
600 x 800	32	50 µm	cardboard box 1 x 500	500	70 01 205
700 x 1100	72	50 µm	cardboard box 1 x 350	350	70 01 305

Indicator patch



Autoclavable bags BIOHAZARD red – Warning Instruction and sterilization indicator patch

Polyethylene (PE).

Distinctive red autoclavable bags for easy identification, for the disposal of contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in English, German, French and Spanish languages
- autoclavable at 121°C, 20 min, for autoclaving, the bag must not be completely closed
- practical bench-top stand, plastic-coated, with 3 rubber feet
- only in large bag autoclaving



W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
210 x 290	1.5	20 µm	cardboard box 10 x 100	1000	70 02 110
Set consisting of bench-top stand and 100 red waste disposal bags 210 x 290 mm				1	70 01 410

Autoclavable Bags BIOHAZARD

Autoclavable bags BIOHAZARD – Warning Instruction and sterilization indicator patch

Polypropylene (PP).

Autoclavable disposable waste bag of very strong PP-film with a broad seam at the bottom, for the sterilization and disposal of hazardous and contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in English, German, French and Spanish language
- autoclavable at 134 °C, 20 min, for autoclaving, the bag must not be completely closed



W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	6	50 µm	cardboard box 1 x 100	100	70 02 105
300 x 500	6	50 µm	cardboard box 1 x 500	500	70 02 100
400 x 780	22	50 µm	cardboard box 1 x 100	100	70 02 155
400 x 780	22	50 µm	cardboard box 1 x 500	500	70 02 150
600 x 800	32	50 µm	cardboard box 1 x 100	100	70 02 205
600 x 800	32	50 µm	cardboard box 1 x 500	500	70 02 200
700 x 1100	72	50 µm	cardboard box 1 x 75	75	70 02 305
700 x 1100	72	50 µm	cardboard box 1 x 350	350	70 02 300

Autoclavable bags BIOHAZARD red – Warning Instruction and sterilization indicator patch

Polypropylene (PP).

Distinctive red autoclavable bags for easy identification, for the disposal of contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in German, English and French language
- autoclavable at 134 °C, 20 min, for autoclaving, the bag must not be completely closed
- marking maximum filling (except 7003230)



W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	6	50 µm	cardboard box 1 x 500	500	New 70 03 200
400 x 780	22	50 µm	cardboard box 1 x 500	500	70 03 210
600 x 800	32	50 µm	cardboard box 1 x 500	500	70 03 220
700 x 1100	72	50 µm	cardboard box 1 x 350	350	New 70 03 230

Autoclavable bags BIOHAZARD yellow – Warning Instruction and sterilization indicator patch

Polyethylene (HD-PE).

Autoclavable disposable waste bag of very strong PE-film with a broad seam at the bottom, for the sterilization and disposal of hazardous and contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in German, English and French language
- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- marking maximum filling (except 7003130)



W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	6	50 µm	cardboard box 1 x 500	500	70 03 100
400 x 780	22	50 µm	cardboard box 1 x 500	500	New 70 03 110
600 x 800	32	50 µm	cardboard box 1 x 500	500	70 03 120
700 x 1100	72	50 µm	cardboard box 1 x 350	350	New 70 03 130

Bench-top stand and Cleanibag System



Bench-top stand for waste disposal bags

Practical bench-top stand, plastic-coated, with 3 rubber feet.

- for bag size 200 x 300 mm and 300 x 500 mm

Product	Quantity per Pack	Order No.
bench-top stand for waste disposal bags 200 x 300 mm, High 25 cm	1	70 01 400
Set consisting of bench-top stand and 100 waste disposal bags (standard) 200 x 300 mm	1	70 01 401
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 200 x 300 mm	1	70 01 405
bench-top stand for waste disposal bags 300 x 500 mm, High 35 cm	1	70 01 430
Set consisting of bench-top stand and 100 waste disposal bags (standard) 300 x 500 mm	1	70 01 415
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 300 x 500 mm	1	70 01 420
Set consisting of bench-top stand and 100 red waste disposal bags 210 x 290 mm	1	70 01 410



Cleanibag System

All-purpose PE bags a with self-adhesive strip for clinical and laboratory use.

- self-adhesive strip, sticks on smooth and clean surfaces
- residue-free on removable

Other sizes available on request.

Self-adhesive

W x H mm	Volume approx. l	Packaging	Quantity per Pack	Order No.
200 x 300	1.5	cardboard box 1 x 1000	1000	70 00 250
300 x 300	6.5	cardboard box 1 x 1000	1000	70 00 260
300 x 450	8	cardboard box 1 x 1000	1000	70 00 270

Ear Tips and Ear Funnels



Ear Tips, Ear Funnels



Hygienic and safe disposable products. Once attached, they remain fixed on most commonly used otoscopes. Ergonomic and smoothly formed. No sharp edges.

Ear Tips

Made of high quality polystyrene (PS).

- for Heine K180®, Mini 3000®, Beta 200®, KaWe Piccolight C®, Riester ri-mini® otoscopes
- high precision
- the hygienic disposable alternative

Ø mm	Color	Packaging	Quantity per Pack	Order No.
2.5	black	bags 20 x 50	1000	10 20 340
2.5	black	bags 2 x 500	1000	10 20 350
2.5	black	bag 1 x 1000	1000	10 20 330
2.5	grey	bags 20 x 50	1000	10 20 250
2.5	grey	bags 2 x 500	1000	10 20 260
2.5	grey	bag 1 x 1000	1000	10 20 230
4.0	black	bags 20 x 50	1000	10 20 341
4.0	black	bags 2 x 500	1000	10 20 351
4.0	black	bag 1 x 1000	1000	10 20 331
4.0	grey	bags 20 x 50	1000	10 20 251
4.0	grey	bags 2 x 500	1000	10 20 261
4.0	grey	bag 1 x 1000	1000	10 20 231

Ear Funnels

Made of high quality polystyrene (PS).

- for Heine Beta 100® otoscopes
- high precision
- the hygienic disposable alternative

Ø mm	Color	Packaging	Quantity per Pack	Order No.
2.5	black	bag 1 x 1000	1000	10 20 240
2.5	black	bags 2 x 500	1000	10 20 243
2.5	black	bags 20 x 50	1000	10 20 540
4.0	black	bag 1 x 1000	1000	10 20 241
4.0	black	bags 2 x 500	1000	10 20 242
4.0	black	bags 20 x 50	1000	10 20 541

® registered trade mark

Multi Purpose Beakers and Multi Purpose Beaker System

Multi Purpose beakers with screw-caps

CE IVD

Polypropylene (PP) or polystyrene (PS).

For sampling, transport and storage of solid, pasty and liquid samples.

- with red screw-cap
- supplied in non-sterile or sterile, individually packed



Volume ml	Fig. No.	Material	Graduation and Labeling area	Sterilized	Height with cap, mm	Ø cap, outer, mm	Packaging	Quantity per Pack	Order No.
30	1	PP	–	–	47	43	cardboard box 1 x 1000	1000	59 21 173
30	1	PP	–	■	47	43	bags 500 x 1	500	59 21 174
60	2	PP	■	–	66	43	cardboard box 1 x 600	600	59 21 175
60	2	PP	■	■	66	43	bags 500 x 1	500	59 21 176
120	3	PP	■	–	73	63	cardboard box 1 x 500	500	59 21 182
120	3	PP	■	■	73	63	bags 250 x 1	250	59 21 183
200	4	PP	–	–	80	64	cardboard box 1 x 200	200	59 21 185
200	4	PP	–	■	80	64	bags 150 x 1	150	59 21 184
200	5	PS	–	■	82	64	bags 150 x 1	150	59 21 188

Multi Purpose Beakers

Glass-clear polystyrene (PS).

- volume 100 ml, with graduation
- self-adhesive film cover, leakproof and easily labelled
- comfortable sampling, the film cover can be pierced with pipet tips
- practical packaging, 50 multi purpose beakers are stacked in PE-bags for use with the beaker dispenser



Product	Packaging	Quantity per Pack	Order No.
ratiolab® multi-purpose beakers with cover	bags 20 x 50	1000	59 21 170
ratiolab® multi-purpose beakers without cover	bags 20 x 50	1000	59 21 171
self-adhesive film covers for beakers	strip 125 x 4	500	59 21 160

Beaker Tray and Beaker Dispenser for Multi Purpose Beakers

Beaker Tray: Robust plastics with easy-to-clean surface.

- for 10 ratiolab® multi purpose beakers

Beaker Dispenser: Robust plastics with easy-to-clean surface.

- for 50 ratiolab® multi purpose beakers
- for individual beaker dispensing
- glass-clear dispenser door for refills makes stock visible
- separate side box for stocking of self-adhesive film covers



Product	Fig. No.	Quantity per Pack	Order No.
ratiolab® beaker tray	1	1	59 21 200
ratiolab® beaker dispenser	2	1	59 21 190

Multi Purpose bottles, Petri Dishes and Inoculating Loops



Multi Purpose bottles

Polyethylene, blue translucent (PE).

- inclusive lid with nonwoven fabric liner
- with graduations, light protection
- wide neck diameter 80 mm
- Volume: 2.5 l

Product	Packaging	Quantity per Pack	Order No.
Multi purpose bottle 2.5 l with self-adhesive labels	cardboard box 1 x 60	60	59 22 250
lids for Multi purpose bottle 2.5 l	bag 1 x 100	100	59 22 204
self-adhesive labels for Multi purpose bottle 2.5 l	bag 1 x 100	100	59 22 253



Petri Dishes

CE IVD

Transparent polystyrene (PS).

- uncoated, with vents
- sterilized or clean as produced

Ø* x H mm	Description	Packaging	Quantity per Pack	Order No.
60 x 14	with vents	50 x 10	500	90 50 006
60 x 14	sterilized, with vents	50 x 10	500	90 50 106
90 x 15	with vents	25 x 20	500	90 50 000
90 x 15	sterilized, with vents	25 x 20	500	90 50 100
147 x 18	with vents	11 x 20	220	90 50 004
147 x 18	sterilized, with vents	11 x 20	220	90 50 104
65 x 14	with triple vents with compartments	25 x 20	500	90 50 005
65 x 14	sterilized, with triple vents with compartments	25 x 20	500	90 50 105

*external diameter



Inoculating Loops

CE IVD

Made of polystyrene (PS).

- hexagonal handle for safe handling
- beta-sterile
- sterile, individually packed in easy to open peel-packs

Product	Packaging	Quantity per Pack	Order No.
1 µl inoculating loops	100 peel-packs of 20	2000	70 20 100
10 µl inoculating loops	100 peel-packs of 20	2000	70 20 200

Multipurpose Containers

sterilized available
on request



Multipurpose container

Polypropylene (PP).

The best round containers for sampling or storing of paste or powder medicine.

- for easy identification and the option to mark them with a pen the containers are white
- suitable for freezer storage
- open autoclavable at 121 °C
- supplied: container with separate screw-cap, non-sterile
- can be used for food

Volume ml	Ø mm	Height mm	Packaging	Quantity per Pack	Order No.
35	38	48	cardboard box 1 x 350	350	59 26 035
60	45	57	cardboard box 1 x 350	350	59 26 060
125	57	68	cardboard box 1 x 350	350	59 26 125
375	81	99	cardboard box 1 x 120	120	59 26 375
500	97	92	cardboard box 1 x 160	160	59 26 500
1000	113	129	cardboard box 1 x 80	80	59 26 998
1250	113	161	cardboard box 1 x 70	70	59 26 999

sterilized available
on request



Multipurpose container

Polypropylene (PP).

The best round containers for sampling or storing of paste or powder medicine.

- for easy identification and the option to mark them with a pen the containers are white
- suitable for freezer storage
- open autoclavable at 121 °C
- supplied: container with separate screw-cap, non-sterile

Volume ml	Fig. No.	Ø mm	Height mm	Packaging	Quantity per Pack	Order No.
50	1	35	74	cardboard box 1 x 200	200	59 23 050
250	2	65	90	cardboard box 1 x 100	100	59 23 250
500	3	90	86	cardboard box 1 x 72	72	59 23 500

Multipurpose Containers and Wide-neck Bottles



Multipurpose container

Polypropylene (PP).

Closure made of high quality polyethylene (HD-PE).

The best round containers for sampling or storing of paste or powder medicine.

- for easy identification and the option to mark them with a pen the containers are white
- suitable for freezer storage
- with originality seal ring on the closure
- supplied: container with separate screw-cap, non-sterile
- can be used for food

Volume ml	Ø mm	Height mm	Packaging	Quantity per Pack	Order No.
100	62	53	cardboard box 1 x 150	150	59 27 100
250	77	74	cardboard box 1 x 120	120	59 27 250
500	100	92	cardboard box 1 x 70	70	59 27 500
1000	116	130	cardboard box 1 x 30	30	59 27 999



Wide-neck bottle, square bottom

High quality polyethylene (HD-PE).

- color: natural, translucent
- for easy identification the closure is made of blue polypropylene
- with originality seal ring on the closure
- 250 ml and 500 ml bottle with UN approval 3H1/x0.8/S
- supplied: bottle and separate closure, non-sterile

Volume ml	Fig. No.	Neck Ø mm	Height mm	W x D mm	Packaging	Quantity per Pack	Order No.
50	1	28	88	36 x 36	cardboard box 1 x 100	100	59 24 050
250	2	45	129	59 x 59	cardboard box 1 x 100	100	59 24 250
500	3	54	162	75 x 75	cardboard box 1 x 50	50	59 24 500

Life Science



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Micro Test Plates

96-Well Micro Test Plates, volume approx. 300 µl

Clear polystyrene (PS) or translucent polypropylene (PP).

- with U-, F-, or V-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumericly coded
- wells with raised rims for reduced cross-contamination and effective sealing with Ratiolab cover films (see on page 73)

- precise design, perfectly shaped for use with automatic systems
- optimum space for precise positioning
- space-saving and stackable
- polypropylene plates may be sealed with heat-sealing films without deformation



PS



PP



Bottom	Material	Sterilized	Packaging	Quantity per Pack	Order No.
U	PS	–	bags 10 x 10	100	60 18 111
U	PS	■	individually in bags 100 x 1	100	60 18 113
U	PP	–	bags 10 x 10	100	60 18 121
U	PP	■	individually in bags 100 x 1	100	60 18 123
F	PS	–	bags 10 x 10	100	60 18 211
F	PS	■	individually in bags 100 x 1	100	60 18 213
F	PP	–	bags 10 x 10	100	60 18 221
F	PP	■	individually in bags 100 x 1	100	60 18 223
V	PS	–	bags 10 x 10	100	60 18 311
V	PS	■	individually in bags 100 x 1	100	60 18 313
V	PP	–	bags 10 x 10	100	60 18 321
V	PP	■	individually in bags 100 x 1	100	60 18 323

Micro Test Plates, Spot Test Plates



96-Well Micro Test Plates, volume approx. 300 µl

Polypropylene (PP) or polystyrene (PS).

- with U-bottom or F-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumerically coded
- wells with raised rims for reduced cross-contamination and effective sealing with Ratiolab cover films (see on page 73)
- precise design, perfectly shaped for use with automatic systems
- optimum space for bar code labels on the side walls
- space-saving and stackable
- surface untreated

Bottom	Material	Color	Packaging	Quantity per Pack	Order No.
U	PP	black	bags 10 x 10	100	60 18 710
U	PS	black	bags 10 x 10	100	60 18 711
F	PP	black	bags 10 x 10	100	60 18 717
F	PS	black	bags 10 x 10	100	60 18 718



Lids for Micro Test Plates

Optional in highly transparent polystyrene (PS) or polypropylene (PP).

Material	Sterilized	Packaging	Quantity per Pack	Order No.
PS	–	bags 10 x 10	100	60 18 402
PS	■	individually in bags 100 x 1	100	60 18 401
PP	–	bags 10 x 10	100	60 18 422
PP	■	individually in bags 100 x 1	100	60 18 421



Spot test plates

Polystyrene (PS), white.

- 3 x 4 wells
- L x W x H: 135 x 109 x 10 mm

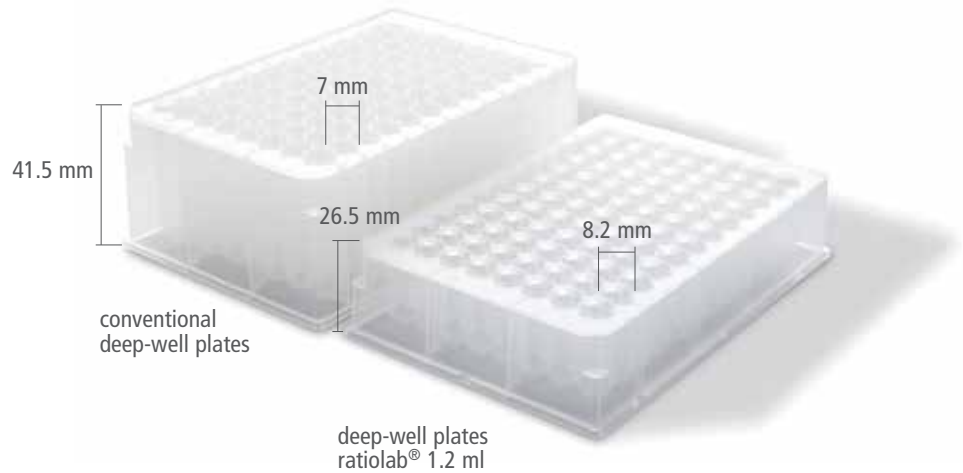
Ø Mould mm	Packaging	Quantity per Pack	Order No.
20	bag 1 x 100	100	60 18 060

Deep-Well-Plates

Low-Profile Deep-Well Plates (96)

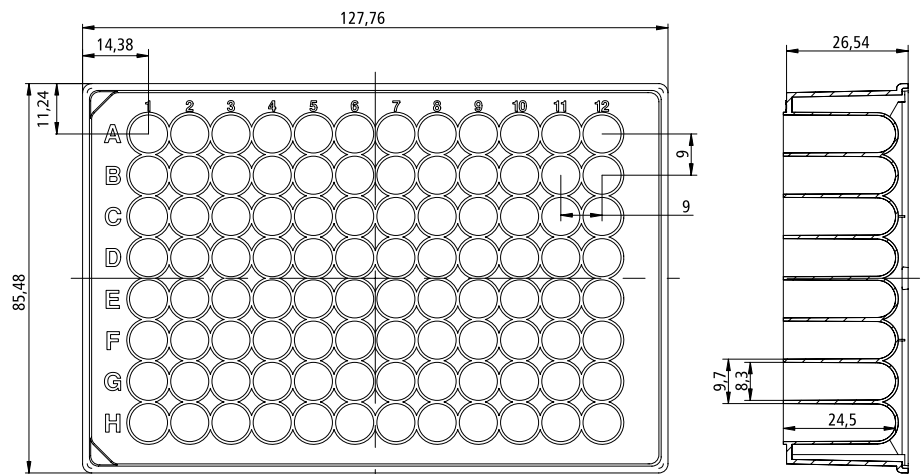
These 1.2 ml low-profile deep-well plates are ideal for pharmaceuticals, biotechnology and diagnostics. Of the same standard dimensions (Society for Biomolecular Sciences – SBS), they are one-third lower than standard deep-well plates (96). They thus require less space! Requiring some 30% less space, they help to optimize warehouse space, hence lowering costs – especially for expensive cryo-storage applications.

The cavities are some 20% larger than conventional plates. Thus, when used with robots, they provide additional security. The chimney form of the wells reliably prevents cross-contamination. Their precise, true-to-size form makes them highly suitable for high-throughput screening (HTS).



Clear polypropylene (PP).

- about half as high as conventional deep-well plates at 1.2 ml fill volume
- SBS standard micro test plate format
- well with significantly larger cross section
- wells with raised rims for reduced cross-contamination
- improved visual control due to clear polypropylene
- autoclavable at 121 °C, 20 min
- temperature resistant to – 80 °C
- 8 x 12 wells with alphanumeric code in micro test plate format
- optimally sealing with Ratiolab cover films (see on page 73)
- precise design, for use in automatic pipetting systems for High Throughput Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable



Deep-Well-Plates

Deep-Well-Plates

Translucent polypropylene (PP), surface with very low protein binding.



Volume per Well ml	Fig No.	Well	Bottom	Packaging	Quantity per Pack	Order No.
1.2 Low Profile	1	96	U	bags 10 x 5	50	81 01 012
1.2	2	96	U	bags 10 x 5	50	60 20 121
2.0	3	96	V	bags 10 x 5	50	60 20 221
3.5	4	48	U	bags 10 x 5	50	60 20 231
4.6	5	48	U	bags 10 x 5	50	60 20 241

Closures for Deep-Well-Plates and Reagent Reservoirs



1



2

3



4



1



2



3

Closures for 96-Well Deep-Well-Plates Low Profile, 1.2 ml

Made of thermo-plastic elastomer (TPE).

- suitable to 81 01 012
- autoclavable at 121 °C, 20 min

Product	Fig. No.	Material	Packaging	Quantity per Pack	Order No.
96-well-cover mats	1	TPE	cardboard box 10 x 10	100	81 01 101

Closures for 96-Well Deep-Well-Plates

Made of thermo-plastic elastomer (TPE) or ethylene vinyl acetate (EVA).

- closures 82 00 008 and 82 00 009 suitable to Deep-Well-Plate 60 20 121
- closures 82 00 010 suitable to Deep-Well-Plate 60 20 221

Product	Fig. No.	Material	Packaging	Quantity per Pack	Order No.
1.2 ml 8-well-cover strips	2	TPE	bag 1 x 1000	1000	82 00 008
1.2 ml 96-well-cover mats	3	TPE	bags 10 x 10	100	82 00 009
2.2 ml 96-well-cover mats*	4	EVA	bags 5 x 20	100	82 00 010

*for 96-square well plates

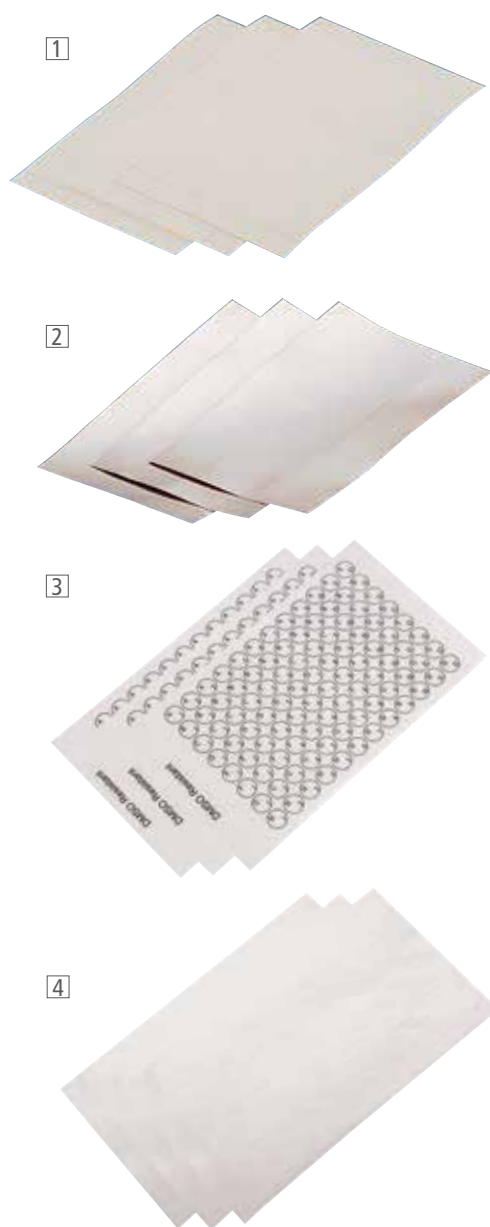
Reagent Reservoirs

Translucent polypropylene (PP).

- for manual and automated liquid handling applications
- compatible with all common pipetting robots and dispensing systems
- autoclavable at 121°C, 20 min only 6025000

Volume per Well ml	Fig. No.	Well	Packaging	Quantity per Pack	Order No.
195	1	1	bags 2 x 5	10	60 25 000
22	2	8	bags 2 x 5	10	60 25 020
15	3	12	bags 2 x 5	10	60 25 010

Cover Films for Micro Test and PCR Plates



Cover Films

For micro test plates, deep-well plates, micro test tubes and PCR plates Adhesive base must be free of grease, dust, degassing and air-conditioned in order to ensure safe bonding.

- self-adhesive
- for manual operation
- adhesive with high solvent resistance
- all films of SBS standard format

1 Soft-PVC peeling cover film

- low-cost film for polystyrene plates
- can be removed without any residues
- minimum application temperature: + 5 °C
- temperature resistant from – 20 °C to + 70 °C
- ideal for the storage of plates at room temperature

2 Aluminum universal cover film

- can be easily removed
- ideal for piercing
- for all plate types; PS, PP, PC, PE
- temperature resistant from – 80 °C to + 120 °C
- ideal for the storage of plates at room temperature (20°C-23°C) and dry room

3 Piercing-foil with cavity circle 96-well

- each cavity is marked by a circle and a numerical printing
- prepierced in each cavity optimizes opening by tip
- self-closing film reduces the risk of cross-contamination
- temperature resistant from – 80 °C to + 30 °C
- DMSO-resistant

4 Gas permeable peeling film

- SBS-Standard
- liquid tight
- high permeability
- temperature resistant from – 5 °C to + 60 °C
- ideal for the storage of plates at room temperature (20°C-23°C) and dry room

Polypropylen peeling cover film

- can be removed without any residues and repeatedly used
- for all plate types; PS, PP, PC, PE, DMSO-resistant
- temperature resistant from – 80 °C to + 120 °C
- ideal for the storage of plates at room temperature (20°C-23°C) and dry room

Further films on request.

Product	Fig. No.	Material	Packaging	Quantity per Pack	Order No.
soft-pvc peeling cover film	1	PVC	pack 1 x 100	100	60 18 610
aluminum universal cover film	2	AL	pack 1 x 100	100	60 18 611
piercing-foil with cavity circle 96-well	3	PP	pack 1 x 100	100	60 18 619
gas permeable peeling film	4	PP	pack 1 x 50	50	60 18 618
polypropylene peeling cover film	-	PP	pack 1 x 100	100	60 18 612

PVC = Polyvinyl chloride, AL = Aluminium, PP = Polypropylene

Micro-Tubes System

Micro-Tubes System

Highly practical system for processing small volumes. The reusable Micro-Rack is the work station and takes 96 micro-tubes in the standard 8 x 12 SBS microplate format. It is a stable and robust system and has a dust-tight lid. A sloping edge helps the positioning of the refill unit. The side edges can be labeled with a barcode. The rack is excellently suited to use in automatic dosing and robotic systems.

The 0.65 and 1.2 ml micro-tubes can be supplied as single, strips of 8 or in 96-well format as a refill system for 8 x 12 plates.

The tubes are closable either with an 8-lid strip or an 8 x 12 closure mat.

- the Micro-Tubes are autoclavable for 20 min at 121 °C
- temperature-resistant to – 80 °C

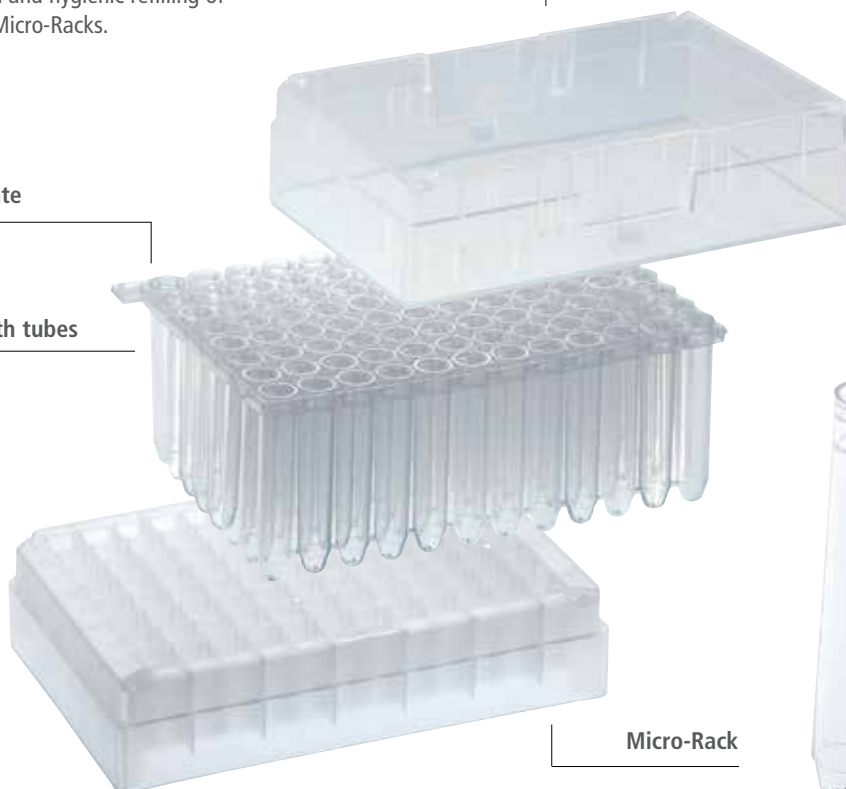


The refill system ensures easy, rapid and hygienic refilling of the Micro-Racks.

Lid

Plate

with tubes



The tubes can be removed singly and are numbered on the bottom.



Micro-Tubes 1.2 ml



Micro-Tubes System



Micro-Tubes

Translucent polypropylene (PP) with very low protein binding.

- available as individual Micro-Tubes or Micro-Tube-Strips of 8 tubes for use with Micro-Racks
- volume 0.65 or 1.2 ml with round bottom

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratiolab® Micro-Tubes, individual	0.65	round	bags 5 x 1000	5000	82 00 021
ratiolab® Micro-Tubes, individual	1.2	round	bags 5 x 1000	5000	82 00 001
ratiolab® Micro-Tube-Strips of 8 tubes	0.65	round	bags 5 x 120	600	82 00 022
ratiolab® Micro-Tube-Strips of 8 tubes	1.2	round	bags 5 x 120	600	82 00 002



Micro-Racks, loaded or empty

Micro-Racks, tray and lid of translucent polypropylene (PP).

- available as empty racks or equipped with coded or non-coded Micro-Tubes
- pressure-tested tightness of the Micro-Tubes
- stackable, for the use with stacker instruments

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratiolab® Micro-Racks, loaded, non-coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 023
ratiolab® Micro-Racks, loaded, coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 024
ratiolab® Micro-Racks, empty	0.65	–	50 Micro-Racks for 96 Micro-Tubes	50	82 00 027
ratiolab® Micro-Racks, loaded, non-coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 003
ratiolab® Micro-Racks, loaded, coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	82 00 004
ratiolab® Micro-Racks, empty	1.2	–	50 Micro-Racks for 96 Micro-Tubes	50	82 00 007



Micro-Tubes Refill System for Micro-Racks

The Micro-Tubes are placed on an 8 x 12 tray and packed in an environmentally friendly cardboard box. The loaded tray can easily be moved from the cardboard box into the empty Micro-Rack.

- available with coded or non-coded Micro-Tubes
- for the very efficient, hygienic, and fast loading of Micro-Racks
- convenient handling and reduced waste
- pressure-tested tightness of the Micro-Tubes

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
Micro-Tubes Refill-System for Micro-Racks					
ratiolab® Refill with 96 Micro-Tubes, non-coded	0.65	round	50 Refills of 96 Micro-Tubes	50	82 00 025
ratiolab® Refill with 96 Micro-Tubes, coded	0.65	round	50 Refills of 96 Micro-Tubes	50	82 00 026
ratiolab® Refill with 96 Micro-Tubes, non-coded	1.2	round	50 Refills of 96 Micro-Tubes	50	82 00 005
ratiolab® Refill with 96 Micro-Tubes, coded	1.2	round	50 Refills of 96 Micro-Tubes	50	82 00 006
Closures for ratiolab® Micro-Tubes					
8-cap-Strips			bag 1 x 1000	1000	82 00 008
8 x 12 cover mats			bag 10 x 10	100	82 00 009

Further cover films see on page 73.



1

2



3



4



5



6



7



8

PCR Tubes

Pure polypropylene (PP).

- rapid and homogeneous heat transfer due to consistently ultrathin wall design
- perfect fit, compatible with all major brands of thermocyclers due to precise production
- DNase-, RNase-, DNA and endotoxin-free
- variety of tight closures available to reduce sample evaporation

PCR Tubes, single

- volume 0.2 or 0.5 ml
- with attached cap, flat or domed
- caps designed for tight sealing, easy open and close

Volume ml	Fig. No.	Cap	Packaging	Quantity per Pack	Order No.
0.2	1	flat	bag 1 x 1000	1000	86 10 006
0.2	2	domed	bag 1 x 1000	1000	86 10 001
0.5	3	flat	bag 1 x 1000	1000	86 10 007

PCR Strips of 8 Tubes

- volume 0.2 ml
- with attached domed cap strips or for use with detached 8-cap strips
- caps designed for tight sealing, easy open and close

Volume ml	Fig. No.	Caps	Packaging	Quantity per Pack	Order No.
with attached individual caps					
8 x 0.2	4	flat	bag 1 x 125	125	86 10 040
8 x 0.2	5	domed	bag 1 x 125	125	86 10 039
for separate cap strips					
8 x 0.2	6	without	bag 1 x 125	125	86 10 002
cap strips					
8-cap-strips	7	flat	bag 1 x 125	125	86 10 015
8-cap-strips	8	domed	bag 1 x 125	125	86 10 003

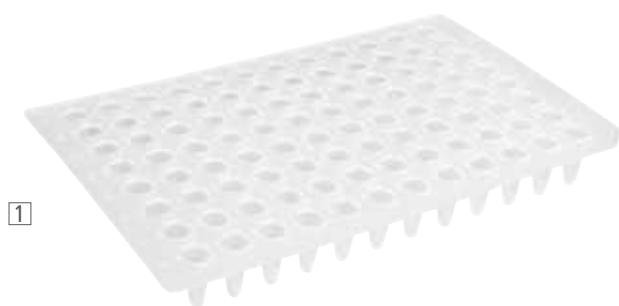
PCR Plates and PCR Racks

96-well PCR Plates

These plates conform fully to the highest requirements of PCR (Polymerase Chain Reaction). They are made of polypropylene and are characterized by their very thin but uniform walls. In this way, optimal heat transfer in short cycle times is achieved. The smooth inside walls of the cavities minimize the binding of enzymes and nucleic acids.

The plates are free of DNA, DNase and RNase. They are available optionally without or with edges (the latter to minimize cross-contamination).

- working volumes 0.2 ml
- alphanumeric coding for optimal sample identification
- available in two versions for various PCR systems



1



2

Volume ml	Fig. No.	Description	Packaging	Quantity per Pack	Order No.
96 x 0.2	1	without rim, low form	bags 10 x 10	100	86 10 014
96 x 0.2	2	with rim, high form	bags 4 x 25	100	86 10 011

96-Well PCR-Rack

Polypropylene (PP).

Work and storage rack for 0.2 and 0.5 ml PCR tubes, PCR strips, and PCR segments.

- 8 x 12 positions, micro test plate format
- autoclavable
- available in five colors for the convenient identification of different types of samples
- transparent lids available in two different heights

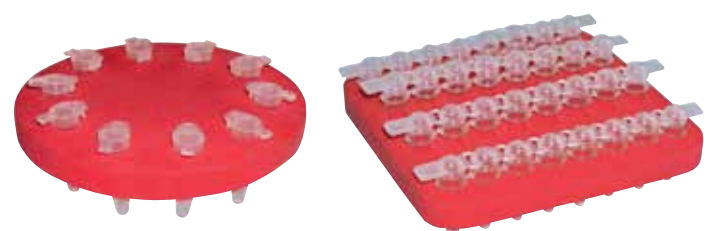


Product	Material	Quantity per Pack	Order No.
PCR-Rack white	PP	10	61 14 100
PCR-Rack yellow	PP	10	61 14 101
PCR-Rack green	PP	10	61 14 103
PCR-Rack red	PP	10	61 14 104
PCR-Rack blue	PP	10	61 14 102
lid for PCR-Racks, 14 mm high	PP	10	61 14 110
lid for PCR-Racks, 28 mm high	SAN*	10	61 14 111

*Styrol-Acrylnitril

Floating Cryo Racks

Ideal for the thawing out or cooling of samples in PCR tubes and PCR strips. The loaded racks remain floating. The tubes fit firmly in the racks and keep them well positioned in the bath.



Product	Quantity per Pack	Order No.
Floating Cryo Racks for 10 PCR tubes	10	61 14 200
Floating Cryo Racks for 4 PCR strips of 8 tubes	10	61 14 201

Cryo



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Cryo Boxes, Cardboard, Format 133 x 133 mm and Grid Inserts



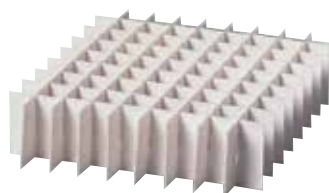
Cryo Boxes, Cardboard, Format 133 x 133 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage even at very low temperatures
- temperature-resistant down to -80°C
- available with a water-repellent standard coating or with a waterproof plastic coating
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes from dia. 6 mm to dia. 28 mm
- the Cryo Boxes can be used for larger vessels when the grid is removed
- suitable grid inserts for cryo boxes see under

Color	Quantity per Pack	Height 32 mm Order No.	Height 50 mm Order No.	Height 75 mm Order No.	Height 100 mm Order No.	Height 130 mm Order No.
Water-repellant standard coating						
white	10	51 31 321	51 31 501	51 31 751	51 31 001	51 31 131
blue	10	51 31 322	51 31 502	51 31 752	51 31 002	51 31 132
red	10	51 31 323	51 31 503	51 31 753	51 31 003	51 31 133
green	10	51 31 324	51 31 504	51 31 754	51 31 004	51 31 134
yellow	10	51 31 325	51 31 505	51 31 755	51 31 005	51 31 135
With waterproof plastic coating						
white	10	51 32 321	51 32 501	51 32 751	51 32 001	51 32 131
blue	10	51 32 322	51 32 502	51 32 752	51 32 002	51 32 132
red	10	51 32 323	51 32 503	51 32 753	51 32 003	51 32 133
green	10	51 32 324	51 32 504	51 32 754	51 32 004	51 32 134
yellow	10	51 32 325	51 32 505	51 32 755	51 32 005	51 32 135



Grid Inserts for Cryo Boxes, Format 133 x 133 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage
- temperature-resistant down to -80°C
- water-repellent finish
- packaging in practical folding boxes

Grid	Quantity per Pack	For Tube Dia. mm	Height of Grids 25 mm Order No.	Height of Grids 30 mm Order No.	Height of Grids 40 mm Order No.	Height of Grids 65 mm Order No.
4 x 4	10	28.0	51 20 214	51 20 215	51 20 216	51 20 217
5 x 5	10	23.0	51 20 124	51 20 125	51 20 126	51 20 127
6 x 6	10	19.0	51 20 134	51 20 135	51 20 136	51 20 137
7 x 7	10	16.0	51 20 144	51 20 145	51 20 146	51 20 147
8 x 8	10	14.0	51 20 154	51 20 155	51 20 156	51 20 157
9 x 9	10	11.5	51 20 165	51 20 166	51 20 167	51 20 168
10 x 10	10	10.5	51 20 175	51 20 174	51 20 176	51 20 177
12 x 12	10	8.5	51 20 185	51 20 184	51 20 186	51 20 187
13 x 13	10	8.0	51 20 194	51 20 195	51 20 196	51 20 197
14 x 14	10	7.0	51 20 204	51 20 205	51 20 206	51 20 207
16 x 16	10	6.0	51 20 225	51 20 226	51 20 227	51 20 228

Cryo Boxes, Cardboard 1/2-Format and Cryo Labels



Cryo Boxes and Grid Inserts, Cardboard, 1/2-Format 130 x 62 mm

Ultra-low temperature-resistant cardboard, white.

- for sample storage even at ultra-low temperatures
- temperature-resistant down to -80°C
- water-repellent finish

Product	Grid	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
1/2-format Cryo Boxes, cardboard	–	130 x 62 x 50	–	10	51 31 506
1/2-format Grid Inserts	8 x 4	124 x 58 x 30	14.0	10	51 20 218
1/2-format Grid Inserts	10 x 5	124 x 58 x 30	10.5	10	51 20 128



Rainbow Cryo labels

For customizing the white Cryo Boxes, the Rainbow Cryo labels are available in modern colors: red, yellow, green, blue, purple.

- temperature-resistant down to -150°C
- 50 labels per pack, divided into 5 colors, 10 pieces from each color

Product	L x W mm	Quantity per Pack	Order No.
Rainbow Cryo labels	200 x 40	5 x 10	51 20 002

Cryo Boxes, Cardboard, Format 136 x 136 mm and Grid Inserts



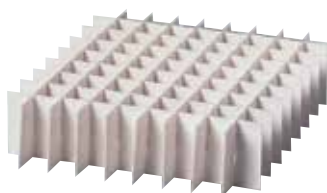
Cryo Boxes, Cardboard, Format 136 x 136 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage even at ultra-low temperatures
- temperature resistant down to -80°C
- available with a water-repellent standard coating or with a waterproof plastic coating
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes from dia. 6 mm to dia. 28,5 mm
- the Cryo Boxes can be used for larger vessels when the grid is removed
- suitable grid inserts for cryo boxes see under

Color	Quantity per Pack	Height 32 mm Order No.	Height 50 mm Order No.	Height 75 mm Order No.	Height 100 mm Order No.	Height 130 mm Order No.
Water-repellant standard coating						
white	10	51 41 321	51 41 501	51 41 751	51 41 001	51 41 131
blue	10	51 41 322	51 41 502	51 41 752	51 41 002	51 41 132
red	10	51 41 323	51 41 503	51 41 753	51 41 003	51 41 133
green	10	51 41 324	51 41 504	51 41 754	51 41 004	51 41 134
yellow	10	51 41 325	51 41 505	51 41 755	51 41 005	51 41 135
With waterproof plastic coating						
white	10	51 42 321	51 42 501	51 42 751	51 42 001	51 42 131
blue	10	51 42 322	51 42 502	51 42 752	51 42 002	51 42 132
red	10	51 42 323	51 42 503	51 42 753	51 42 003	51 42 133
green	10	51 42 324	51 42 504	51 42 754	51 42 004	51 42 134
yellow	10	51 42 325	51 42 505	51 42 755	51 42 005	51 42 135



Grid Inserts for Cryo Boxes, Format 136 x 136 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage
- temperature-resistant down to -80°C
- water-repellent finish
- packaging in practical folding boxes

Grid	Quantity per Pack	For Tube Dia. mm	Height of Grids 25 mm Order No.	Height of Grids 30 mm Order No.	Height of Grids 40 mm Order No.	Height of Grids 65 mm Order No.
4 x 4	10	28.5	51 20 210	51 20 211	51 20 212	51 20 213
5 x 5	10	23.5	51 20 121	51 20 120	51 20 122	51 20 123
6 x 6	10	19.5	51 20 131	51 20 130	51 20 132	51 20 133
7 x 7	10	16.5	51 20 143	51 20 140	51 20 142	51 20 141
8 x 8	10	14.5	51 20 152	51 20 150	51 20 151	51 20 153
9 x 9	10	12.0	51 20 163	51 20 160	51 20 161	51 20 162
10 x 10	10	11.0	51 20 173	51 20 170	51 20 172	51 20 171
12 x 12	10	9.0	51 20 182	51 20 180	51 20 181	51 20 183
13 x 13	10	8.5	51 20 190	51 20 193	51 20 191	51 20 192
14 x 14	10	7.5	51 20 202	51 20 203	51 20 201	51 20 200
16 x 16	10	6.5	51 20 221	51 20 222	51 20 223	51 20 224

Cryo Boxes, Cardboard, 1/2-Format and 1/4-Format

Format 136 x 136 x 75 mm and Format 148 x 148 x 130 mm



Cryo Boxes and Grid Inserts, Cardboard, 1/2-Format 134 x 67 mm and 1/4-Format 75 x 75 mm

Ultra-low temperature-resistant cardboard, white.

- for sample storage even at ultra-low temperatures
- temperature-resistant down to – 80 °C
- water-repellent finish

Product	Grid	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
Water-repellant standard coating					
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 50	–	10	51 60 028
1/2-format Grid Inserts	8 x 4	128 x 63 x 30	14.5	10	51 20 219
1/2-format Grid Inserts	10 x 5	128 x 63 x 30	11.0	10	51 60 029
1/4-format Cryo Boxes, cardboard	–	75 x 75 x 50	–	10	51 60 035
1/4-format Grid Inserts	5 x 5	68 x 68 x 30	11.0	10	51 60 036
With waterproof plastic coating					
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 50	–	10	51 62 028
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 75	–	10	51 62 751



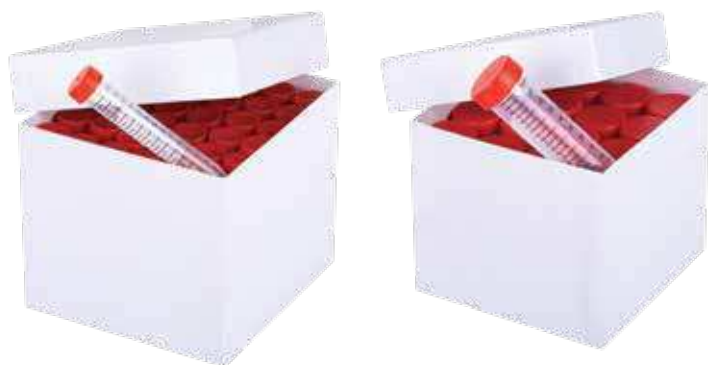
Cryo Boxes, Cardboard, Format 136 x 136 x 75 mm

Ultra-low temperature-resistant cardboard.

suitable for 5 ml microcentrifuge tubes

- for sample storage even at ultra-low temperatures
- with waterproof plastic coatings
- temperature resistant down to – 80 °C
- the Cryo Boxes can be used for larger vials when the grid is removed
- suitable for 5 ml microcentrifuge tubes

Color	Grid	For Tubes Ø x H mm	Quantity per Pack	Order No.
white	5 x 5	17 x 60	10	51 42 756



Cryo Boxes, Cardboard, Format 148 x 148 x 130 mm

Ultra-low temperature-resistant cardboard.

suitable for centrifuge tubes

- for sample storage even at ultra-low temperatures
- with waterproof plastic coatings
- temperature resistant down to – 80 °C
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes dia. 17 mm or dia. 30 mm
- the Cryo Boxes can be used for larger vials when the grid is removed
- suitable for centrifuge tubes: product no. 33 00 001 to 33 00 006

Color	Grid	For Tubes Ø x H mm	Quantity per Pack	Order No.
white	4 x 4	30 x 115	5	51 44 130
white	6 x 6	17 x 120	5	51 44 131

Cryo Boxes with Slip Lid, PP, Format 133 x 133 mm



2-in-1 Cryo Boxes with Slip Lid, PP, Format 133 x 133 mm

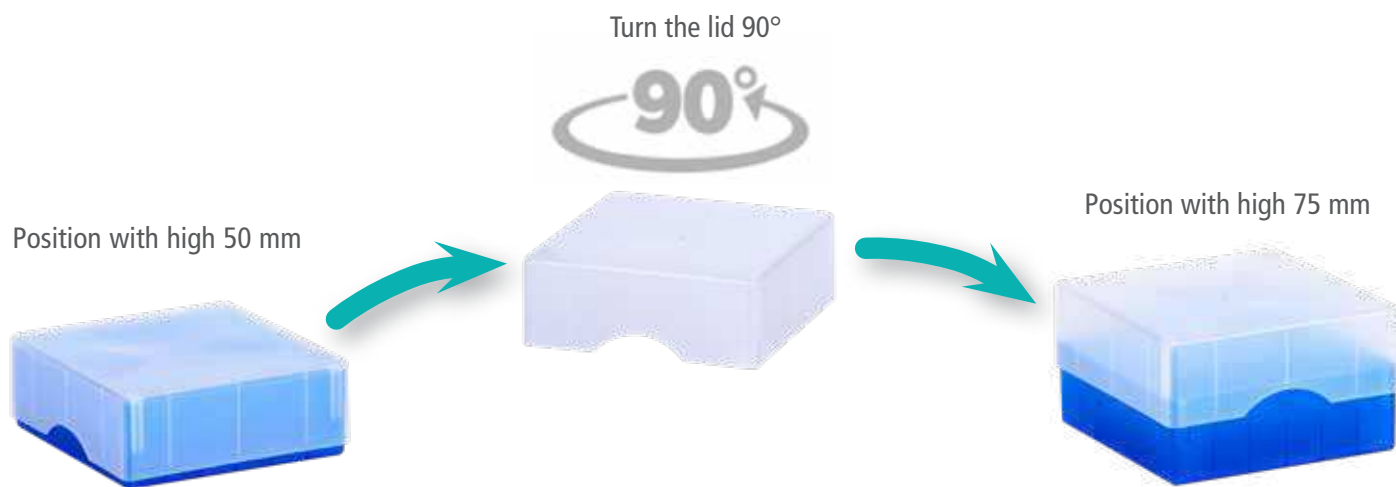
High-quality polypropylene (PP). Available in natural and other colors.

The specialty: the boxes are adjustable in height.

The boxes are available in 6 modern colors, with numerical coding and corresponding vents for draining condensed water.

The 6 x 6 until 10 x 10 grid accommodates space from 36 to 100 tubes.

- autoclavable, temperature-resistant from -90°C to $+121^{\circ}\text{C}$
- grids are available: 6 x 6, 7 x 7, 8 x 8, 9 x 9, 10 x 10
- numerically coded



	Grid For tube Dia.	6 x 6 19.0 mm	7 x 7 17.0 mm	8 x 8 15.0 mm	9 x 9 13.0 mm	10 x 10 11.5 mm
Color	Quantity per Pack	Order No.	Order No.	Order No.	Order No.	Order No.
natural	5	53 20 410	53 20 310	53 20 210	53 20 010	53 20 110
yellow	5	53 20 411	53 20 311	53 20 211	53 20 011	53 20 111
red	5	53 20 412	53 20 312	53 20 212	53 20 012	53 20 112
green	5	53 20 413	53 20 313	53 20 213	53 20 013	53 20 113
blue	5	53 20 414	53 20 314	53 20 214	53 20 014	53 20 114
black	5	53 20 415	53 20 315	53 20 215	53 20 015	53 20 115
mixed	5	53 20 416	53 20 316	53 20 216	53 20 016	53 20 116

Cryo Boxes with Grids, PP, Format 133 x 133 mm

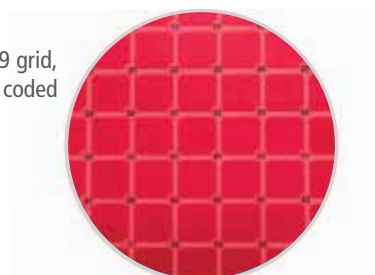


Cryo Boxes with Grids, PP, Format 133 x 133 mm

The boxes are made of high quality polypropylene in natural or other colors. They are available with heights of 52 or 75 mm.

- autoclavable, temperature-resistant from – 90 °C to + 121 °C
- 81 places, 9 x 9 grid, numerically coded
- robust hinge with safe snap-on lid
- stackable for safe transport
- drain bores at the bottom for dew liquids
- removable grid inserts
- Cryo Boxes can also be used for larger vials by removing the grid inserts

9 x 9 grid,
numerically coded



Color	W x D x H mm	For Tube Dia. mm	Grid	Quantity per Pack	Order No.
for Cryo Tubes 1.2 – 2 ml					
natural	133 x 133 x 52	12.8	9 x 9	5	51 20 010
yellow	133 x 133 x 52	12.8	9 x 9	5	51 20 011
red	133 x 133 x 52	12.8	9 x 9	5	51 20 012
green	133 x 133 x 52	12.8	9 x 9	5	51 20 013
blue	133 x 133 x 52	12.8	9 x 9	5	51 20 014
black	133 x 133 x 52	12.8	9 x 9	5	51 20 015
for Cryo Tubes 3 – 4 ml					
natural	133 x 133 x 75	12.8	9 x 9	5	51 20 020
yellow	133 x 133 x 75	12.8	9 x 9	5	51 20 021
red	133 x 133 x 75	12.8	9 x 9	5	51 20 022
green	133 x 133 x 75	12.8	9 x 9	5	51 20 023
blue	133 x 133 x 75	12.8	9 x 9	5	51 20 024
black	133 x 133 x 75	12.8	9 x 9	5	51 20 025

Cryo Boxes and Grid Inserts, PP, Format 133 x 133 mm



Cryo Boxes and Grid Inserts, PP, Format 133 x 133 mm

The boxes are made of high quality polypropylene in natural or other colors. They are available with heights of 52 or 75 mm. These ratiolab® Cryo Boxes are particularly practical and flexible due to their removable grid inserts.

The separate naturally-colored inserts are available in five sizes and can thus be used with sample vessels of differing diameters. The inserts fit all ratiolab® Cryo Boxes. Cleaning of the boxes and the inserts is much simpler than with Cryo Boxes with permanently fitted inserts.

- autoclavable, temperature-resistant from – 90 °C to + 121 °C
- robust hinge with safe snap-on lid
- stackable for safe transport
- drain bores at the bottom for dew liquids
- Cryo Boxes can also be used for larger vials by removing the grid inserts

Color	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
Cryo Boxes without Grid Insert				
natural	133 x 133 x 52		5	52 20 010
yellow	133 x 133 x 52		5	52 20 011
red	133 x 133 x 52		5	52 20 012
green	133 x 133 x 52		5	52 20 013
blue	133 x 133 x 52		5	52 20 014
black	133 x 133 x 52		5	52 20 015
natural	133 x 133 x 75		5	52 20 020
yellow	133 x 133 x 75		5	52 20 021
red	133 x 133 x 75		5	52 20 022
green	133 x 133 x 75		5	52 20 023
blue	133 x 133 x 75		5	52 20 024
black	133 x 133 x 75		5	52 20 025
Grid Inserts				
6 x 6	133 x 133 x 30	20.5	5	52 20 100
7 x 7	133 x 133 x 30	17.3	5	52 20 101
8 x 8	133 x 133 x 30	15.8	5	52 20 102
9 x 9	133 x 133 x 30	12.8	5	52 20 103
10 x 10	133 x 133 x 30	11.2	5	52 20 104

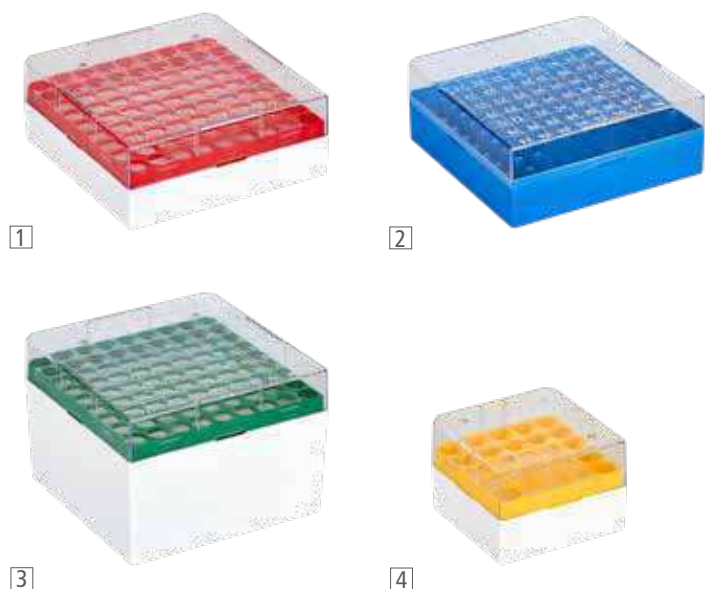
Cryo Boxes with Grids, PC, Format 132 x 132 mm and 76 x 76 mm

CE IVD

Cryo Boxes with Grids, PC, Format 132 x 132 mm and 76 x 76 mm

Made of high quality colored polycarbonate (PC).
For use with liquid nitrogen.

- autoclavable, temperature-resistant from – 190 °C to + 121 °C
- 81 or 100 places, 9 x 9 resp. 10 x 10 grids
- 1/4-format with 25 places, 5 x 5 grid
- numerically coded
- stackable for safe transport
- drain bores at the bottom for dew liquids
- Cryo Boxes can also be used for larger vials by removing the grid inserts (except figure 2)



Color	Fig No.	W x D x H mm	For Tube Dia. mm	Grid	Quantity per Pack	Order No.
for Cryo Tubes 1.2 – 2 ml						
blue	1	132 x 132 x 52	12,3	9 x 9	5	51 50 001
green	1	132 x 132 x 52	12,3	9 x 9	5	51 50 002
red	1	132 x 132 x 52	12,3	9 x 9	5	51 50 003
yellow	1	132 x 132 x 52	12,3	9 x 9	5	51 50 004
for Cryo Tubes 1.2 – 2 ml						
blue	2	132 x 132 x 52	12,3	10 x 10	5	51 50 011
green	2	132 x 132 x 52	12,3	10 x 10	5	51 50 012
red	2	132 x 132 x 52	12,3	10 x 10	5	51 50 013
yellow	2	132 x 132 x 52	12,3	10 x 10	5	51 50 014
white	2	132 x 132 x 52	12,3	10 x 10	5	51 50 015
for Cryo Tubes 3 – 5 ml						
blue	3	132 x 132 x 94	12,3	9 x 9	4	51 50 021
green	3	132 x 132 x 94	12,3	9 x 9	4	51 50 022
red	3	132 x 132 x 94	12,3	9 x 9	4	51 50 023
yellow	3	132 x 132 x 94	12,3	9 x 9	4	51 50 024
1/4-format, for Cryo Tubes 1.2 – 2 ml						
blue	4	76 x 76 x 52	12,3	5 x 5	8	51 50 031
green	4	76 x 76 x 52	12,3	5 x 5	8	51 50 032
red	4	76 x 76 x 52	12,3	5 x 5	8	51 50 033
yellow	4	76 x 76 x 52	12,3	5 x 5	8	51 50 034

Cryo Tubes

CE IVD

Cryo Tubes

Polypropylene with the highest translucence. For the storing and conservation of tissue cultures and biological samples e.g. sera, blood and spermata. Suitable for storage from general cold storage refrigeration (+4°C) down to the vapor phase of liquid nitrogen.

Manufactured in clean Room ISO 7 (UNI EN ISO 14644-1). Class 10.000 (US FED STD 209E).

- sterilized by beta-radiation, products meet a minimum Sterility Assurance Level (SAL) of 10⁻⁶
- autoclavable at 121°C for 20 Min
- certificate completely free of DNA-, DNase-, Pyrogen-, ATP-, Human DNA, and PCR Inhibitor
- lid with integrated sealing function; no additional silicone O-ring

- internal conical bottom for complete emptying
- white graduations for precise measurement
- white lettering for sample identification
- available with internal or external threads
- equipped with base for using with one hand
- each tube and package is labeled with an expiry date
- cap: PE and TVP
- 2.0 ml, 4.0 ml and 5.0 ml tubes available also with round bottom
- packaged in PE bags of 50 tubes in boxes
- suitable working stations see on page 89
- suitable cryo-boxes see on page 80-87

free of DNA-, DNase-,
Pyrogen-, ATP-, Human DNA,
and PCR Inhibitor



Volume ml	Description	Ø x Height mm	Packaging	Quantity per Pack	Order No.
Cryo Tubes with External Thread					
1,2	self-standing	12.3 x 41	20 x 50	1000	51 10 112
2,0	round base	12.3 x 46	20 x 50	1000	51 10 120
2,0	self-standing	12.3 x 47	20 x 50	1000	51 10 122
3,0	self-standing	12.3 x 71	20 x 50	1000	51 10 130
4,0	self-standing	12.3 x 75	20 x 50	1000	51 10 140
5,0	self-standing	12.3 x 90	20 x 50	1000	51 10 150
Cryo Tubes with Internal Thread					
1,2	self-standing	12.3 x 43	20 x 50	1000	51 10 013
2,0	round base	12.3 x 47	20 x 50	1000	51 10 025
2,0	self-standing	12.3 x 48	20 x 50	1000	51 10 024
4,0	self-standing	12.3 x 76	20 x 50	1000	51 10 041
4,0	round base	12.3 x 75	20 x 50	1000	51 10 042
5,0	self-standing	12.3 x 91	20 x 50	1000	51 10 051
5,0	round base	12.3 x 90	20 x 50	1000	51 10 052

Cryo Tubes Accessories

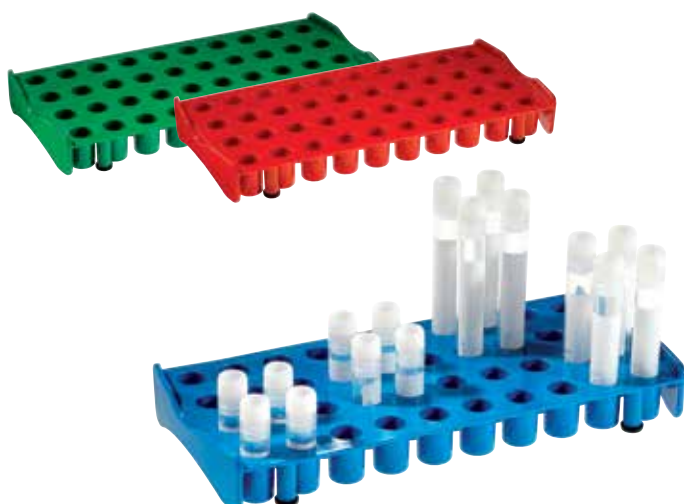


Color Coding Cap Inserts for Cryo Tubes

CE IVD

Polypropylene. For cryo tubes 1.2 to 5.0 ml.
Packed in PE-bags with 1000 pcs.

Color	Quantity per Pack	Order No.
white	1000	51 10 001
red	1000	51 10 002
blue	1000	51 10 003
green	1000	51 10 004
yellow	1000	51 10 005



Work Stations for 40 Cryo Tubes

CE IVD

High quality polypropylene.

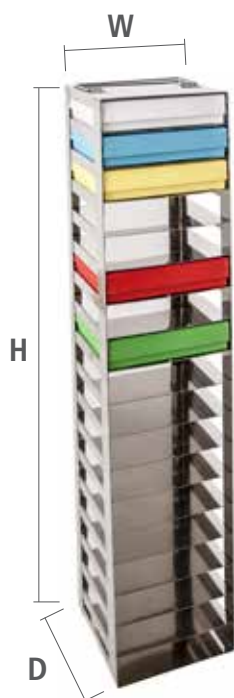
For 40 Cryo Tubes 1.2 to 5 ml with 12.5 mm outer diameter. Cryo Tubes with self-standing base are automatically locked in the Work Station and can easily be screwed and unscrewed with one hand.

- with non-slip feet, the Work Stations stand safely on laboratory benches
- autoclavable
- size (W x L x H) 100 x 220 x 30 mm



Color	Quantity per Pack	Order No.
green	5	53 00 400
red	5	53 00 200
blue	5	53 00 100

Racks for Freezer Chests



Vertical Racks, stainless steel

For the storing of Cryo Boxes in freezer chests.
Stainless steel.

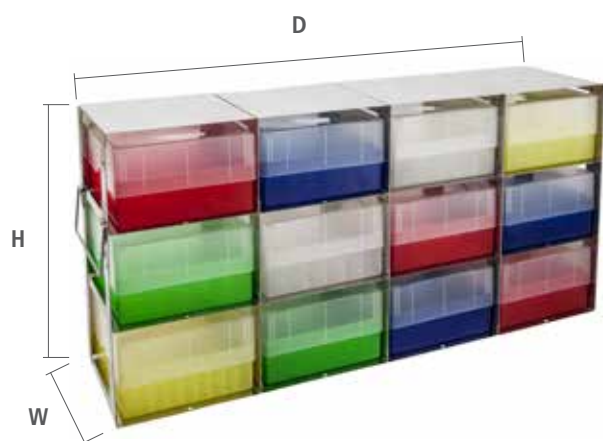
- for all Cryo Boxes format 130 x 130; 133 x 133 and 136 x 136 mm
- surfaces for perfect cleaning
- robust construction
- handles for convenient transport
- rack size includes the holder
- Cryo Racks can be supplied with shelf sizes for any standard Cryo Boxes

Rack standard sizes are listed in the tables below:

other sizes
available on request

Number of Shelves horizontal x vertical	Rack Size D x W x H mm	for Cryo Boxes Height			Quantity per Pack	Order No.
		32 mm	50 mm	75 mm		
1 x 4	140 x 140 x 222	–	■	–	1	54 00 041
1 x 5	140 x 140 x 277	–	■	–	1	54 00 021
1 x 6	140 x 140 x 482	–	–	■	1	54 00 028
1 x 7	140 x 140 x 385	–	■	–	1	54 00 042
1 x 7	140 x 140 x 561	–	–	■	1	54 00 029
1 x 8	140 x 140 x 441	–	■	–	1	54 00 027
1 x 8	140 x 140 x 641	–	–	■	1	54 00 030
1 x 9	140 x 140 x 495	–	■	–	1	54 00 026
1 x 9	140 x 140 x 720	–	–	■	1	54 00 031
1 x 10	140 x 140 x 550	–	■	–	1	54 00 000
1 x 11	140 x 140 x 406	■	–	–	1	54 00 032
1 x 11	140 x 140 x 604	–	■	–	1	54 00 023
1 x 12	140 x 140 x 443	■	–	–	1	54 00 033
1 x 12	140 x 140 x 659	–	■	–	1	54 00 025
1 x 13	140 x 140 x 479	■	–	–	1	54 00 034
1 x 13	140 x 140 x 713	–	■	–	1	54 00 001
1 x 14	140 x 140 x 516	■	–	–	1	54 00 035
1 x 15	140 x 140 x 552	■	–	–	1	54 00 036
1 x 16	140 x 140 x 589	■	–	–	1	54 00 037
1 x 17	140 x 140 x 625	■	–	–	1	54 00 038
1 x 18	140 x 140 x 662	■	–	–	1	54 00 024

Racks for Freezer Cabinets



Horizontal Racks, stainless steel

For the storing of Cryo Boxes in freezer cabinets and chests.
Stainless steel.

- for all Cryo Boxes format 130 x 130; 133 x 133 and 136 x 136 mm
- surfaces for perfect cleaning
- robust construction
- handles for convenient transport
- Cryo Racks can be supplied with shelf sizes for any standard Cryo Boxes

Rack standard sizes are listed in the tables below:

other sizes
available on request

Number of Shelves horizontal x vertical	Rack Size D x W x H mm	for Cryo Boxes Height				Quantity per Pack	Order No.
		50 mm	75 mm	100 mm	130 mm		
3 shelves							
3 x 3	424 x 140 x 165	■	–	–	–	1	54 00 007
3 x 4	424 x 140 x 219	■	–	–	–	1	54 00 009
3 x 5	424 x 140 x 274	■	–	–	–	1	54 00 022
4 shelves							
4 x 2	566 x 140 x 164	–	■	–	–	1	54 00 011
4 x 2	566 x 140 x 219	–	–	■	–	1	New 54 00 010
4 x 2	566 x 140 x 275	–	–	–	■	1	New 54 00 012
4 x 3	566 x 140 x 240	–	■	–	–	1	54 00 006
4 x 3	566 x 140 x 314	–	–	■	–	1	54 00 040
4 x 4	566 x 140 x 219	■	–	–	–	1	54 00 004
4 x 4	566 x 140 x 319	–	■	–	–	1	54 00 005
4 x 5	566 x 140 x 274	■	–	–	–	1	54 00 003
4 x 6	566 x 140 x 328	■	–	–	–	1	54 00 002
4 x 7	566 x 140 x 391	■	–	–	–	1	New 54 00 008
5 shelves							
5 x 2	705 x 140 x 161	–	■	–	–	1	New 54 00 016
5 x 2	705 x 140 x 212	–	–	■	–	1	New 54 00 020
5 x 3	705 x 140 x 240	–	■	–	–	1	New 54 00 017
5 x 4	705 x 140 x 219	■	–	–	–	1	New 54 00 013
5 x 4	705 x 140 x 319	–	■	–	–	1	New 54 00 018
5 x 5	705 x 140 x 274	■	–	–	–	1	New 54 00 014
5 x 6	705 x 140 x 328	■	–	–	–	1	New 54 00 015

Racks for Freezer Cabinets



Drawer Rack, stainless steel

For the storing of Cryo Boxes in freezer cabinets and chests.
Stainless steel.

- for all Cryo Boxes format 130 x 130; 133 x 133 and 136 x 136 mm
- cabinet slide-ins without pull-out stop
- easy-to-clean polished surface
- robust design

Rack standard sizes are listed in the tables below:

other sizes
available on request

Number of Shelves horizontal x vertical	Rack Size D x W x H mm	for Cryo Boxes Height			Quantity per Pack	Order No.
		50 mm	75 mm	100 mm		
4 shelves						
4 x 2	570 x 144 x 112	■	–	–	1	New 54 00 043
4 x 3	570 x 144 x 168	■	–	–	1	New 54 00 044
4 x 3	570 x 144 x 250	–	■	–	1	54 00 019
4 x 4	570 x 144 x 224	■	–	–	1	54 00 046
4 x 4	570 x 144 x 335	–	■	–	1	54 00 066
4 x 5	570 x 144 x 280	■	–	–	1	54 00 045
4 x 6	570 x 144 x 336	■	–	–	1	54 00 047
4 x 7	570 x 144 x 392	■	–	–	1	New 54 00 049
5 shelves						
5 x 3	709 x 144 x 241	–	■	–	1	New 54 00 052
5 x 4	709 x 144 x 224	■	–	–	1	New 54 00 050
5 x 4	709 x 144 x 321	–	■	–	1	New 54 00 053
5 x 5	709 x 144 x 280	■	–	–	1	54 00 048
5 x 6	709 x 144 x 336	■	–	–	1	New 54 00 051

Racks in special dimensions and design



1

Racks in special dimensions and design

Being specialized in design, construction and production of storage and cryo-racks we are proud to offer you our service. Provide us with the dimensions you request and our CAD-team will create the design for you.

Those products are in example:

- Blood bag canisters for storage of blood bags in ultra freezers (see fig.1)

other sizes
available on request



2

- Blood bag frames for blood bag canisters in ultra freezers (see fig 2)



3

- special spring clip holder keeps cryo boxes at their compartment (see fig 3)

Please send your request directly to our mailaccount tech@ratiolab.com or contact us by phone.

Technical information



Think! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Chemical resistance of plastics

The plastics used are classified as follows with respect to chemical resistance:

+ Excellent chemical resistance

Constant contact with medium gives rise to no damage to the plastic within 30 days. The plastic can, however, remain resistant over a number of years.

0 Partial to good chemical resistance

Constant contact with the medium gives rise to minor damage within a period of 7-30 days; such damage is in fact partially reversible (e.g. swelling, softening, less mechanical firmness, discoloration).

— Low chemical resistance

Not suitable for constant contact with medium. Damage may occur immediately (e.g. less mechanical firmness, deformation, discoloration, cracks, dissolution).

Chemical resistance of plastics with groups of substances at 20 °C	PP	PS	HD-PE	LD-PE
Alcohols, aliphatic	+	+	+	+
Ether	0	—	0	0
Aldehydes	+	—	+	0
Ester	0	—	0	0
Hydrocarbons, aliphatic	+	—	+	0
Hydrocarbons, aromatic	0	—	+	0
Hydrocarbons, halogenated	0	—	0	0
Ketones	0	—	0	0
Alkalis	+	+	+	+
Acids, strong or concentrated	+	0	+	+
Acids, weak or diluted	+	0	+	+
Oxidizing acids, oxidizing agents	—	—	—	—

These carefully selected recommendations from the literature or from manufacturers are intended to inform and guide. However, the user is obliged to check suitability for the applications intended.

Chemical	PP		PS		HD-PE		LD-PE	
	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C
Acetaldehyde	+	—	—	—	+	0	+	—
Acetic acid (glacial), 100 %	+	0	—	—	+	+	+	0
Acetic acid, 96 %	+	+	0	0	+	+	+	+
Acetic anhydride	0	0	—	—	0	0	—	—
Acetone	+	+	—	—	+	+	+	0
Acetonitrile	+	0	—	—	+	0	+	0
Acetophenone	0	0	—	—	0	0	—	—
Acetylacetone	+	—	—	—	+	—	+	—
Acetylchloride	+	—	—	—	+	—	+	—
Acrylic acid	+	—	—	—	+	—	+	—
Acrylonitrile	0	—	—	—	+	+	+	+
Adipic acid	+	+	+	+	+	+	+	+
Allyl alcohol	+	+	+	0	+	+	+	+
Aluminum chloride	+	+	+	+	+	+	+	+
Aluminum hydroxide	+	+	0	0	+	+	+	+
Amino acids	+	+	+	+	+	+	+	+
Ammonium chloride	+	+	+	+	+	+	+	+
Ammonium fluoride	+	+	+	+	+	+	+	+
Ammonium hydroxide, 30 % (Ammonia)	+	+	0	—	+	+	+	+
Ammonium sulfate	+	+	+	+	+	+	+	+
n-Amyl acetate	0	—	—	—	+	0	0	—
Amyl alcohol (Pentanol)	+	+	0	0	+	+	+	+
Amyl chloride (Chloropentane)	—	—	—	—	—	—	—	—

Chemical resistance of plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Aniline	+	+	-	-	+	+	+	0
Barium chloride	+	+	+	+	+	+	+	+
Benzaldehyde	+	+	-	-	+	+	+	+
Benzene (Benzol)	+	0	-	-	+	+	0	-
Benzine (Gasoline)	0	0	-	-	+	+	0	-
Benzoyl chloride	+	0	-	-	+	+	0	-
Benzyl alcohol	0	-	-	-	0	-	0	-
Benzylamine	0		-	-	0		0	-
Benzylchloride			-	-				
Boric acid, 10 %	+	+	+	+	+	+	+	+
Bromine	-	-	-	-	-	-	-	-
Bromobenzene	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-
Bromonaphthalene			-	-				
Butanediol	+	+	-	-	+	+	+	+
1-Butanol	+	+	0	-	+	+	+	+
Butylamine			-	-				
n-Butyl acetate	0	0	-	-	+	+	0	0
Butyl methyl ether	+	0	-	-	0	-	0	-
Butyric acid	-	-	-	-	0	-	-	-
Calcium carbonate	+	+	+	+	+	+	+	+
Calcium chloride	+	+	+	+	+	+	+	+
Calcium hydroxide	+	+	+	0	+	+	+	+
Calcium hypochlorite	+	+	+	+	+	+	+	+
Calomel	+	+	+	0	+	+	+	+
Carbon disulfide	-	-	-	-	-	-	-	-
Carbon tetrachloride	-	-	-	-	0	-	-	-
Chloro naphthalene								
Chloroacetaldehyde, 45 %			-	-				
Chloroacetic acid	+	+	-	-	+	+	+	+
Chloroacetone			-	-				
Chlorobenzene	0	-	-	-	-	-	-	-
Chlorobutane	0	-	-	-	0	-	0	-
Chloroform	-	-	-	-	+	0	-	-
Chlorosulfonic acid								
Chromic acid, 10 %	+	+	-	-	+	+	+	+
Chromic acid, 50 %	0	0	-	-	+	0	+	0
Chromosulfuric acid	-	-	0	0	+	-	+	-
Copper sulfate	+	+	+	+	+	+	+	+
Cresol	0	0	-	-	0	-	-	-
Cumene (isopropyl benzene)	0	-	-	-	+	0	0	-
Cyclohexane	0	-	-	-	0	-	0	-
Cyclohexanone	0	-	-	-	0	-	-	-
Cyclopentane	0	-	-	-	0	-	-	-
Decane	0				0	-		
1-Decanol	+		0		+			
Dibenzylether	+		-	-	+			
Dibromoethane								
Dibutyl phthalate	+	0	-	-	0	-	0	-
Dichloroacetic acid	0	-	0	-	0	0	0	-
Dichlorobenzene	0	-	-	-	0	-	0	-
Dichloroethane	0	-			0	-	0	-
Dichloromethane	0	-	-	-	0	-	0	-
Diesel oil (Heating oil)	+	0	-	-	+	0	0	-
Diethanolamine	0		-	-	0			
1.2 Diethylbenzene	-	-	-	-	0	-	-	-

Chemical resistance of plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C
Diethylether	0	-	-	-	0	-	-	-
Diethylamine	0	-	0	0	0	-	-	-
Diethylene glycol	+	+	0	-	+	+	+	+
Dimethyl sulfoxide (DMSO)	+	+	-	-	+	+	+	+
Dimethylaniline			-	-				
Dimethylformamide (DMF)	+	+	-	-	+	+	+	+
1.4 Dioxane	+	0	-	-	+	+	+	0
Diphenyl ether			-	-				
Ethanol	+	+	-	-	+	+	+	+
Ethanolamine	+							
Ethyl acetate	+	0	-	-	+	+	+	+
Ethyl methyl ketone	+	0	-	-	0	-	0	-
Ethylbenzene	-	-	-	-	-	-	-	-
Ethylene glycol (glycol)	+	+	+	+	+	+	+	+
Ethylene oxide	0	-	-	-	0	0	0	0
Fluoroacetic acid			-	-				
Formaldehyde, 40 %	+	+	-	-	+	+	+	+
Formamide	+	+			+	+	+	+
Formic acid, 100 %	+	+	+	0	+	+	+	+
Glycerol	+	+	+	+	+	+	+	+
Glycolic acid, 50 %	+	+			+	+	+	+
Heating oil (Diesel oil)	+	0	-	-	+	0	0	-
Heptane	0	0	-	-	0	0	0	-
Hexane	+	0	0	-	+	0	0	-
Hexanoic acid								
Hexanol	+	+			+	+	+	+
Hydriodic acid	+	+			+	+	+	+
Hydrobromic acid	+	+	0	-	+	+	+	+
Hydrochloric acid, 10 %	+	+	+	+	+	+	+	+
Hydrochloric acid, 20 %	+	+	+	+	+	+	+	+
Hydrochloric acid, 37 %	+	+	0	0	+	+	+	+
Hydrofluoric acid, 40 %	+	+	+	+	+	+	+	+
Hydrofluoric acid, 70 %	+	0	-	-	+	0	+	-
Hydrogen peroxide, 35 %	+	+	+	+	+	+	+	+
Isoamyl alcohol	+	+			+	+	+	+
Isobutanol	+	+	0	0	+	+	+	+
Isooctane			0					
Isopropanol (2-propanol)	+	+	0	0	+	+	+	+
Isopropyl ether	-	-	-	-	-	-	-	-
Lactic acid	+	+	+	+	+	+	+	+
Lugol's solution (iodine-potassium iodide solution)	+	+	0	-	-	-	-	-
Mercury	+	+	+	+	+	+	+	+
Methanol	+	+	0	-	+	+	+	0
Methoxybenzene			-	-				
Methyl formate			-	-				
Methyl propyl ketone	+	0	-	-	+	+	+	0
Methylene chloride	0	-	-	-	0	-	0	-
Mineral oil (engine oil)	+	+	+		+	+	+	0
Monochloroacetic acid	+	+	-	-	+	+	+	+
Nitric acid, 10 %	+	+	-	-	+	+	+	+
Nitric acid, 30 %	0	-	-	-	0	-	0	0
Nitric acid, 70 %	-	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	0	-	-	-
Nitrohydrochloric acid	0	-	0	-	-	-	-	-
Oleic acid			-	-				
Oxalic acid	+	+	+	+	+	+	+	+

Chemical resistance of plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C	20 °C	50 °C
Ozone	0	–	0	0	0	–	0	–
n-Pentane								
Peracetic acid								
Perchloric acid	+	–	–	–	+	–	+	–
Perchloroethylene	–	–	–	–	–	–	–	–
Petroleum	0	–	–	–	0	–	0	–
Petroleum ether			–	–			0	
Phenol	+	+	–	–	+	+	+	0
Phenylethanol	0				0			
Phenylhydrazine	0				0			
Phosphoric acid, 85 %	+	+	+	0	+	+	+	+
Piperidine	+				+			
Potassium chloride	+	+	0	0	+	+	+	+
Potassium dichromate								
Potassium hydroxide	+	+	0	0	+	+	+	+
Potassium permanganate	+	+	+	+	+	+	+	+
Propanol	+	+	0		+	+	+	+
Propionic acid	+	0	0	–	+	0	0	–
Propylene glycol (propanediol)	+	+	+	+	+	+	+	+
Pyridine	0	0	–	–	+	0	+	0
Salicylaldehyde	+	+	–	–	+	+	+	+
Salicylic acid	+	+	+	+	+	+	+	+
Silver acetate	+	+	0	0	+	+	+	+
Silver nitrate	+	+	0	0	+	+	+	+
Sodium acetate	+	+	+	+	+	+	+	+
Sodium chloride	+	+	+	+	+	+	+	+
Sodium dichromate	+	+	+	0	+	+	+	+
Sodium fluoride	+	+	+	+	+	+	+	+
Sodium hydroxide, 30 %	+	+	+	+	+	+	+	+
Sulfuric acid, 60 %	+	+	–	–	+	+	+	+
Sulfuric acid, 98 %	–	–	–	–	0	–	0	–
Tartaric acid	+	+	+	+	+	+	+	+
Tetrachloroethylene								
Tetrahydrofuran (THF)	0	–	–	–	0	–	0	–
Tetramethylammonium hydroxide								
Toluene	0	–	–	–	0	0	0	–
Trichloroacetic acid	0	–	0	–	0	0	0	–
Trichlorobenzene	–	–	–	–	–	–	–	–
Trichloroethane	–	–	–	–	0	–	–	–
Trichloroethylene	–	–	–	–	0	–	–	–
Trichlorotrifluoroethane			–	–				
Triethanolamine			–	–				
Triethylene glycol	+	+	+	0	+	+	+	+
Trifluoroacetic acid (TFA)			–	–				
Trifluoro ethane			–	–				
Tripropylene glycol	+	+	+	+	+	+	+	+
Turpentine	–	–	–	–	0	–	0	–
Urea	+	+	+	+	+	+	+	+
Xylene	–	–	–	–	0	–	0	–
Zinc chloride, 10 %	+	+	+	+	+	+	+	+
Zinc sulfate, 10 %	+	+	+	+	+	+	+	+

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our products, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, not the suitability of the products for a specific purpose.

Plastics Technical data and Index

Sterilizing plastic - Autoclaving

Recommended autoclave cycle: 20 minutes at 121 °C, 1 bar

The following plastics can be autoclaved several times: PP and PC

Standard abbreviations for plastics

DIN-Abbrev.	Description	Application temperature (°C)	
		from	to
ABS	acrylic butadiene styrene copolymer	-40	+85 (+100)
E-CTFE	ethylene chlorotrifluorethylene	-70	+150 (+170)
ETFE	ethylene tetrafluor ethylene	-100	+150 (+180)
FEP	tetrafluor ethylene perfluorpropylene	-100	+205
HDPE	polyethylene high density	-50	+80 (+120)
LDPE	polyethylene low density	-50	+75 (+190)
MF	melamine	-60	+80 (+120)
NR	natural rubber	-40	+80
PA	polyamide (PA6)	-30	+80 (+140)
PBT	polybutylene terephthalate	-50	+150
PC	polycarbonate	-100	+135 (+140)
PE	polyethylene (see HDPE/LDPE)	-40	+80 (+90)
PES	polyether sulfone	-100	+150
PETG	polyethylene terephthalate	-40	+65
PFA	perfluoralkoxy	-200	+260
PMMA	polymethylmethacrylate	-40	+85 (+90)
PMP (TPX)	polymethylpentene	0	+150 (+180)
POM	polyoxymethylene	-40	+110 (+140)
PP	polypropylene	-10	+110 (+140)
PS	polystyrene	-20	+70 (+80)
PSU	polysulfone	-100	+150
PTFE	polytetrafluor ethylene	-200	+260
PVC	polyvinylchlorid	-20	+80
PVDF	polyvinylidene flouride	-40	+105 (+150)
SAN	styren acrylonitrile	-20	+85 (+95)
SI	silicone rubber	-50	+180 (+250)
TPE	thermoplastic elastomer	-50	+121

Disclaimer: All information in this table are without guarantee.
Legal claims are excluded here.

Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page
1020230	61	1771000	37	2100555	35	2410640	36	2500170	34	2600131	43
1020231	61	1771000xl	37	2100600	34	2410642	36	2500180	36	2600135	43
1020240	61	1780010	39	2100610	35	2410650	36	2500190	34	2600145	42
1020241	61	1780011	38	2113602	34	2410653	36	2513162	34	2600151	44
1020242	61	1780012	38	2113612	35	2413602	34	2513163	34	2600155	42
1020243	61	1780013	38	2130602	34	2413612	35	2513172	34	2600160	43
1020250	61	1780020	39	2130612	35	2430602	34	2513192	34	2600165	44
1020251	61	1780100	39	2153602	34	2430612	35	2513502	34	2600171	42
1020260	61	1780200	39	2153612	35	2453602	34	2530162	34	2600181	42
1020261	61	1780201	38	2400600	34	2453612	35	2530163	34	2600190	44
1020330	61	1780202	38	2400610	35	2453620	36	2530172	34	2600195	44
1020331	61	1780203	38	2400620	36	2453630	36	2530173	34	2600206	44
1020340	61	1781000	39	2400622	36	2453640	36	2530192	34	2600216	44
1020341	61	1781001	38	2400623	36	2453642	36	2553162	34	2600220	43
1020350	61	1781002	38	2400624	36	2453650	36	2553163	34	2600230	42
1020351	61	1781003	38	2400630	36	2453653	36	2553172	34	2600240	42
1020540	61	1781250	39	2400640	36	2500110	34	2553192	34	2600250	43
1020541	61	1781251	38	2400642	36	2500130	35	2553502	34	2600260	42
1770010	37	1781252	38	2400650	36	2500140	35	2600111	43	2655111	43
1770020	37	1781253	38	2400653	36	2500150	35	2600119	42	2655120	43
1770100	37	2100500	34	2410620	36	2500160	34	2600120	43	2655131	43
1770200	37	2100553	35	2410630	36	2500163	34	2600125	42	2655135	43

Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page
2655151	44	3200311	27	4770037	18	5110140	88	5120180	82	5131752	80
2655171	42	3200312	27	4770038	18	5110150	88	5120181	82	5131753	80
2655181	42	3300001	53	4770039	18	5120002	81	5120182	82	5131754	80
2655206	44	3300002	53	4770040	18	5120010	85	5120183	82	5131755	80
2655230	42	3300003	53	4770041	18	5120011	85	5120184	80	5132001	80
2655240	42	3300004	53	4770042	18	5120012	85	5120185	80	5132002	80
2656111	43	3300005	53	4770043	18	5120013	85	5120186	80	5132003	80
2656135	43	3300006	53	4770044	18	5120014	85	5120187	80	5132004	80
2656171	42	3514030	56	4770045	18	5120015	85	5120190	82	5132005	80
2711110	48	3514031	56	4770046	18	5120020	85	5120191	82	5132131	80
2712120	48	3514032	56	4770047	18	5120021	85	5120192	82	5132132	80
2722110	49	3514033	56	4770048	18	5120022	85	5120193	82	5132133	80
2722120	49	3514040	56	4770049	18	5120023	85	5120194	80	5132134	80
2722130	49	3514900	56	4770050	18	5120024	85	5120195	80	5132135	80
2722131	49	351490B	56	4770051	18	5120025	85	5120196	80	5132321	80
2725110	50	351490G	56	4770052	18	5120120	82	5120197	80	5132322	80
2725120	50	351490R	56	4770053	18	5120121	82	5120200	82	5132323	80
2810100	50	351490Y	56	4770054	18	5120122	82	5120201	82	5132324	80
2811110	50	3520000	56	4770055	18	5120123	82	5120202	82	5132325	80
2812010	50	3622000	56	4770056	18	5120124	80	5120203	82	5132501	80
2812011	50	3712005	57	4770057	18	5120125	80	5120204	80	5132502	80
2812012	51	3712006	57	4770058	18	5120126	80	5120205	80	5132503	80
2900101	41	3712007	57	4770059	18	5120127	80	5120206	80	5132504	80
2900102	41	3712008	57	4770060	18	5120128	81	5120207	80	5132505	80
2900103	41	3712009	57	4770061	18	5120130	82	5120210	82	5132751	80
2900104	41	3712101	57	4770062	18	5120131	82	5120211	82	5132752	80
2900105	41	3712201	57	4770063	18	5120132	82	5120212	82	5132753	80
2900106	41	3712202	57	4770064	19	5120133	82	5120213	82	5132754	80
2900107	41	3712203	57	4770065	19	5120134	80	5120214	80	5132755	80
2900109	41	3712204	57	4770066	19	5120135	80	5120215	80	5141001	82
2910101	41	3714010	56	4770067	19	5120136	80	5120216	80	5141002	82
2910102	41	3814010	56	4770068	19	5120137	80	5120217	80	5141003	82
2910103	41	3814020	53	4770069	19	5120140	82	5120218	81	5141004	82
2910104	41	3914900	56	4770070	19	5120141	82	5120219	83	5141005	82
2910105	41	391490B	56	4770071	19	5120142	82	5120221	82	5141131	82
2910106	41	391490G	56	4780010	21	5120143	82	5120222	82	5141132	82
2910107	41	391490R	56	4780012	21	5120144	80	5120223	82	5141133	82
2910109	41	391490Y	56	4780018	21	5120145	80	5120224	82	5141134	82
2970001	25	4770001	16	4780020	21	5120146	80	5120225	80	5141135	82
2970002	25	4770002	16	4780025	21	5120147	80	5120226	80	5141321	82
2970003	25	4770003	16	4780058	21	5120150	82	5120227	80	5141322	82
2970004	25	4770004	16	4780100	21	5120151	82	5120228	80	5141323	82
2970005	25	4770005	16	4780200	21	5120152	82	5131001	80	5141324	82
2970006	25	4770006	16	4780308	21	5120153	82	5131002	80	5141325	82
2970014	24	4770007	16	4781000	21	5120154	80	5131003	80	5141501	82
2980200	26	4770008	16	4785000	21	5120155	80	5131004	80	5141502	82
3014030	56	4770009	16	4790052	21	5120156	80	5131005	80	5141503	82
3101011	40	4770010	16	4790302	21	5120157	80	5131131	80	5141504	82
3102011	40	4770011	17	5110001	89	5120160	82	5131132	80	5141505	82
3105011	40	4770012	17	5110002	89	5120161	82	5131133	80	5141751	82
3110011	40	4770013	17	5110003	89	5120162	82	5131134	80	5141752	82
3125011	40	4770014	17	5110004	89	5120163	82	5131135	80	5141753	82
3150011	40	4770015	17	5110005	89	5120165	80	5131321	80	5141754	82
3170100	45	4770016	17	5110013	88	5120166	80	5131322	80	5141755	82
3170200	45	4770017	17	5110024	88	5120167	80	5131323	80	5142001	82
3170305	45	4770018	17	5110025	88	5120168	80	5131324	80	5142002	82
3170385	45	4770019	17	5110041	88	5120170	82	5131325	80	5142003	82
3170485	45	4770020	17	5110042	88	5120171	82	5131501	80	5142004	82
3200300	27	4770031	18	5110051	88	5120172	82	5131502	80	5142005	82
3200301	27	4770032	18	5110052	88	5120173	82	5131503	80	5142131	82
3200302	27	4770033	18	5110112	88	5120174	80	5131504	80	5142132	82
3200303	27	4770034	18	5110120	88	5120175	80	5131505	80	5142133	82
3200306	27	4770035	18	5110122	88	5120176	80	5131506	81	5142134	82
3200309	27	4770036	18	5110130	88	5120177	80	5131751	80	5142135	82

Index

Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page	Order No.	Page
5142321	82	5320013	84	5400032	90	5921171	62	6025020	72	8200002	75
5142322	82	5320014	84	5400033	90	5921173	62	6114100	77	8200003	75
5142323	82	5320015	84	5400034	90	5921174	62	6114101	77	8200004	75
5142324	82	5320016	84	5400035	90	5921175	62	6114102	77	8200005	75
5142325	82	5320110	84	5400036	90	5921176	62	6114103	77	8200006	75
5142501	82	5320111	84	5400037	90	5921182	62	6114104	77	8200007	75
5142502	82	5320112	84	5400038	90	5921183	62	6114110	77	8200008	72
5142503	82	5320113	84	5400040	91	5921184	62	6114111	77	8200008	75
5142504	82	5320114	84	5400041	90	5921185	62	6114200	77	8200009	72
5142505	82	5320115	84	5400042	90	5921188	62	6114201	77	8200009	75
5142751	82	5320116	84	5400043	92	5921190	62	7000250	60	8200010	72
5142752	82	5320210	84	5400044	92	5921200	62	7000260	60	8200021	75
5142753	82	5320211	84	5400045	92	5922204	63	7000270	60	8200022	75
5142754	82	5320212	84	5400046	92	5922250	63	7001000	58	8200023	75
5142755	82	5320213	84	5400047	92	5922253	63	7001005	58	8200024	75
5142756	83	5320214	84	5400048	92	5923050	64	7001100	58	8200025	75
5144130	83	5320215	84	5400049	92	5923250	64	7001105	58	8200026	75
5144131	83	5320216	84	5400050	92	5923500	64	7001150	58	8200027	75
5150001	87	5320310	84	5400051	92	5924050	65	7001155	58	8610001	76
5150002	87	5320311	84	5400052	92	5924250	65	7001200	58	8610002	76
5150003	87	5320312	84	5400053	92	5924500	65	7001205	58	8610003	76
5150004	87	5320313	84	5400066	92	5926035	64	7001210	58	8610006	76
5150011	87	5320314	84	5515010	53	5926060	64	7001212	58	8610007	76
5150012	87	5320315	84	5515040	53	5926125	64	7001300	58	8610011	77
5150013	87	5320316	84	5515041	53	5926375	64	7001305	58	8610014	77
5150014	87	5320410	84	551504D	53	5926500	64	7001310	58	8610015	76
5150015	87	5320411	84	5515051	53	5926998	64	7001311	58	8610039	76
5150021	87	5320412	84	5515060	53	5926999	64	7001400	58	8610040	76
5150022	87	5320413	84	5515061	53	5927100	65	7001400	60	9022000	22
5150023	87	5320414	84	551506D	53	5927250	65	7001401	58	9022001	22
5150024	87	5320415	84	5615000	54	5927500	65	7001401	60	9022026	26
5150031	87	5320416	84	5615001	54	5927999	65	7001405	58	9022028	23
5150032	87	5400000	90	5615002	54	6018060	69	7001405	60	9022030	23
5150033	87	5400001	90	5615003	54	6018111	68	7001410	58	9022030	27
5150034	87	5400002	91	5615004	54	6018113	68	7001410	60	9050000	63
5160028	83	5400003	91	5615005	54	6018121	68	7001415	60	9050004	63
5160029	83	5400004	91	5615008	55	6018123	68	7001420	60	9050005	63
5160035	83	5400005	91	5615009	55	6018211	68	7001430	60	9050006	63
5160036	83	5400006	91	5615020	54	6018213	68	7002100	59	9050100	63
5162028	83	5400007	91	5615030	54	6018221	68	7002105	59	9050104	63
5162751	83	5400008	91	5615038	55	6018223	68	7002110	58	9050105	63
5220010	86	5400009	91	5615039	55	6018311	68	7002150	59	9050106	63
5220011	86	5400010	91	5615101	54	6018313	68	7002155	59	9420016	30
5220012	86	5400011	91	5615106	54	6018321	68	7002200	59	9420017	30
5220013	86	5400012	91	5615108	55	6018323	68	7002205	59	9420018	30
5220014	86	5400013	91	5615109	55	6018401	69	7002300	59	9420019	30
5220015	86	5400014	91	5615158	55	6018402	69	7002305	59	9420024	21
5220020	86	5400015	91	5615159	55	6018421	69	7003100	59	9420025	19
5220021	86	5400016	91	5615400	54	6018422	69	7003110	59	9420026	19
5220022	86	5400017	91	5616021	55	6018610	73	7003120	59	9420027	19
5220023	86	5400018	91	5616022	55	6018611	73	7003130	59	9425516	30
5220024	86	5400019	92	5616023	55	6018612	73	7003200	59	9425517	30
5220025	86	5400020	91	5616025	55	6018618	73	7003210	59	9425518	30
5220100	86	5400021	90	5616026	55	6018619	73	7003220	59		
5220101	86	5400022	91	5616027	55	6018710	69	7003230	59		
5220102	86	5400023	90	5700110	52	6018711	69	7020100	63		
5220103	86	5400024	90	5700120	52	6018717	69	7020200	63		
5220104	86	5400025	90	5700200	52	6018718	69	7100007	22		
5300100	89	5400026	90	5700401	52	6020121	71	8010161	33		
5300200	89	5400027	90	5810100	52	6020221	71	8030160	33		
5300400	89	5400028	90	581010D	52	6020231	71	8030170	33		
5320010	84	5400029	90	5810110	52	6020241	71	8101012	71		
5320011	84	5400030	90	5921160	62	6025000	72	8101101	72		
5320012	84	5400031	90	5921170	62	6025010	72	8200001	75		

Welcome!

About ratiolab®

For over 40 years we have been developing professional solutions for laboratory routine, for research, science and industry – all in close cooperation with our customers. Our range of products has proven itself in numerous laboratories throughout the world.

We supply everything that facilitates daily work routines, increases accuracy and improves process safety – in fact, those items that help to make the laboratory all that more efficient!

Efficiency² by ratiolab®

- We have been partners for the trade for over three decades, providing comprehensive quality and reliability
- We produce disposable plastic products in series of the highest precision, made in Germany
- We offer individual development and manufacture of customized products
- We have a Quality Management System corresponding to DIN EN ISO 9001:2015 and EN ISO 13485:2016

Bioswisstec AG
Ebnatstrasse 65
8200 Schaffhausen
Switzerland

+41 52 620 33 44
info@bioswisstec.com

www.bioswisstec.com



THINK! Development and production of customized products



Slamed Pipets and Analysers



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

ratiolab[®]
disposables for sciences

slamed[®]
instruments for sciences

Ratiolab GmbH · Am Siebenstein 12
63303 Dreieich, Germany · Tel. +49 (0) 6103 30025-0
Fax +49 (0) 6103 30025-55 · info@ratiolab.com

www.ratiolab.com