## Microbiology

Sample collection, cultivation, processing







#### **SARSTEDT International**

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#### Sample collection systems

#### Swabs

Sarstedt swabs are used to easily collect and efficiently transport bacteriological, serological and cytological samples. The swabs are suitable for use both on intact skin and in natural body orifices. They can also be used in the food industry within the scope of hygiene controls and for sample collection from various surfaces.

In addition to short and long swab designs, swabs made from plastic or aluminium and versions with and without a transport medium are also available. When transporting over long distances, or when sending sensitive microorganisms, we recommend the use of swabs with transport medium. The addition of charcoal to the medium in some variants is used to neutralise bacterial toxins and other inhibitory substances.

#### Neutral swab, sterile

Order no	Diameter/tube length in mm	Stick material/length in mm	Swab material	Packaging/item
80.625	16.5/101	Polystyrene/90	Viscose	500/bag • 500/case
80.1301.500	13/145	Polystyrene/150	Viscose	500/inner box • 2000/case
80.1303.500	13/145	Aluminium/155	Viscose	500/inner box • 2000/case

#### Swabs with transport medium

- Transport tubes and separate swabs, individually wrapped, sterile, in practical peel-pack packaging
- Suitable for aerobes and anaerobes
- Tested according to the CLSI standard method M40-A2

#### Swab with Amies transport medium, sterile

Order no	Diameter/tube length in mm	Stick material/length in mm	Swab material	Packaging/item
80.1361.500	13/145	Polystyrene/150	Viscose	100/inner box • 600/case
80.1363.500	13/145	Aluminium/150	Viscose	100/inner box • 600/case

#### Swab with Amies transport medium and charcoal, sterile

Order no	Diameter/tube length in mm	Stick material/length in mm	Swab material	Packaging/item
80.1362.500	13/145	Polystyrene/150	Viscose	100/inner box • 600/case
80.1366.500	13/145	Aluminium/150	Viscose	100/inner box • 600/case



#### Urine diagnostics

#### Sarstedt offers two systems for hygienic urine collection.

The Urine Monovette® provides a traditional aspiration principle, in which the urine is removed from the collection container by applying the suction tip and pulling back the plunger from the collection tube.

The V-Monovette® urine offers enclosed urine transfer via the vacuum system. Using a system such as this improves hygiene and convenience both for the patient and for the user. As there is no need to open urine containers to fill the tubes, contamination is virtually excluded.

Both systems are available with a boric acid preparation. This means that microorganisms in the urine are stabilised for up to 48 hours when stored at room temperature.

#### Urine culture

Order no	Design	Volumes in ml	Length/ diameter in mm	Packaging/item
10.253.020	Urine Monovette® with stabiliser, individually packaged, sterile	10	102/15	100/inner box • 500/outer box
10.251	Collection tip for Urine Monovette®	-	78/8	100/bag • 500/outer box
11.2253.001	V-Monovette® urine with stabiliser, round base	4	75/13	50/inner box • 500/outer box
11.2453.001	V-Monovette® urine with stabiliser, round base	10	100/15	50/inner box • 500/outer box
51.9923.820	Urine tube with stabiliser	30	90/25	500/bag • 500/outer box

#### Urine container

Order no	Design	Volumes in ml	Length/ diameter in mm	Packaging/item
75.562.105	Container with lid fitted, sterile, with sterility guarantee thanks to safety label	100	73/62	5/bag 200/case
75.562.400	Container with integrated transfer unit, lid fitted, sterile, with sterility guarantee thanks to safety label	100	73/62	5/bag 200/case

Other products for urine analysis can be found in our brochure 219 "Urine analysis", brochure 479 "V-Monovette® Urine" and on the homepage at www.sarstedt.com.



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#### Sample collection systems

#### Stool diagnostics

Stool tubes from Sarstedt allow for clean and easy stool collection. In addition to various sizes, there are also various stool scoops available, meaning that it is also possible to obtain defined stool amounts of 1 ml, roughly 1 g.

Sterile, labelled or light-protected containers are optionally available.

On request, stool tubes from a minimum purchase volume of 20,000 items can be supplied with an individually designed label.

#### Stool tubes with screw cap

Order no	Tube length/diameter in mm	Tube material	Design	Packaging Items/case
80.622	107/25	PP	Sterile	400
80.622.111	107/25	PP	Unsterile	500
80.623	101/16.5	PP	Sterile	500
80.623.111	101/16.5	PP	Unsterile	500
80.734.001	76/20	PP	Sterile	500
80.734	76/20	PP	Unsterile	500
80.734.311	76/20	PP	Sterile, with label	500
80.734.301	76/20	PP	Unsterile, with label	500
80.734.401	76/20	PP, white	Unsterile, with label	500

#### Stool tubes with flat base and push caps

Order no	Tube length/diameter in mm	Material of the tubes	Design	Packaging Items/case
80.621	75/23.5	PS	Sterile	250
80.620	75/23.5	PS	Unsterile	500

# SARSTEDT SARSTEDT Jung Park Color Color

#### Tubes with screw cap to collect a defined stool sample

These stool tubes allow for clean and simple collection of a defined stool sample of 1 ml, roughly 1 g.

The stool scoop collects 1 ml, and the excess is removed using the enclosed spatula. The scoop is securely fixed into the cap and reaches roughly to the middle of the tube. This design allows for centrifugation and collection of the excess, without this dispersing when the tube is opened.

#### Example of use:

#### Immunological procedure to detect occult blood

Via the addition of e.g. 2ml dist. water into the stool tube, simple mixing can be used to produce a suspension. After centrifugation of the tubes, the excess can be used for an immunological procedure to analyse proteins, e.g. haemoglobin and albumin in humans.

Order no	Tube length diameter in mm	Material of the tubes	Design	Packaging Items/case
80.623.022	101/16.5	PP	Stool tubes incl. spatula	1000



#### 25 ml and 70 ml stool tubes

The 25 and 70 ml tubes are made of stable white polypropylene. There is an integrated stool scoop in the brown screw cap. The tubes are primarily used for collecting stool samples for pathology, but are also suitable for grain and soil samples.

Order no	Length/diameter in mm	Material of the tubes	Volumes in ml	Design	Packaging Items/case
80.9924.014	54/28	PP	25	White with brown cap and label	500
80.9924.027	55/44	PP	70	White with brown cap and label	500

Suitable transport systems can be found in the main catalogue under the heading "Sample transport & disposal".



#### Petri dishes

#### Transport systems

For the transport of urine and stool samples, we offer a complete packaging system of transport containers/bottles and shipping boxes. The system has been tested and approved by the BAM (Bundesanstalt für Materialforschung und -prüfung, Federal Institute for Materials Research and Testing) and corresponds to the requirements of the packaging regulation P650 for substance class UN 3373 of the ADR, RID, ICAO and IATA. This regulation demands transport packaging consisting of 3 components: the primary container, the secondary container packaging and rigid outer packaging.

Lots of our primary containers (e.g. stool tubes, Urine Monovette®) are able, as per ADR, to withstand an internal pressure, which leads to a pressure difference of at least 95 kPa (0.95 bar), without a drop in the fill level and therefore offer an optimum solution for shipping samples in compliance with guidelines.

Detailed information can be found in our brochure 458 "Transport and shipping systems" and on the homepage at www.sarstedt.com.

#### Stand systems for stool and urine samples

For space-saving and clear storage of stool and urine samples, there are four different stands available of 17.2 to 26 mm in diameter. The high-quality and shatter-proof material of the stands is very resistant, meaning, among other things, that the stands can be autoclaved\* at 121 °C. In addition, they are simple to dismantle to allow for easy cleaning.

There is also a version available with a side pocket. To go with this stand, there is a cover which can be used in particular to protect opened tubes from external influences (e.g. UV radiation).

Information on other ranges of stands can be found either in our complete catalogue or on the homepage at www.sarstedt.com.

#### "20 series" racks

Order no	Hole Top	diameter Middle	in mm Bottom	External dimensions L x W x H in mm	Example uses
93.841.100	26	26	10	327×72×60	Tubes up to 25 mm diameter
93.893.100	21.5	26	10	327x72x60	Tubes up to 21 mm diameter
93.844.100	17.2	17.2	8.5	257×62×55	Tubes up to 17 mm diameter, all S-Monovettes
93.1097.100	17.2	17.2	8.5	257x74x55	Stands with side pocket, tubes up to 17 mm diameter, all S-Monovettes
93.1102.001	Brown	transparen	it cover	256×62×72	Suitable for stand no 93.1097.100, the cover means in particular that opened tubes are shielded from external influences

#### \* Important information on autoclavability

Products made of PP/PC can be autoclaved up to 121 °C without any appreciable loss of mechanical properties. The user must check whether other product characteristics are affected in terms of the desired use.



#### Petri dishes for bacteriology

Petri dishes from Sarstedt are produced from crystal clear polystyrene and, due to their heat resistance up to approx. 80 °C, they are ideally suited for work with hot agar. They are available in variants with 35, 60, 92 and 150 mm diameter. Their high level of dimensional stability means that our Petri dishes can be stacked easily and securely, so they are optimally suited to use in automated plate casting machines. Variants with ventilation cams offer improved gas exchange, and variants without ventilation cams offer the possibility of longer incubation due to low rates of evaporation. Coloured variants open up many coding options.

A Petri dish divided into two separate compartments offers the option to carry out parallel tests under comparable conditions or to use two different agar systems. In addition to round designs, a square Petri dish is also available for more efficient storage.

- Crystal clear polystyrene (heat-resistant to approx. 80°C)
- Easily stacked
- With and without ventilation cams
- · Variants sterilised with radiation are available

#### Petri dishes, round

ı	Order no	Diameter/height in mm	Ventilation cams	Packaging unit/tube bag/case
	82.1184.500	150/20 (gamma-sterile)	With	10/100
	82.1472	92/16	Without	20/480
	82.1473	92/16	With	20/480
	82.1472.001	92/16 (gamma-sterile)	Without	20/480
	82.1473.001	92/16 (gamma-sterile)	With	20/480
	82.1194.500	60/15 (gamma-sterile)	With	20/500
	82.1135.500	35/10 (gamma-sterile)	With	20/500

#### Petri dish, round, with two compartments

Order no	Diameter/height in mm	Ventilation cams	Packaging unit/tube bag/case
82.1195	92/16	With	20/480

#### Petri dish, square

Order no	L x W x H in mm	Ventilation cams	Packaging unit/bag/case
82.9923.422	100 x 100 x 20 gamma- sterile	Without	4/160



#### Inoculation loops

#### Coloured Petri dishes with ventilation cams

Order no	Diameter/height in mm	Colour		Packaging unit/tube bag/case		
82.1473.020	92/16	Red	All the second	20/480		
82.1473.040	92/16	Yellow	and the same of	20/480		
82.1473.060	92/16	Blue	J. Barrell	20/480		
82.1473.080	92/16	Green	11000	20/480		



#### Microbial air samplers

The DESAGA GS 100 Microbial Air Sampler collects ambient air samples for microbiological testing. Following the Anderson Air sampler Principle, it draws in the ambient air over a nozzle plate. A microprocessor controls and inspects the sample collection. The thermal mass flow meter accurately regulates the flow. The design of the inlet results in an intake speed of approx. 0.4 m/sec, whereby the air flow is set to 100l/min in the factory. Without going through filters or nutrient solutions, particles and germs are deposited on an underlying standard Petri dish with nutrient medium. The cultivation of the colony-forming units can then take place directly in this dish. The collection head can, of course, be autoclaved and the housing can be cleaned using conventional disinfectants.

Before the measurement, the measurement parameters are entered via the keypad. The non-volatile memory includes five different programs for sampling, consisting of feed volume and start delay. This data can be called up at any time, inspected and changed via the 2-line LCD display.

In the event of mobile use, an installed battery with an operating capacity of approx. 5-6 hours supplies the power. The mains adapter included in the scope of delivery can be used to recharge the battery and, of course, direct operation from the wall outlet is also possible.

Order no	Design	Packaging/item
90.170.370	GS 100, microbial sampler, 230V incl. collection head	1
92.170.375	Collection head for GS100, aluminium, 400 holes	1
92.170.390	Transport case for GS 100	1

Instruction manual on request.

#### Technical data

Measurement principle:	Thermal mass flow meter (Anderson Air sampler)
Measurement programs:	5 collection methods, storable
Intake speed:	0.4m/sec
Feed rate:	100I/min
Feed volume:	10 – 9990l
Start delay:	0:00 - 59:59 min
Suitable Petri dishes:	Standard Petri dishes, diameter 90 mm (e.g. item no 82.1473)
Dimensions (W x D x H):	200x170x125mm
Weight:	2.3kg
Power supply:	Battery pack, operating capacity 5-6 hours, 240/15 Volt mains-powered operation with charging adapter 20-80% rel. humidity
Working area:	0 -/+50°C



#### Inoculation loops, needles and inoculation spreaders

Sarstedt disposable inoculation loops, needles and inoculation spreaders are convenient to use and increase safety in the workplace. They reduce the risk of cross contamination and save time due to the omission of sterilising with heat or flame-scarfing between two inoculations. They also prevent the creation of pathogenic aerosols which harbour the risk of spreading germs. Flexible inoculation loops are used for the simple conduct of swabs or inoculation in liquid medium. Two versions are available, 1 µl and 10 µl, which are colour-coded to make them easier to differentiate. The inoculation needle can be used for seeding or withdrawing individual colonies. We recommend the use of the inoculation spreaders to place large volumes on culture media.

- Time-saving, particularly when processing large serial tests
- Convenient handling
- Ultimate safety
- Gamma-sterile

#### Gamma-sterile inoculation loops, needles and inoculation spreaders made of polystyrene

Order no	Design	Colour	Packaging/item
86.1562.010	10 µl loop	Blue	10/peel-pack packaging, 1000/case
86.1562.050	10 µl loop	Blue	48/peel-pack packaging, 1920/case
86.1567.010	1 µl loop	White	10/peel-pack packaging, 1000/case
86.1567.050	1 µl loop	White	48/peel-pack packaging, 1920/case
86.1568.010	Needle	Orange	10/peel-pack packaging, 1000/case
86.1568.050	Needle	Orange	50/peel-pack packaging, 2000/case
86.1569.001	Inoculation spreader	Blue	1/bag, 500/case
86.1569.005	Inoculation spreader	Blue	4/peel-pack packaging, 500/case





#### Petri dish transfer system

#### POS 720 Petri dish organisation system

POS 720 and PTS are important milestones on the route to the automation of microbiological laboratories with medium to high sample volumes.

Up to 700 Petri dishes per hour are labelled, stacked in sets in a fully automatic process and transported to the workstations. Labelling and reading errors in microbiology laboratories are reduced and processing procedures are made simple and consistent, improving quality and competitiveness.

- Labour-saving and easy to operate
- Reliable provision of all required Petri
- Consistent barcode labelling and clear alphanumeric printing
- Reliable identification of dishes throughout the process
- Additional labels for special media and bouillons available at the workstation

POS 720 Petri dish organisation system				
Device	POS 720/PTS			
Order number	90.200.100			

Supply

Electrical connection 230V ± 10%/50-60Hz/400VA

**Environmental conditions** 

Permissible ambient +15°C -/+35°C temperature

Maximum relative humidity 80%, non-condensing

**Dimensions** 

1700 mm x 1100 mm x 1800 mm (height with installed signal Width x depth x height

200 kg without Petri dishes

Accessories

Weight

Direct thermal printer with dispensing device and automatic Label printer

winding of the carrier material

Roll labels Labels

Supply: 10,000 items/roll

Format: 78 mm x 10 mm

Material: Thermo Premium Top (other material on request)

Adhesive: Permanent (other adhesive on request)

Performance data

Suitable Petri dishes All brands (summary on request)

Labelling Barcode and clear text, layout customer-specific

Dish throughput Up to 700 plates/hour

Data processing connection Network connection to the laboratory's LAN RS232/V24

#### PTS Petri dish transfer system

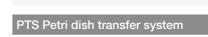
The Petri Dish Transfer System PTS transports the dish stacks pre-sorted by the POS 720 to the individual workstations. The free-standing system provides customised solutions and is adjustable in height within a defined range. Laboratory tables and benches can be conveniently positioned close to the PTS.

Exit points on the track ensure that stacks are correctly assigned to the relevant workstations. Dish stacks which cannot be assigned during scanning are discharged to the fault area.

Signal light for status

display and for safe

access to the POS



Device Order number 90.200.200

Supply

Electrical connection 230V ± 10%/50-60Hz/322VA

AP

**Environmental conditions** 

Permissible ambient temperature +15°C -/+35°C

Maximum relative humidity 80%, non-condensing

Dimensions

Rotary plate with 15 magazines

for 40 plates each

Width x depth x height Vary depending on customer-specific design Vary depending on customer-specific design Weight

Layout example for PTS with three workstations (AP1-AP3) and a fault lock

AP 3



#### Automatic culture media

- Prepare
- Label/mark
- Stack according to samples
- Transport to workstation

Printer and applicator produce labels and apply them to the base, or to the side of the plates

The dish stacker produces one stack per sample

91426409

Labelled plate, layout can be freely configured

Conveyor line can be configured for all space conditions

> Dish stack for a sample on the way to the workstation





#### DishRack Petri dish stand

#### DishRack for optimum handling

Toppling stacks are a thing of the past. Up to 88 plates can be held safely in one hand. Each DishRack has four retainers, suitable for standard Petri dishes with 92 and 100 mm diameter. Easily remove plates in any location without laborious rearrangement. Whether it is at the analytical workstation, in the incubator or during sample storage – the DishRack provides support in all areas.

#### Safe transport in the indestructible rack

Two flexible silicone strips ensure that the plates are held securely in the racks, even when there are strong vibrations and in moving transport. The high-quality, temperature-resistant and shatter-proof plastic of the DishRack is largely resistant to acids and alkalis.

#### DishRack allows for organisation and systematic working

In the DishRack, you can deposit, transport, incubate and store your plates in an orderly manner in logistics systems. You can make your individual work process easier, and better organised, with the DishRack. There are five different colours and interchangeable labelling strips available for this purpose. A glance in the incubator is all that is needed to access the green DishRack, which has been assigned for example for all samples from the urine workstation, or you can take out the small, yellow DishRack which, according to your organisation plan, may contain the fungal cultures from the stool workstation.

#### DishRack 50 · for up to 52 plates

Order no	Colour	Height in mm	Packaging unit/case
93.1647	Neutral	240	1
93.1647.001	Red	240	1
93.1647.002	Yellow	240	1
93.1647.003	Blue	240	1
93.1647.004	Green	240	1

#### DishRack 80 · for up to 88 plates

Order no	Colour	Height in mm	Packaging unit/case
93.1646	Neutral	360	1
93.1646.001	Red	360	1
93.1646.002	Yellow	360	1
93.1646.003	Blue	360	1
93.1646.004	Green	360	1



#### Deep Well MegaBlock® 96 Well

The Deep Well MegaBlock® meets all important requirements for the processing of samples up to a volume of 2.2 ml in automated systems or if large volumes are placed in retention samples.

- Alphanumeric labelling of wells
- High security due to 100% leak test of each well
- Free of human DNA, DNase/RNase and free of pyrogens/endotoxins
- Ideal for long-term storage of samples

#### MegaBlock® 0.5/1.2/2.2ml, PP

- For the storage of pharmaceutical samples
- For DNA isolation, enzyme assays and cell culture applications
- Solvent-resistant, including against DMSO
- Autoclavable\*

- Raised wells in the 0.5 and 1.2 ml variants
- Also suitable for heat sealing systems
- Films and mats are available for covering

#### MegaBlock® 1.2ml, PS clear

- Ideal for long-term storage of blood samples
- Made of highly transparent and crystal clear polystyrene, allows for easy visual inspection of the

  wolls

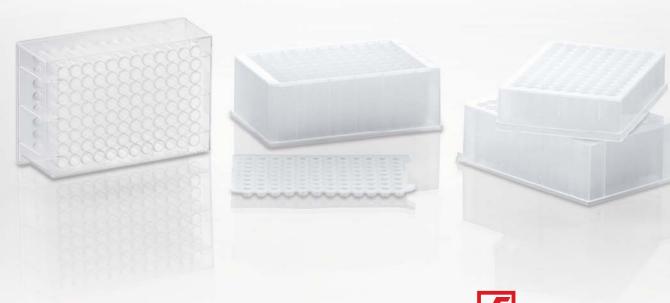
#### MegaBlock®

Order number	Design	Volume/ma	aterial	Optics	Packaging/item
82.1969.002	Round, raised wells	0.5 ml	PP	Transparent	56/case
82.1970.002	Round, raised wells	1.2ml	PS	Highly transparent	32/case
82.1971.002	Round, raised wells	1.2ml	PP	Transparent	32/case
82.1972.002	Square wells, round base	2.2 ml	PP	Transparent	32/case

#### Cover and films for MegaBlock®

Order number	Design	Packaging/item
95.1990.002	Cover for MegaBlock®, pierceable, suitable for round wells	10/bag · 50/inner box · 250/case
95.1991.002	Cover for 2.2 ml MegaBlock®, suitable for 82.1972.002	10/bag $\cdot$ 50/inner box $\cdot$ 250/case
82.1586	Acetol film, transparent	100 films/inner box

\*Products made of PP can be autoclaved up to 121 °C without any appreciable loss of mechanical properties. The user must check whether other product characteristics are affected in terms of the desired use.





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#### Cuvettes

#### Cuvettes

Since the 1970s Sarstedt has been a well-known manufacturer of high-quality disposable cuvettes made from polystyrene (PS) and acrylic (PMMA). The cuvettes are mainly used for photometric analyses, which may be used for determining the clouding or colour intensity of a solution/suspension. The cuvettes are also available as a 2x optical micro cuvette, semi-micro cuvette and as a 4x optical cuvette for 90° angle fluorescence measurements. As it is recommended that the user should only use cuvettes with the same mould cavity number, e.g. in order to avoid a variation in absorbance values, our cuvettes are packaged according to mould cavity number and sorted into Styrofoam boxes.

#### Semi-micro cuvette 10x4mm, light path: 10mm, 2 sides optical

Order no	Height in mm	Material	Packaging	Packaging Items/case
67.742	45	Polystyrene	100/Styrofoam box, packed by mould cavity number	2000
67.746	45	Polystyrene	Filled to 500/bag	2000
67.740	45	Acrylic (PMMA)	100/Styrofoam box, packed by mould cavity number	2000

#### Cuvette 10x10 mm, light path: 10mm, 2 sides optical

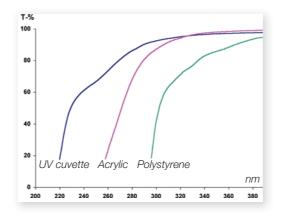
Order no	Height in mm	Material	Packaging	Packaging Items/case
67.741	45	Polystyrene	100/Styrofoam box, packed by mould cavity number	2000
67.745	45	Polystyrene	Filled to 500/bag	2000
67.738	45	Acrylic (PMMA)	100/Styrofoam box, packed by mould cavity number	2000

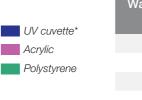
#### Cuvette for fluorescence measurements, light path: 10 mm, all 4 sides optical

Order no	Height in mm	Material	Packaging	Packaging Items/case
67.754	45	Polystyrene	100/Styrofoam box, packed by mould cavity number	2000
67.755	45	Acrylic (PMMA)	100/Styrofoam box, packed by mould cavity number	2000

## SARSTEDT

#### Transmission depending on the wavelength





Wavelength	Transmission (T) in %						
(nm)	UV	Acrylic	Polystyrene				
260	73%	23%	0%				
280	86%	68%	0%				
313	94%	93%	66%				
334	96%	97%	79%				
366	97%	98%	90%				
405	98%	99%	95%				
560	98%	99%	96%				

#### Method:

The graph and the table display the precise light transmission of the cuvette depending on the different wavelengths and the different plastic types. Cuvettes each filled with distilled, clear water. Layer thickness: 10 mm

Acrylic

\*Detailed information on the UV cuvettes can be found both in our complete catalogue, in our brochure 362 "PCR and molecular biology" and on the homepage at www.sarstedt.com.

#### Cuvette 10x10mm with round opening, optical path: 10mm, 2 sides optical

Order no	Height in mm	Material	Packaging	Packaging unit/case
67.743	96	Polystyrene	100/Styrofoam box, packed by mould cavity number	1000
67.749	55	Polystyrene	100/Styrofoam box, packed by mould cavity number	2000

#### Push caps for cuvettes with round opening

Order no	Suitable for cuvette	Packaging unit/bag/case
65.803	Order no: 67.743	1000/5000
65.793	Order no: 67.749	1000/5000

#### Round cuvette for LKB analyser (used for sample preparation in particular)

Order no	Height/diameter in mm	Material	Packaging	Packaging unit/case
68.752	51/12	Polypropylene	Filled to 1000/bag	5000
		7		
		J	ATT	
		, di		
				7
				SARSTED

#### Serological pipettes

#### Serological pipettes

Serological pipettes from Sarstedt are produced from crystal clear polystyrene. Due to the printing with a positive and negative scale, the products are suitable for all kinds of applications. In addition, the pipetting volume is increased due to the negative scale. The optimised mouthpiece of the pipette offers a universal, drip-free seat in conventional pipetting aids. The marking with the international colour code means that quick and easy identification of the different volumes is possible. The individually packaged serological pipettes are sterile and are certified pyrogen-free/endotoxin-free and non-cytotoxic.



= 10

#### Serological pipettes 1 ml, 2 ml, 5 ml, 10 ml, 25 ml, 50 ml

Order no	Total volume/graduation		Design	Colour code	Packaging unit/bag/case
86.1251.001*	1 ml	1/100 ml	Plugged, ind. wrapped, sterile	and the same of th	100/1000
86.1251.025	1 ml	1/100 ml	Plugged, sterile, in 25 units	and the same of th	25/1000
86.1252.001*	2ml	1/100 ml	Plugged, ind. wrapped, sterile	A Parket	100/1000
86.1252.025	2ml	1/100 ml	Plugged, sterile, in 25 units	A Parket	25/1000
86.1253.001*	5ml	1/10ml	Plugged, ind. wrapped, sterile	4.10 (200	50/500
86.1253.025	5ml	1/10ml	Plugged, sterile, in 25 units	A STATE OF THE STA	25/500
86.1254.001*	10ml	1/10ml	Plugged, ind. wrapped, sterile	A STATE OF THE STA	50/500
86.1254.025	10ml	1/10ml	Plugged, sterile, in 25 units	and the state of t	25/500
86.1685.001*	25 ml	2/10ml	Plugged, ind. wrapped, sterile	A POST	25/200
86.1685.020*	25 ml	2/10ml	Plugged, sterile, in 20 units	N. E. State	20/200
86.1689.001*	50ml	1/2ml	Plugged, ind. wrapped, sterile	11.75	20/100

<sup>\*</sup>Pyrogen-free/endotoxin-free and non cytotoxic

#### Demeter pipette 1.1 ml, with and without tip

• For the production of dilutions for bacteriological investigations, e.g. in the food laboratory

Order no	Total volume/graduation	Design	Packaging unit/bag/case
86.1686.225	1.1 ml/0.5 – 1.0 – 1.1	Without tip, plugged, sterile	25/1000
86.1686.025	1.1 ml/0.5 – 1.0 – 1.1	With tip, plugged, sterile	25/1000

#### Aspiration pipette, polystyrene

- For the suction of liquids using a vacuum pump
- Individually packaged in paper/plastic peel sterile packaging
- Pyrogen-free/endotoxin-free and not cytotoxic
- No print, no cotton plugs

#### Ordering information, aspiration pipette

Order no	Total volume/graduation	Design	Packaging unit/bag/case
86.1252.011	2 ml/without graduation	Without plug and print, ind. wrapped, sterile	1/1000

#### Pipettes 5 ml and 10 ml without tip, e.g. for homogenised media

Order no	Total volume/graduation		Design	Packaging unit/bag/case
86.1687.010	5 ml	1/10ml	Without tip, plugged, sterile	10/500
86.1688.010	10ml	1/10ml	Without tip, plugged, sterile	10/500



#### Disposal bags

#### Micro test plates

With Sarstedt micro test plates, a large number of tests can be conducted in very small spaces and with very low sample volumes, such as antibiotic test series or biochemical investigations to characterise and differentiate bacteria.

The plates in the 96 well format are made of high-quality, crystal clear polystyrene in the ANSI/SLAS standard format (formerly SBS). The micro test plates therefore provide consistent optical quality and fit in all common dispensers, washers and readers. There are three base shapes (flat, round and conical) available for the different areas of application. In order to facilitate quick coordination when filling the wells, they are also labelled alphanumerically. Each plate is provided with a batch number and expiration date for improved traceability.

- ANSI/SLAS standard (formerly SBS)
- Alphanumeric marking of wells
- Marking of each plate with batch number and expiration date

Order no	Description	Base shape	Lid	Max. volume (ml)	Packaging/item
82.1581	Micro test plate		_	0.39	25/bag 100/case
82.1581.001	Micro test plate, sterile		✓	0.39	1/blister pack 50/case
82.1582	Micro test plate		-	0.31	25/bag 100/case
82.1582.001	Micro test plate, sterile		<b>✓</b>	0.31	1/blister pack 50/case
82.1583	Micro test plate		-	0.29	25/bag 100/case
82.1583.001	Micro test plate, sterile		<b>✓</b>	0.29	1/blister pack 50/case
82.1584	Cover made of polystyrene				25/bag 100/case

#### Disposal bags

Sarstedt disposal bags are used to collect and dispose of used disposable products from the laboratory and hospital. A high level of tear and perforation resistance is achieved using a 50 µm thick polypropylene film with stable, wide base seam. Due to the risk of injury, however, sharp or pointed objects should never be placed in the disposal bags.

The Sarstedt disposal bags are suitable for steam sterilisation in autoclaves at 121 °C<sup>(1)</sup> or 134 °C<sup>(2)</sup>. In order to achieve full steam sterilisation, the disposal bag must always be autoclaved without being sealed.

In addition to various sizes, coloured bags and variants with "Bio Hazard" printed on them are also available.

- Strong film (50 µm) for a high level of reliability during application
- Reduction in the waste volume
- Can be autoclaved at 121 °C<sup>(1)</sup> or 134 °C<sup>(2)</sup>

Order no	Opening dimension x	Capacity**	Bag o	colour	lour Bag printing		Print o	colour	Packaging
Order no	length (mm)	Сараспу	Natural	Yellow	Yes	No	Red	Blue	Unit/bag/case
86.1197*	200 x 300 <sup>(1)</sup>	2 litres	•			•			100/1000
86.1198	300 x 500 <sup>(2)</sup>	7 litres	•			•			50/500
86.1201	300 x 500 <sup>(1)</sup>	7 litres	•		•		•		50/500
86.1201.103	300 x 500 <sup>(2)</sup>	7 litres		•	•			•	50/500
86.1199	400 x 780 <sup>(2)</sup>	24 litres	•			•			50/250
86.1202	400 x 780 <sup>(1)</sup>	24 litres	•		•		•		50/250
86.1202.103	400 x 780 <sup>(2)</sup>	24 litres		•	•			•	50/250
86.1200	600 x 780 <sup>(2)</sup>	40 litres	•			•			50/250
86.1203	600 x 780 <sup>(1)</sup>	40 litres	•		•		•		50/250
86.1203.103	600 x 780 <sup>(2)</sup>	40 litres		•	•			•	50/250
86.1204	700 x 1120 <sup>(2)</sup>	80 litres	•			•			50/150
86.1206.103	700 x 1120 <sup>(2)</sup>	80 litres		•	•			•	50/150

<sup>\*</sup> Disposal bag for table racks in practical dispenser box (100 units/dispenser pack).

#### Table rack for disposal bag

Steel wire rack coated with epoxy resin

Order no: 95.1297

1 rack including a bag dispensing pack (order no 86.1197)







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<sup>\*\*</sup> Can still be sealed after autoclaving.

Notes	Notes
<b>SARSTEDT</b>	<b>SARSTEDT</b>

### If you have any questions, we'll be happy to help!

Visit our website: www.sarstedt.com



Brochure 362



Brochure 471



Brochure 219



Brochure 479



Brochure 681







