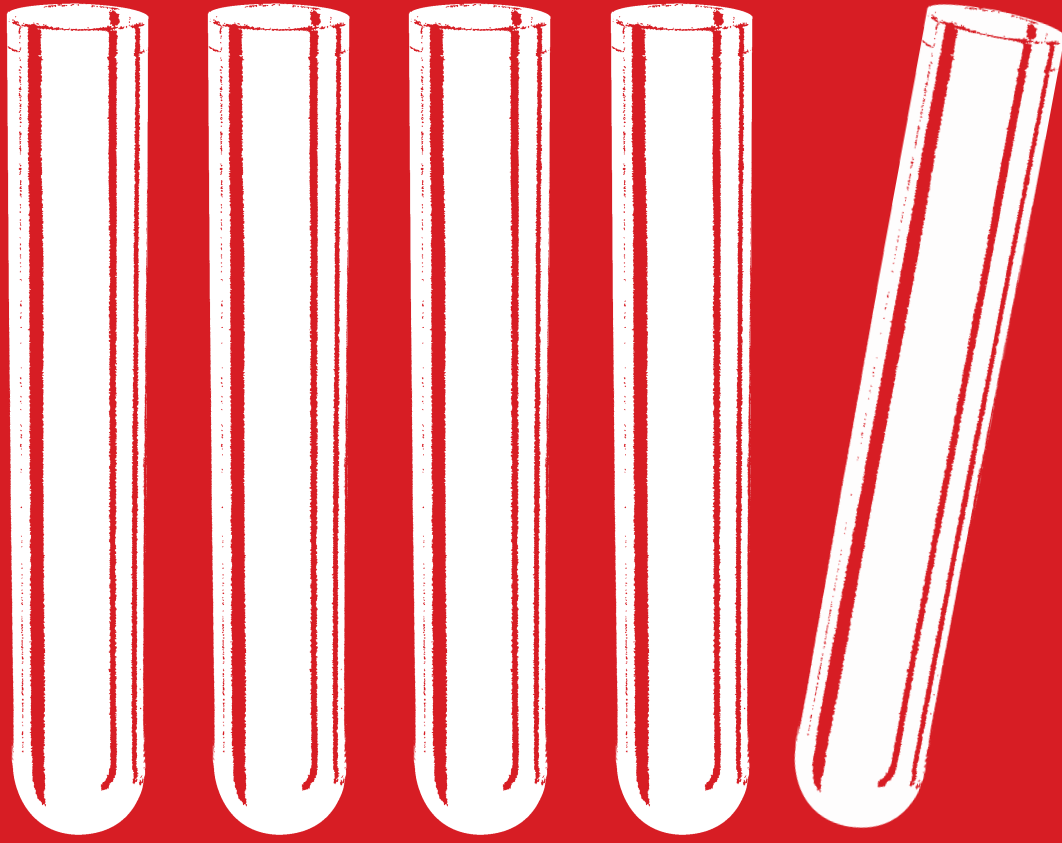
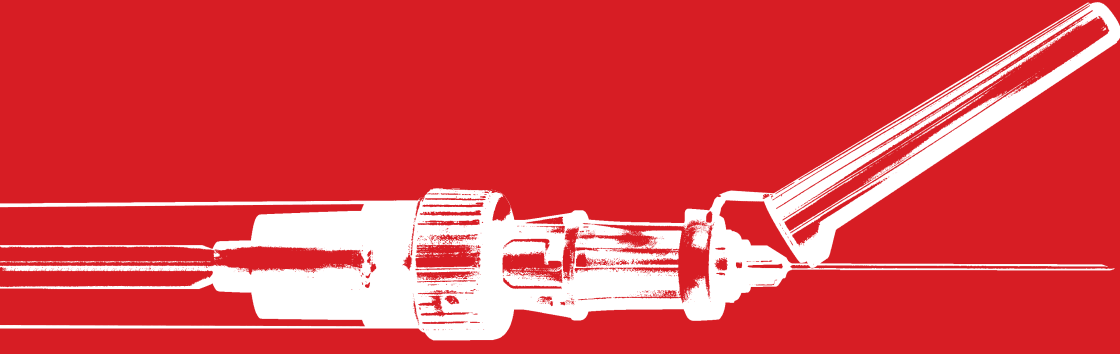




SARSTEDT



Comprehensive Catalogue

2016/2017



Your Partner in Medicine and Science Worldwide

The Sarstedt Group, with headquarters in Nümbrecht, Germany, is active worldwide.

Since its founding in 1961, the company has always emphasised innovation, quality, close coordination with customer needs and continuous development. Our commitment goes far beyond our own research and development activities. For instance, we support the internationally recognised 50,000 € Biochemical Analysis Prize awarded by the German Association for Clinical Chemistry and Laboratory Medicine.

We provide to our customers an exceptionally broad spectrum of different products. These include diagnostic systems like, for example, the S-Monovette®, the enclosed blood collection system, but also life science and laboratory products, products for clinical use and transfusion medicine, as well as laboratory automation systems.

The great depth of our product program is reflected in the diversity of our production locations in Europe, North America and Australia. See the following page for examples of our highly modernised production sites where most of our extensive product portfolio is produced.

Global distribution and servicing of SARSTEDT products are realised by 30 Sarstedt-owned distribution organisations and a dealer network that provides worldwide coverage.



Marnay, France



Brand-Erbisdorf, Germany



Klingenthal, Germany



Wiehl, Germany



Newton, NC, USA



Rheinbach, Germany



Adelaide, Australia



Hemer, Germany



Direct support

Our efforts are focused on the health and safety of patients and users and consistent high quality of our products.

2,500 motivated and qualified employees in Development, Production, Distribution and Service guarantee superior SARSTEDT quality to our customers. Everything under one roof - development, production and distribution.

As a responsibly managed family-based company, our corporate processes are based on solid values and sustainability. The entire product supply chain is thus in our hands. This means respectful handling of natural resources as well as responsible and environment-friendly production across the board.

We listen closely to our customers' wishes. Our worldwide Distribution and Service Team is the direct interface between you and Sarstedt. You benefit directly from our technical competence and ready support when it comes to selecting and using our products.

Development

The application-oriented product development at our own development centre utilises the latest technologies and is based on dialogue with those who use the products - from the idea to the finished product.

Production

Over 90% of our entire product range is produced at our own foreign and domestic sites with the most modern equipment available.

Quality

Our products are employed directly in patient treatment as well as in research and development laboratories - there can be no compromises when it comes to quality standards. The modern quality management system we have integrated in our operations according to EN ISO 13485 meets these demands.

Distribution

The SARSTEDT Group distributes its products worldwide almost exclusively by way of its own distribution organisations and field service.





Quality is a process – the goal is perfection

The high quality of our products is our contribution to the success of your work. As a supplier of superior, reliable, and precision products for medicine and science we share responsibility for the many different tests and investigations carried out with Sarstedt products in institutes, clinics and laboratories all over the world. Every day, our more than 50 years of company research and development contribute to the further development and quality of our products. To make sure it stays that way, we constantly invest in modern technology and employee qualification.

Continuous improvement of the quality of our production processes is ensured by our use of high-grade raw materials and production tools, deployed on the most advanced production systems available. To ensure consistent quality we use standardised processes subjected to constant monitoring and analysis.

Sarstedt, as a global company, can supply products that meet the specifications of the laws and authorities of different countries and markets. This is documented, for instance, by independent certification.

Sarstedt quality means satisfaction of the very highest demands.

EN ISO 13485 DE-M
TRBA 250 **CE** ISO 8669
ISO 26825 **Biosphere® plus**
PCR Performance Tested
P 650 AFNOR
un ISO 14820 **ISO 23907**

Improved
and expanded!



For more than 20 years, Sarstedt's premium cell culture products have supported scientific research and discovery worldwide. Our many years of experience combined with insight from our customers have allowed us to optimise and continually expand the product range.

All flasks, dishes, and plates have been updated for exceptional performance, traceability, and simple handling.

For further information go to: www.sarstedt.com

Your Sarstedt Team



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Innovations that advance patient care



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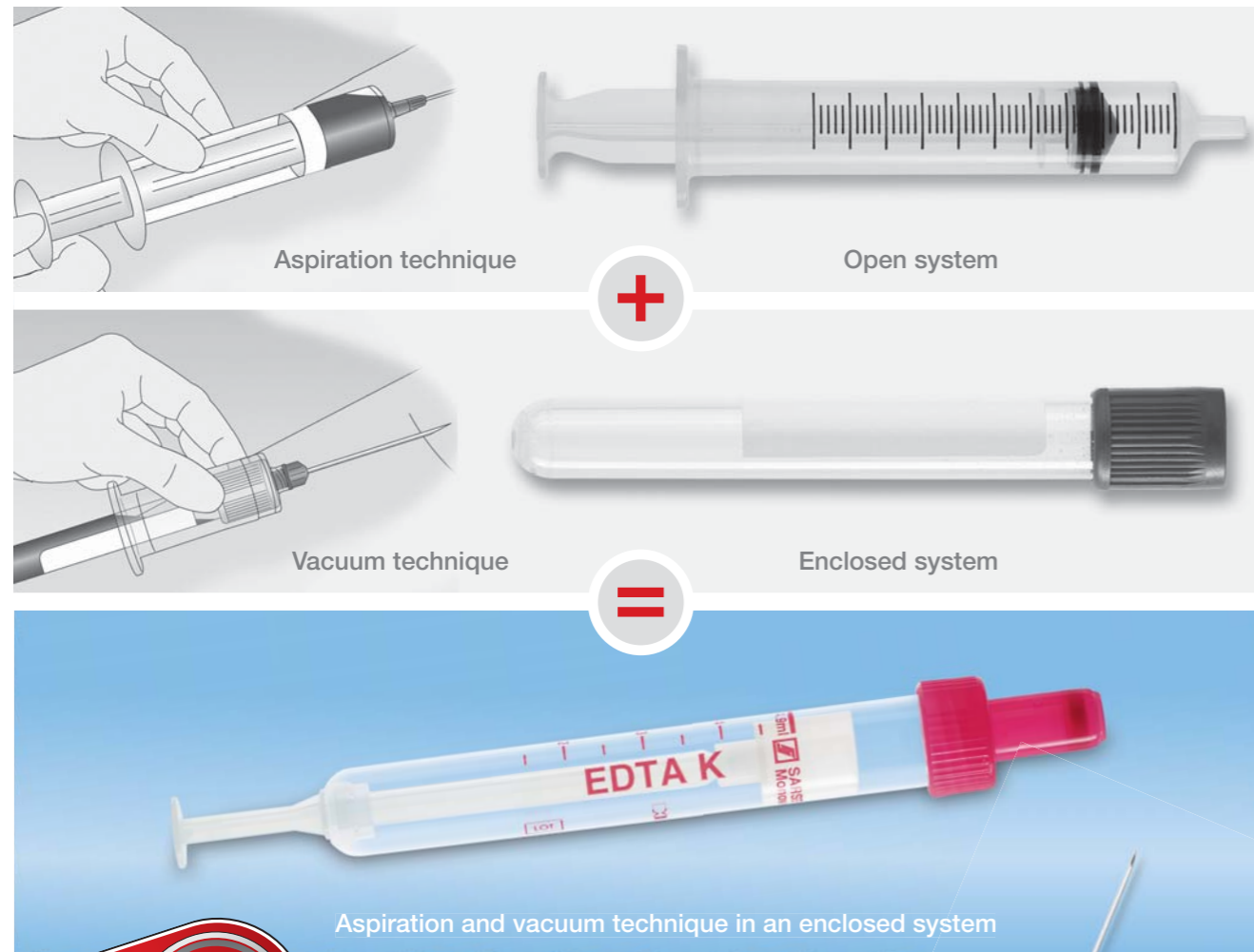
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One System – 2 techniques The S-Monovette® combines the advantages of both systems

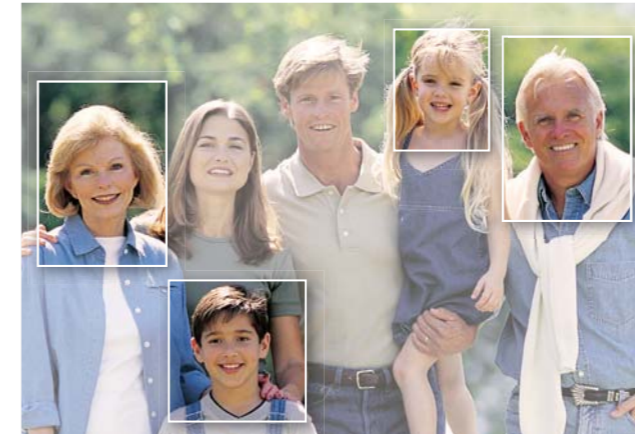
- ✓ Suitable for all vein conditions
- ✓ Optimum sample quality
- ✓ Economical
- ✓ Safe



It's the individual that matters

Demographic development shows that our population is growing older which places a very specific demand on medical care and treatment. Blood collection in particular is affected because difficult vein conditions are increasingly noted with elderly patients. Blood collection may also be complicated from children with very small or fragile veins.

The answer to all these challenges is the S-Monovette® with its variable collection techniques combined in one system. As required, phlebotomists can select either the aspiration or the vacuum method.



We already know that 47.3%* of all patients are

- under 5 years or
- over 65 years of age.

* Association of German Hospitals
Zahlen, Daten, Fakten 2009

This shows that gentle blood collection is essential for maintaining optimal results.

Aspiration method

... the gentle technique for routine blood collection

The aspiration technique is the method of choice for gentle blood collection from any vein condition and is ideal for fragile veins at risk of collapse.



Vacuum method

... always a "fresh" vacuum

Using the S-Monovette® with the vacuum technique ensures that a "fresh" vacuum is generated immediately prior to blood collection, providing a precise filling volume as with the aspiration method.



Blood collection systems for every age group

Paediatric blood collection makes considerable demands of personnel and collection systems. Sarstedt offers a broad spectrum of different collection systems for venous and capillary blood collection in this field.

- S-Monovette® & Safety-Multifly®-Needle
- Microvette® & Safety-Lancet
- Micro Tubes & Micro-Needle

S-Monovette®, Safety Needle & Safety Multifly® Needle

The sensitivity of modern analytical systems means sample volumes can be reduced, even for extensive routine workups.

Due to its specialised design with reduced dimension and low nominal volume, the S-Monovette® Paediatrics masters these challenges.

Gentle blood collection using the aspiration method makes the S-Monovette® Paediatrics an ideal solution for the difficult blood vessel situations seen in paediatrics.



Microvette® & Safety-Lancet

Depending on the application, the Microvette® is available with a cylindrical or conical insert in a range of volumes from 100 to 500 µl.

Both capillary straw and gravity-flow rim collections are possible.

Safety-Lancets ensure safety and precision. Different configurations are available.



Micro Tubes & Micro-Needle

The Micro-Needle has been designed to accommodate the special requirements in neonatology. It features a ridged handle to ensure a controlled, safe puncture. The short needle reduces blood waste to a minimum.

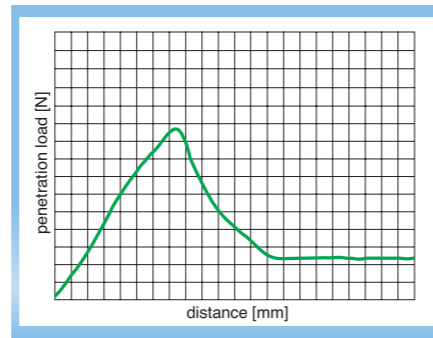
Compatible sample tubes in a range of preparations with screw cap or push cap are available.



The optimally matched system components of the S-Monovette® and needle ensure the reliability and safety crucial to an innovative blood collection system.



- 1 The S-Monovette® Safety-Needle is ready-to-use without any need to assemble a needleholder. The optimal bevel and superior glide of the Safety-Needle in combination with a flat puncturing angle ensure safe puncturing for enhanced patient comfort.
- 2 The deeper recessed membrane reliably prevents direct contact with the puncture site on the membrane. The result is even greater protection against infection and safe use of the S-Monovette®.
- 3 The screw cap enables gentle opening of the tube minimising the aerosol effect likely to occur when using push caps.
- 4 The superior transparency of the materials used to produce the S-Monovette® enable optimal visual assessment of the sample quality.



- 1 Low penetration force due to precise bevel and superior glide

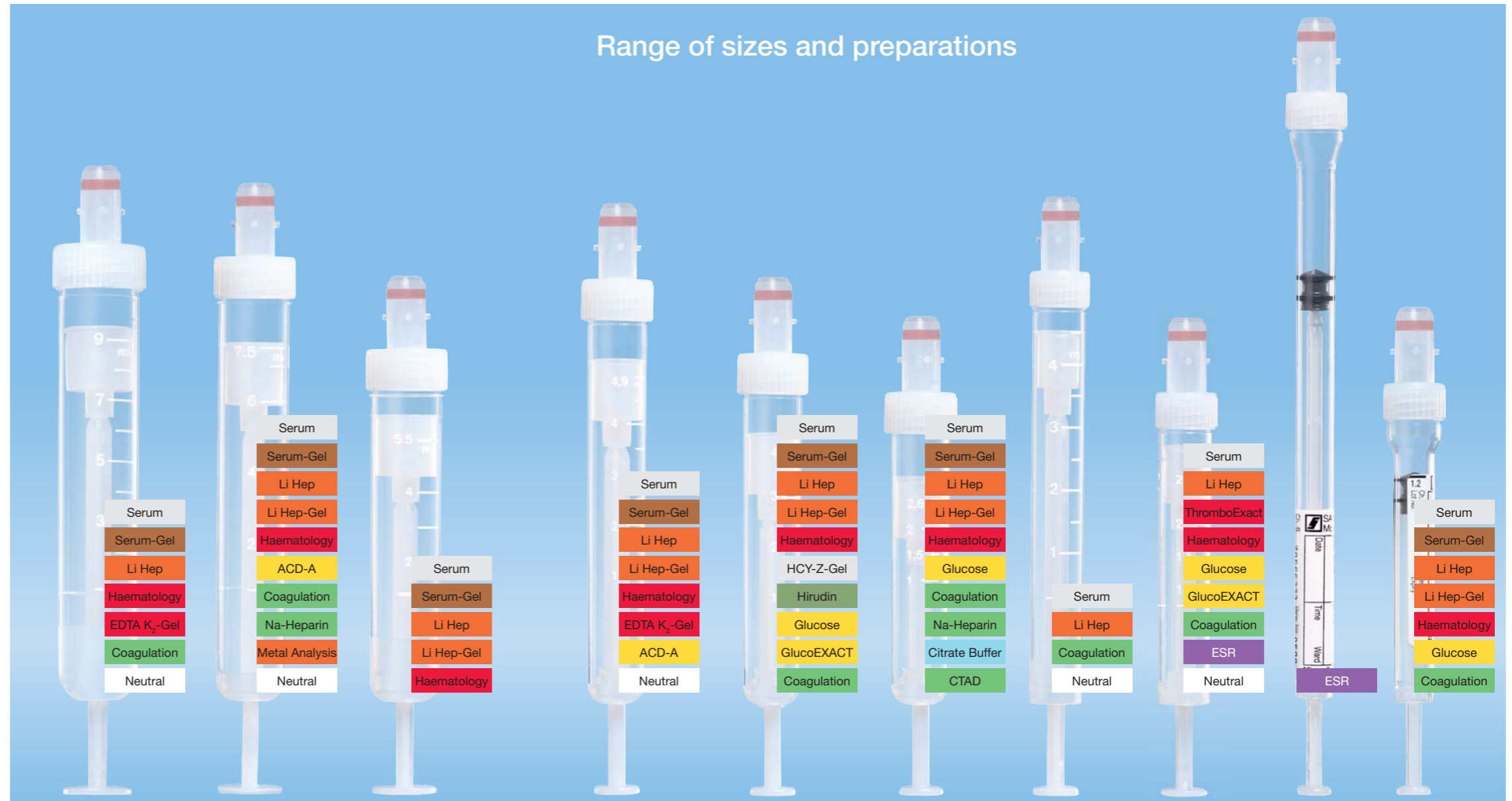


- 2 Recessed membrane for protection against risk of exposure



- 3 Screw cap to minimise aerosol effect

Range of sizes and preparations



Average outer tube diameter	16 mm	15 mm	15 mm	13 mm	13 mm	13 mm	11 mm	11 mm	8 mm	8 mm
Outer screw cap diameter	19 mm	18 mm	18 mm	16 mm	16 mm	16 mm	13 mm	13 mm	13 mm	13 mm
Tube length with screw cap	108 mm	108 mm	91 mm	106 mm	91 mm	81 mm	108 mm	82 mm	146 mm	82 mm
Tube length without screw cap	92 mm	92 mm	75 mm	90 mm	75 mm	65 mm	92 mm	66 mm	130 mm	66 mm
Screw cap for re-capping	65.176	65.729	65.729	65.728	65.728	65.728	65.1121	65.1121	65.1121	65.1121

Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Serum Clotting Activator	9.0 ml	92 mm x 16 mm	02.1063	02.1063.001	
	7.5 ml	92 mm x 15 mm	01.1601	01.1601.001	
	5.5 ml	75 mm x 15 mm	03.1397	03.1397.001	
	4.9 ml	90 mm x 13 mm	04.1934	04.1934.001	
	4.5 ml	92 mm x 11 mm	05.1104	05.1104.001	
	4.0 ml	75 mm x 13 mm	04.1924		
	2.7 ml	75 mm x 13 mm		04.1943.001	
	2.7 ml	66 mm x 11 mm	05.1557	05.1557.001	
	2.6 ml	65 mm x 13 mm	04.1904	04.1904.001	
	1.2 ml	66 mm x 8 mm		06.1663.001	

Serum (clotting activator) S-Monovettes contain beads coated with a clotting activator (silicate). As a rule, this clotting additive enables the blood to clot within 20-30 minutes and the sample can be centrifuged. The beads form a layer between the blood clot and the serum during centrifugation.

Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Serum-Gel Clotting Activator	9.0 ml	92 mm x 16 mm	02.1388	02.1388.001	
	7.5 ml	92 mm x 15 mm	01.1602	01.1602.001	
	4.9 ml	90 mm x 13 mm	04.1935	04.1935.001	
	4.7 ml	75 mm x 15 mm	03.1524	03.1524.001	
	4.0 ml	75 mm x 13 mm	04.1925		
	2.6 ml	65 mm x 13 mm	04.1905	04.1905.001	
	1.1 ml	66 mm x 8 mm		06.1667.001	


Serum-Gel (clotting activator) In addition to the beads, this S-Monovette® contains a polyacrylic ester gel that, due to its density, forms a stable separating layer between the blood clot and the serum during centrifugation and serves as a barrier during sample transport and storage. Compliance with the recommended storage conditions will keep most parameters stable for up to 48 hours.

Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Plasma Lithium-Heparin	9.0 ml	92 mm x 16 mm	02.1065	02.1065.001	
	7.5 ml	92 mm x 15 mm	01.1604	01.1604.001	
	5.5 ml	75 mm x 15 mm	03.1628	03.1628.001	
	4.9 ml	90 mm x 13 mm	04.1936	04.1936.001	
	4.5 ml	92 mm x 11 mm	05.1106	05.1106.001	
	4.0 ml	75 mm x 13 mm	04.1920		
	2.7 ml	75 mm x 13 mm	04.1929	04.1929.001	
	2.7 ml	66 mm x 11 mm	05.1553	05.1553.001	
	2.6 ml	65 mm x 13 mm	04.1906	04.1906.001	
	1.2 ml	66 mm x 8 mm		06.1666.001	
	 S-Monovette® Plasma-Gel Lithium-Heparin	7.5 ml	92 mm x 15 mm	01.1634	
4.9 ml		90 mm x 13 mm	04.1940	04.1940.001	
4.7 ml		75 mm x 15 mm	03.1631	03.1631.001	
4.0 ml		75 mm x 13 mm		04.1927.001	
2.7 ml		75 mm x 13 mm	04.1928		
2.6 ml		65 mm x 13 mm	04.1907		
1.1 ml	66 mm x 8 mm		06.1669.001		


Plasma / Plasma Gel (Lithium-Heparin) Heparin, at an average concentration of 16 I.U./ml blood, is used as an anticoagulant for plasma generation. Heparin is coated onto beads which form a layer between the plasma and the corpuscular components during centrifugation. The function of the plasma gel is identical to serum gel.

Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Haematology Potassium EDTA	9.0 ml	92 mm x 16 mm		02.1066.001	
	7.5 ml	92 mm x 15 mm		01.1605.001	
	4.9 ml	90 mm x 13 mm	04.1931	04.1931.001	
	4.0 ml	75 mm x 15 mm	03.1068	03.1068.001	
	3.4 ml	65 mm x 13 mm	04.1914	04.1914.001	
	2.7 ml	75 mm x 13 mm	04.1917	04.1917.001	
	2.7 ml	66 mm x 11 mm	05.1167	05.1167.001	
	2.6 ml	65 mm x 13 mm	04.1901	04.1901.001	
	1.6 ml	66 mm x 11 mm		05.1081.001	
	1.2 ml	66 mm x 8 mm		06.1664.001	

Haematology (Potassium EDTA) EDTA K₃ is pre-dosed as a liquid preparation in an average concentration of 1.6 mg EDTA/ml blood. The maximum dilution caused by the liquid preparation is lower than 1%. Although the EDTA preparation may dry during storage, this does not in any way impair its anticoagulant effect. An S-Monovette® with EDTA K₂ and gel is available for use in molecular virus diagnostics.


Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Glucose Fluoride	2.7 ml	75 mm x 13 mm	04.1918	04.1918.001	
	2.7 ml	66 mm x 11 mm	05.1073	05.1073.001	
	2.6 ml	65 mm x 13 mm	04.1903	04.1903.001	
	1.2 ml	66 mm x 8 mm		06.1665.001	

Glucose Determination (Fluoride) The S-Monovette® for glucose determination contains fluoride (1.0 mg/ml blood) as a glycolysis inhibitor and EDTA (1.2 mg/ml blood) as an anticoagulant in a liquid preparation. The glucose concentration in the sample is stabilised for a period of 24 hours.

Preparation	Volume	Length / Ø	Order No. with transparent plastic label	Order No. with coloured paper label	Colour code cap/label
 S-Monovette® Coagulation Sodium Citrate 1 in 10	10.0 ml	92 mm x 16 mm		02.1067.001	
	8.2 ml	92 mm x 15 mm		01.1606.001	
	5.0 ml	92 mm x 11 mm	05.1071	05.1071.001	
	4.3 ml	75 mm x 13 mm	04.1922	04.1922.001	
	3.0 ml	75 mm x 13 mm	04.1919	04.1919.001	
	3.0 ml	66 mm x 11 mm	05.1165	05.1165.001	
	2.9 ml	65 mm x 13 mm	04.1902	04.1902.001	
	1.4 ml	66 mm x 8 mm		06.1668.001	

Coagulation Analytics (Sodium Citrate) Citrate, pre-dosed as a 0.106 molar solution (equivalent to 3.2% trisodium citrate), is used for all physiological coagulation studies (e.g. Quick, PTT, TZ, Fibrinogen). A mixing ratio of 1:10 (1 part citrate + 9 parts blood) must be strictly observed.

Neutral S-Monovette®

Without Preparation	Volume	Length / Ø	Order No. with coloured paper label	Colour code cap/label
 neutral/7.5 m	9.0 ml	92 mm x 16 mm	02.1726.001	
	7.5 ml	92 mm x 15 mm	01.1728.001	
	4.9 ml	90 mm x 13 mm	04.1926.001	
	4.5 ml	92 mm x 11 mm	05.1727.001	
	2.7 ml	66 mm x 11 mm	05.1729.001	

Packaging: All S-Monovettes listed above are wrapped in a sterile packaging of 50 pcs. per box and 500 pcs. per case.
Note: S-Monovettes, individually wrapped, sterile, are available at a minimum ordering quantity of 10,000 pcs..

Special S-Monovette®

Preparation	Volume	Length / Ø	Order No. with coloured paper label	Packaging Unit / Sub-packaging
S-Monovette® EDTA K ₂ -Gel	9.0 ml	92 mm x 16 mm	02.1333.001	500 pcs. / 50 pcs.
S-Monovette® EDTA K ₂ -Gel	7.5 ml	92 mm x 15 mm	01.1621.001	500 pcs. / 50 pcs.
S-Monovette® EDTA K ₂ -Gel	4.9 ml	90 mm x 13 mm	04.1932.001	500 pcs. / 50 pcs.
S-Monovette® Citrate/Buffer	3.8 ml	65 mm x 13 mm	04.1910.001	500 pcs. / 50 pcs.
S-Monovette® ACD-A	8.5 ml	92 mm x 15 mm	01.1610.001	500 pcs. / 50 pcs.
S-Monovette® ACD-A	5.6 ml	90 mm x 13 mm	04.1938.001	500 pcs. / 50 pcs.
S-Monovette® GlucoEXACT, Fluoride Citrate	3.1 ml	75 mm x 13 mm	04.1945.001	500 pcs. / 50 pcs.
	3.1 ml	66 mm x 11 mm	05.1074.001	500 pcs. / 50 pcs.
S-Monovette® for trace metals	7.5 ml	92 mm x 15 mm	01.1604.400	500 pcs. / 50 pcs.
S-Monovette® Homocysteine HCY-Z-Gel	2.7 ml	75 mm x 13 mm	04.1908.001	500 pcs. / 50 pcs.
S-Monovette® Hirudin	2.7 ml	75 mm x 13 mm	04.1944.001	500 pcs. / 50 pcs.
S-Monovette® ThromboExact	2.7 ml	66 mm x 11 mm	05.1168.001	500 pcs. / 50 pcs.
S-Monovette® Serum, Bloodbank labelled	7.5 ml	92 mm x 15 mm	01.1601.014	500 pcs. / 50 pcs.
S-Monovette® Na-Heparin	7.5 ml	92 mm x 15 mm	01.1613.100	500 pcs. / 50 pcs.
S-Monovette® Na-Heparin	2.6 ml	65 mm x 13 mm	04.1913.100	500 pcs. / 50 pcs.
S-Monovette® Li-Heparin liquid	7.5 ml	92 mm x 15 mm	01.1608.001	500 pcs. / 50 pcs.
S-Monovette® Li-Heparin liquid	4.9 ml	90 mm x 13 mm	04.1939.001	500 pcs. / 50 pcs.
S-Monovette® CTAD	2.9 ml	65 mm x 13 mm	04.1909.001	500 pcs. / 50 pcs.

S-Monovette® Hirudin – Thrombocyte Function

To monitor the efficiency (response/non-response) of a platelet inhibiting pharmaceutical drug, either during its development, in routine therapy, or to prove or exclude disorders in thrombocyte function, hirudin has become the anticoagulant of choice. Unlike citrate or heparin, hirudin prevents blood clotting by direct thrombin inhibition, enabling thrombocyte function diagnostics in a native condition. The S-Monovette® Hirudin has been developed to measure thrombocyte activity on the Multiplate® (multiple platelet function analyser).

S-Monovette® PFA 100 – Thrombocyte Function

The PFA 100 measuring system from Siemens requires a special buffered citrate for precise thrombocyte function analysis. The preparation of the S-Monovette® PFA with a 3.8% citrate buffer (0.129 mol/l) and a pH of 5.5 was specially designed to comply with these requirements. With its unique colour code, the S-Monovette® PFA is clearly distinguished from standard citrate tubes for routine diagnostics.

S-Monovette® ThromboExact – Pseudothrombocytopenia

Pseudothrombocytopenia, a preanalytical phenomenon, describes an erroneously low thrombocyte count. Generally, pseudothrombocytopenia is caused by thrombocyte aggregation. Early detection of this phenomenon ensures that the diagnostic and therapeutic consequences of a thrombocytopenia misdiagnosis are avoided. The S-Monovette® ThromboExact has been approved to prevent the formation of thrombocyte aggregation. Apart from the most common aggregation caused by EDTA, multiple aggregation (e.g. heparin and/or citrate) is also documented. A correct thrombocyte count is possible for up to 12 hours after blood collection.

S-Monovette® GlucoEXACT – Precision Glucose Determination

The preanalytic conditions applying to glucose determination in venous blood have become highly important due to increasing glycolysis. To inhibit glycolysis directly and reliably, the guideline on gestational diabetes of the German Diabetes Association (DDG) and the German Association for Gynecology and Obstetrics (DGGG) recommends adding a glycolysis inhibitor to the samples comprising a mixture of fluoride and citrate. The new S-Monovette® GlucoEXACT complies with the guideline and stabilises glucose concentration directly for up to 48h at room temperature.

S-Monovette® Homocysteine Z-Gel – Homocysteine Determination

Correct preanalytical conditions are critical for homocysteine determination because erythrocytes continue to produce homocysteine in the sample after blood collection. Non-stabilised homocysteine diffuses into the plasma leading to a significant increase in homocysteine concentration of approximately 10%/h in the sample material. A specially developed stabiliser keeps the homocysteine concentration relatively constant for up to eight hours after blood collection at room temperature. Centrifugation of the blood sample within this 8-hour period results in an inert gel barrier that safely separates the serum from the blood clot, ensuring further stability of the homocysteine values for a total of 96 hours.


S-Monovette® for Metal Analysis (Lithium Heparin)

This S-Monovette®, in combination with a special Safety-Needle, is formulated for analysis of the most commonly found trace elements. The following maximum values in ng/system are defined for the combined system of the empty S-Monovette® and Needle.

Tl:	2.5	Cr:	5.0	Cu:	70	Al:	40
Cd:	1.5	Pb:	5	Zn:	70	Se:	10
Ni:	8.0	Fe:	50	Mn:	10	Hg:	10

Maximum blank values for each element are indicated on the S-Monovette® label.

Safety-Needle for metal analysis

Order No.	Ø/Length	Description	Colour code	Packaging
85.1162.400 S-Monovette® Needle	0,8 mm/38 mm	21G x 1½", No. 2		1,000/case • 100/box ind. wrapped, sterile
85.1162.600 Safety Needle				500/case • 50/box ind. wrapped, sterile





Safety-Multify®- Needle • Multifly®- Needle

Order No.	Ø/Length	Description	Colour code	Tube length	Packaging	
85.1637.235 Safety-Multify® 85.1637.035 Multifly®	0.9 mm/19 mm	20G x ¾", No. 1		200 mm	400/case 100/box ind. wrapped, sterile	
85.1638.235 Safety-Multify® 85.1638.035 Multifly®	0.8 mm/19 mm	21G x ¾", No. 2		200 mm		
85.1640.235 Safety-Multify® 85.1640.035 Multifly®	0.6 mm/19 mm	23G x ¾", No. 16		200 mm		
85.1642.235 Safety-Multify® 85.1642.035 Multifly®	0.5 mm/19 mm	25G x ¾", No. 18		200 mm		
85.1637.205 Safety-Multify® 85.1637.005 Multifly®	0.9 mm/19 mm	20G x ¾", No. 1		80 mm		
85.1638.205 Safety-Multify® 85.1638.005 Multifly®	0.8 mm/19 mm	21G x ¾", No. 2		80 mm		
85.1640.205 Safety-Multify® 85.1640.005 Multifly®	0.6 mm/19 mm	23G x ¾", No. 16		80 mm		
85.1642.205 Safety-Multify® 85.1642.005 Multifly®	0.5 mm/19 mm	25G x ¾", No. 18		80 mm		
85.1638.201 Safety-Multify® 85.1638.001 Multifly®	0.8 mm/19 mm	21G x ¾", without Multi-Adapter		200 mm		400/case 100/box ind. wrapped, sterile
85.1638.200 Safety-Multify® 85.1638 Multifly®	0.8 mm/19 mm	21G x ¾", detachable guide sleeve		200 mm		



S-Monovette® Safety-Needle • S-Monovette®-Needle

Order No.	Ø/Length	Description	Colour code	Packaging
85.1160.200 Safety-Needle 85.1160 Needle	0.9 mm/38 mm	20G x 1½"		500/box • 50/case ind. wrapped, sterile 1,000/box • 100/case ind. wrapped, sterile
85.1162.200 Safety-Needle 85.1162 Needle	0.8 mm/38 mm	21G x 1½"		500/box • 50/case ind. wrapped, sterile 1,000/box • 100/case ind. wrapped, sterile
85.1440.200 Safety-Needle 85.1440 Needle	0.7 mm/38 mm	22G x 1½"		500/box • 50/case ind. wrapped, sterile 1,000/box • 100/case ind. wrapped, sterile



Safety-Multify®- Needle with assembled holder

Order No.	Ø/Length	Description	Colour code	Tube length	Packaging
85.1638.935	0.8 mm/19 mm	21G x ¾", No. 2		200 mm	100/box 25/case ind. wrapped, sterile



Membrane-Adapter

- The Membrane-Adapter enables safe and reliable adaptation of the S-Monovette® Safety-Needle and the Safety-Multify®-Needle to a Luer system, e.g. the Blood Gas Monovette®.

Order No.	Description	Packaging
14.1112	Membrane-Adapter	1,000/case • 100/box ind. wrapped, sterile



Multi-Adapter

- The Multi-Adapter is available in Luer and Luer-Lock versions. It facilitates adaptation between the S-Monovette® and all Luer systems, e.g. intravenous catheter, three-way tap or butterfly needles.

Order No.	Description	Packaging
14.1205.100	Multi-Adapter with Luer-Lock	1,000/case • 100/box ind. wrapped, sterile
14.1205	Multi-Adapter	1,000/case • 100/box ind. wrapped, sterile



Blood Culture Adapter Universal

- The Blood Culture Adapter Universal was developed specially for blood collection with the Safety-Multify® Needle. Thanks to the shape of the Blood Culture Adapter Universal it is possible to fill standard blood culture bottles with both wide and narrow necks. Blood collection can then be carried out with the S-Monovette®.

Order No.	Description	Packaging
14.1209	Blood Culture Adapter Universal	100/case • 20/box ind. wrapped, sterile



Blood Culture Adapter LongNeck

- The Blood Culture Adapter LongNeck is particularly suitable for use with narrow-neck blood culture bottles.

Order No.	Description	Packaging
14.1207	Blood Culture Adapter LongNeck	250/case • 50/box ind. wrapped, sterile



Blood Culture Adapter Universal with enclosed Safety-Multify®-Needle

Order No.	Ø/Length	Description	Colour code	Tube length	Packaging
51.1638.945	0.8 mm/19 mm	21G x ¾", No. 2		200 mm	50/case ind. wrapped, sterile
51.1640.945	0.6 mm/19 mm	23G x ¾", No. 16		200 mm	



Seraplas® V

Valve separator for the separation of serum/plasma and blood clot after centrifugation

After separation, the plunger is easily removed leaving the valve in place as a barrier to prevent diffusion between the cell layer and supernatant during transport, analysis, and storage. The dimensions of the primary receptacle remain unchanged after separation. This combination of valve and sample tube makes the product particularly suitable for instrument adaptation.

Order No.	Description	Suitable for S-Monovette® - Ø	Packaging pcs./case
53.677*	Seraplas® V11	11 mm	5,000
53.419	Seraplas® V13	13 mm	1,000
53.428	Seraplas® V15	15 mm	1,000
53.420	Seraplas® V16	16 mm	1,000

Should subsequent centrifugation be required, the valve of the separator can be removed using a separate plunger (no. 53.1030).

Order No.	Description	Suitable for	Packaging pcs./case
53.1030	Plunger	Valve Filter V13, V15, V16	2,000

* Seraplas® V11 is supplied with separate plunger, non-assembled.



Insert

In case of a small serum/plasma yield, this cup can be used in combination with S-Monovettes and sample tubes to elevate the sample for analysis.

Order No.	Description	Suitable for	Packaging
73.1051	Insert length 23.5 mm	S-Monovettes Ø 13 mm	500/bag 2,000/case
73.1052	Insert length 23.5 mm	S-Monovettes and tubes Ø 15 mm	500/bag 2,000/case
73.1053	Insert length 23.5 mm	S-Monovettes and tubes Ø 16 mm	500/bag 2,000/case
73.1052.001	Insert length 32 mm	S-Monovettes Ø 15 mm	500/bag 2,000/case



Carrier tube for S-Monovette® 1.2 ml

- Can be barcode labelled for safe sample identification
- Suitable for centrifugation

Order No.	Description	Packaging
55.1570	Carrier tube, open flat bottom, for S-Monovette® with Ø 8 mm to fit outer dimensions 66 x 11 mm	250/bag 1,000/case
55.1570.002	see 55.1570, colour: brown (light predection)	250/bag 1,000/case
55.1572	Carrier tube, open round bottom, for S-Monovette® with Ø 8 mm to fit outer dimensions 65 x 13 mm	250/bag 1,000/case
55.1571	Carrier tube, open round bottom, for S-Monovette® with Ø 8 mm to fit outer dimensions 75 x 13 mm	250/bag 1,000/case
55.1571.051	see 55.1571, colour: light blue	250/bag 1,000/case



Haemo-Diff®

Order No.	Description	Packaging
14.1218	with smear edge	500/bag 2,000/case
14.1217	without smear edge	500/bag 2,000/case



Tourniquet

Order No.	Description	Packaging pcs./case
95.1007	Tourniquet	1/bag 200/case
95.1007.001	Tourniquet • latex-free	1/bag 200/case



Disposable plastic tourniquet

Prevents nosocomial infections caused by venipuncture

- Hygienic and comfortable
- Minimises the risk of cross-infection

Order No.	Description	Packaging pcs./case
95.1006	Single-use tourniquet	200/dispenser box 4,800/case
95.1006.025	Single-use tourniquet	24/dispenser box 1,000/case
95.1005	Wallholder for dispenser box	1
95.1004	Single-use tourniquet for paediatrics	100/dispenser box 4,000/case

Bumper insert to prevent the risk of haemolysis during pneumatic post transport

Multi-component system comprising:

- Transparent sleeve
- Revolver and round insert from high-quality foam material
- Separate buffer element
- Range of options tailored to individual pneumatic post systems





Cap for STAT samples

- Colour-coding of STAT samples from ambulances, intensive care units and operating theatres or for optimised laboratory organisation
- Quick allocation of STAT samples at the laboratory bench
- Enables processing of tubes on many cap-piercing analyser systems

Order No.	Colour	Packaging
14.1513	Neon red	100/bag • 1,000/case
14.1513.001	blue	100/bag • 1,000/case
14.1513.002	yellow	100/bag • 1,000/case
14.1513.005	green	100/bag • 1,000/case
14.1513.008	grey	100/bag • 1,000/case

Anti-evaporation for S-Monovettes and tubes

- Prevents concentration of serum/plasma during storage
- Easy opening and closing of sample tubes



Protective cover for block rack

- Cover for D17 block rack

Order No.	Colour	Packaging pcs./case
93.857	light grey	25

Anti-Evaporation Cap for S-Monovette®

- Fits Ø 15 mm S-Monovettes

Order No.	Colour	Packaging pcs./case
65.648	neutral	5,000

Universal Cap

- For S-Monovette® Ø 13 mm and tubes Ø 12 to 17 mm as the cap can be used in two different positions

Order No.	Colour	Packaging pcs./case
65.1379	neutral	10,000
65.1379.002	red	10,000
65.1379.004	yellow	10,000
65.1379.006	blue	10,000

Archiving Cap

- Suitable for tubes with Ø 13 to 16 mm

Order No.	Colour	Description	Packaging pcs./case
65.647	light blue	without filter	5,000
65.647.020	light blue	with filter	5,000



Universal block rack for a range of laboratory applications

- 50 apertures - 5 rows of 10 apertures each
- Available in three sizes, suitable for all S-Monovette® diameters and for tubes up to Ø 17 mm, cylindrical apertures
- Various colours enable universal use and help to organise your laboratory
- Especially suitable for space-saving sample storage
- Autoclavable up to 121°C
- On request, the ends of the rack can be custom printed to requirements (minimum quantity 200 pcs., not racks with handles)
- D17 rack is also available with handles

Rack D12

Suitable e.g. for S-Monovettes up to Ø 11 mm and for tubes up to Ø 12 mm
Dimensions: (length x width x height) 152 x 80 x 45 mm

Order No.	Colour	Packaging pcs./case
93.854	grey	20
93.854.121	red	
93.854.122	yellow	
93.854.123	green	
93.854.124	blue	
93.854.125	orange	

Rack D13

Suitable e.g. for S-Monovettes and tubes from Ø 8 mm up to Ø 13 mm
Dimensions: (length x width x height) 180 x 96 x 45 mm

Order No.	Colour	Handles	Packaging pcs./case
93.853	grey	without	16
93.853.131	red	without	16
93.853.132	yellow	without	16
93.853.133	green	without	16
93.853.134	blue	without	16
93.853.135	orange	without	16
93.853.200	grey	without	8
93.853.300	grey	without	8

Double block rack with 100 apertures

D 17 racks can be connected either at their front or lateral ends to form one rack with 100 apertures. Very convenient for backup sample storage in freezers and refrigerators. Other colours to identify backup samples are available on request.

Rack D17 with and without handles

Suitable e.g. for S-Monovettes up to Ø 16 mm and for tubes up to Ø 17 mm
Dimensions: (length x width x height) 209 x 109 x 45 mm
length including handles: 246 mm

Order No.	Colour	Handles	Packaging pcs./case
93.852	grey	without	20
93.851	grey	with	12
93.852.171	red	without	20
93.851.171	red	with	12
93.852.172	yellow	without	20
93.851.172	yellow	with	12
93.852.173	green	without	20
93.851.173	green	with	12
93.852.174	blue	without	20
93.851.174	blue	with	12
93.852.175	orange	without	20
93.851.175	orange	with	12
93.852.168	purple	without	20
93.852.169	purple	without	20
93.852.170	white	without	20
93.852.200	grey	without	12
93.852.300	grey	without	12

Micro Needle · Prepared Micro Tubes

Prepared Blood Tubes



Micro Needle

- Minimal blood loss without residual volumes in the adapter
- Ridged grip for needle control
- Rotatable by 360° for fragile veins
- Optimal flow and easy collection thanks to exceptional needle quality and exposed outlet

Order No.	Description	Colour	Packaging
85.921	Micro Needle 21 G x 3/4"		50/box, 500/case
85.923	Micro Needle 23 G x 3/4"		50/box, 500/case
85.925	Micro Needle 25 G x 3/4"		50/box, 500/case

Micro tubes with attached PE push cap closure

- Sample volume 1.3 ml
- Skirted, conical base
- Transparent label

Packaging: 1,000/case
Dimensions: L 40 mm
Ø 10.8 mm



Serum clotting activator	Serum-Gel clotting activator	Plasma Lithium-Heparin	Haematology Potassium-EDTA	Glucose Fluoride	Clotting Citrate
41.1501.005	41.1500.005	1.1 ml	41.1503.005	41.1504.005	41.1505.005
					41.1506.005 1.3 ml 41.1506 1.0 ml 41.1506.002 0.5 ml

Micro tubes with screw cap closure

- Closure contains integral O-ring
- Sample volume 1.3 ml
- Skirted, conical base
- Paper label

Packaging: 1,000/case
Dimensions: L 45 mm
Ø 10.8 mm



Serum Clotting Activator	Serum-Gel Clotting Activator	Plasma Lithium-Heparin	Haematology Potassium EDTA	Glucose Fluoride	Coagulation Citrate
41.1392.005	41.1378.005	1.1 ml	41.1393.005	41.1394.005	41.1350.005
			41.1395.005 41.3395.005 with membrane screw cap		

Special gripper racks for use with screw cap micro tubes see pp. 162-164.



Blood tubes with round and flat base made of polypropylene, with push cap and imprint

Volume in ml	Order No. Description	Preparation	Length/diameter in mm	Packaging pcs./case
10	26.367	Serum clotting activator	95.0 x 16.8	1,000
	26.323 without printing			
	26.369			
10	26.358	Plasma Lithium Heparin	100.0 x 15.7	1,000
		Haematology Potassium-EDTA		
10	28.364 without printing	Serum clotting activator	100.0 x 13.0	1,000
	29.373.004	Serum clotting activator		
7	29.376 without printing	Haematology Potassium-EDTA	75.0 x 13.0	1,000
5	32.329 4.5 ml	Serum clotting activator	50.0 x 16.0 with flat base	1,000
	32.311.001 4.4 ml	Serum-Gel clotting activator		
	32.331 4.5 ml	Plasma Lithium Heparin		
	32.332	Haematology Potassium-EDTA		
	32.525.326	Clotting Citrate	500	
5	34.343	Haematology Potassium-EDTA	75.0 x 12.0	2,000
	34.343.001 2.0 ml			
4	36.350 without printing	Serum clotting activator	55.0 x 12.0	2,000
	36.336	Plasma Lithium Heparin		
	36.338	Haematology Potassium-EDTA		
	36.339 2.0 ml	Glucose Fluoride		
2	38.346	Haematology Potassium-EDTA		



Blood tubes with round and flat base made of polypropylene, with screw cap and paper label

Volume in ml	Order No. Description	Preparation	Length/Ø in mm	Packaging pcs./case
10	46.361 without label	Serum clotting activator	101.0 x 16.5	1,000
10	46.390.001	Serum clotting activator	101.0 x 16.5 with flat base	1,000
	46.363.001	Plasma Lithium-Heparin		
5	49.354.001	Plasma Lithium-Heparin	57.0 x 16.5 with flat base	1,000
	49.355.001	Haematology Potassium EDTA		
	49.396.812 2.0 ml	Coagulation Citrate		
2	47.556 with printing	Haematology Potassium EDTA with pierceable membrane	66.0 x 11.5 with flat base	2,000
	47.410 with printing			ESR Citrate Suitable for Sediplus®

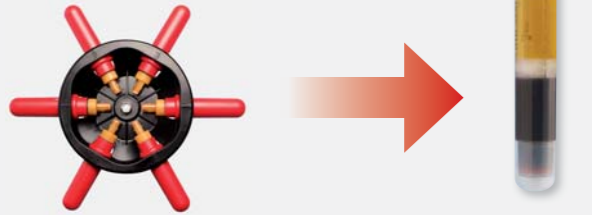
Prepared tubes for direct adaptation to special analysers

Order No.	Preparation	Volume/Capillary	Length/diameter in mm	Description	Packaging pcs./case
45.498.003	Haemolysis solution for glucose determination (Sarstedt)	1,000 µl/20 µl	92/15.3 (round base)	Tube with conical false bottom	500
47.409.001	Haemolysis solution Tinaquant® for HbA _{1c} determination (Roche)	1,000 µl/10 µl	66/11.5	Tube for Cobas Integra® 800 from Roche with Cap Piercing	500

Centrifugation of serum/plasma samples in combination with separator gels or valve filters as a diffusion barrier immediately after blood collection, i.e. already at a doctor's practice, ensures sample stability and accurate results. Centrifugation is ideally conducted in a swing-out rotor rather than in a fixed-angle rotor.

Centrifugation with swing-out rotor

- Thick and stable diffusion barrier
- Yields more sample material for analysers



Centrifugation with fixed-angle rotor

- Thin and unstable diffusion barrier
- Yields less sample material for analysers



Centrifuge SMC 6 (blood) & SMC 6plus (blood and urine)

At the push of a button, the SMC 6 centrifuge operates at a defined rotational speed and is, therefore, ideal for use in a doctor's practice and small labs. The compact design minimises the required storage space in favor of more workspace. The swing-out rotor accommodates 6 blood or test tubes up to 17 x 100 mm. The electronic timer can be adjusted in a range of 1 and 30 minutes.

Order No.	Description
90.184.550	SMC 6 Centrifuge, 115-230 V, complete with 6-position swing-out rotor, 6 tube holders up to 100 mm, 6 tube holders up to 75 mm
90.184.660	SMC 6plus Centrifuge, 115-230 V, additional centrifugation program with low acceleration for urine analytics
92.184.551	Tube holder, up to 100 mm, 1 pc.
92.184.552	Tube holder, up to 75 mm, 1 pc.
92.184.553	Rubber adapter, 25.4 mm, 6 pcs.
92.184.554	Rubber adapter, 6.4 mm, 6 pcs.
92.184.555	Cap for tube holder, 1 pc.



Centrifuge LC 24

Any important functional parameter can be pre-set - from a range of acceleration and deceleration modes to simply presetting the time and speed. The LC 24 saves up to 10 individual user programs available at the push of a button.

The tube holder and the swing-out rotor are included in the standard scope of supplies. They are easy to load and accommodate up to 24 tubes per round.

Order No.	Description
90.184.700	LC 24 Centrifuge, 230 V complete with 6-position swing-out rotor, 6 4-position tube holders up to 100 mm, 6 caps for 4-position tube holders
92.184.751	Tube holder LC 24/LC 24 E, 4-position for 100 mm, 6 pcs.
92.184.752	Tube holder LC 24/LC 24 E, 1-position for 50 ml tubes, 6 pcs.
92.184.755	Tube holder cap LC 24/LC 24 E, 6 pcs.

Identification and Accessioning – Decapping – Sorting – Aliquoting – Labelling – Recapping

Specimen tubes are routinely opened and closed in the lab during sample preparation for analysis, sample archiving and sample transport. When work volumes are constantly high, these activities are a frequent source of injuries (RSI syndrome) and infections if they are done manually. Decades of experience in blood collection and sample preparation went into the development of automatic decappers and recappers. Users now have access to robust, desktop devices with high throughput volumes that are practical in everyday use and easy to operate. They are supplemented by suitable cabinet bases with stowage space, e.g. for compressed air supply or cap disposal.

The tubes are channeled in and out for processing in linear analysis racks (e.g. Roche-Hitachi, Beckman-AU, Siemens-Centaur, Abbott-Architect, Tecan, Hamilton, and many others). Depending on the device, tubes of 65 to 100 mm length and 11 to 16 mm diameter can be processed in mixed operation. High-quality universal stoppers and screw caps are available from Sarstedt for closure.



Decapper DC 1200 Automatic decapping of push cap, screw cap, or evacuated tubes from 11 to 16 mm Ø

- Prevents RSI syndrome and minimises the risk of infection
- For all tubes 11 – 16 mm Ø, 65 - 100 mm long
- Multiple tube sizes and styles processed simultaneously
- Decapping is done in the analytical rack, no relocation necessary
- Available for many linear analytical racks
- Loading and unloading from tray
- High throughput of up to 1,200 tubes/hour



Recapper RC 1200 Automatic recapping of push cap, screw cap, or evacuated tubes from 13 to 16 mm Ø

- Prevents RSI syndrome and minimises the risk of infection
- Uses universal archiving caps
- For tubes 13 – 16 mm Ø, 65 - 100 mm long
- Minimises evaporation and sample contamination
- Multiple tube sizes and styles processed simultaneously
- Available for many linear analytical racks
- Loading and unloading from tray
- High throughput of up to 1,200 tubes/hour



Recapper RC 1200 S Automatic decapping of push cap, screw cap, or evacuated tubes from 13 to 15 mm Ø

- Prevents RSI syndrome and minimises the risk of infection
- Uses Sarstedt screw caps 13 or 15 mm Ø
- For Sarstedt tubes 13 or 15 mm Ø
- Minimises evaporation and sample contamination
- Available for many linear analytical racks
- Loading and unloading from tray
- High throughput of up to 1,200 tubes/hour
- Ideal for long-time storage or sample transport

Identification and Accessioning – Decapping – Sorting – Recapping

Systems for sample accessioning and sorting into racks or carriers

- Ideal in combination with any analytical platform
- No sorting or handling required
- Processes any tube type of 80 to 110 mm length (with cap) and 11 to 16 mm dia., including false bottom options
- Suited for any sample type (serum/plasma, serum gel/plasma gel, EDTA, citrate, blood sugar, urine)
- Integral ID module
- Automatic sample accessioning
- Customised sort rules to a variety of carrier types or bins
- Safe, rapid and continuous operation without error

The innovative Bulk Loader revolutionises sample processing in the clinical laboratory. Just dump closed specimen tubes (e.g. the S-Monovette®) into the bulk loader – no sorting or handling required.

Tubes are automatically placed onto the processing track of the Bulk Loader. Then the sample type (barcode) is identified via the integral ID module.

Samples can be distributed and sorted into centrifuge adapters, feeder/exit trays for laboratory lines, analyser racks, standard racks, BL 1200 ID carriers or BL 2000 bins per customer specifications. Tubes are either distributed according to defined parameters or to sample-related information received from the LIS (laboratory information system). Plausibility checks detect and sort out error samples.



BL 1200 ID – Customised sort rules to a variety of carrier types (bulk to rack)

- Throughput of up to 1,200 tubes/hour
- Up to 600 tubes per sorting platform
- Up to 1,200 tubes for two platforms
- Sorts to any standard rack or tray type

BL 2000 – Customised sort rules to bins (bulk to bulk)

- Throughput of up to 2,000 tubes/hour
- Up to 8 targets with 1 error sample compartment
- Up to 200 tubes per bin

Sorter DC/RC 900 Flex · The compact, combined solution for pre- and post-analytics

- Pre- and post-analytics in one system
- High throughput of up to 900 tubes/hour
- Processes any tube diameter from 11 to 16 mm
- Compatible with most racks or carrier styles
- Online or offline operation
- Opens tubes with push caps, stoppers and screw caps
- Enables tube identification by bar code reader and colour sensor
- Can be customised to sort by tube type, barcode, material (cap colour), etc.
- Closes tubes with archiving caps
- Recapping with screw caps for Sarstedt tubes with 13 or 15 mm diameter, e.g. the S-Monovette®
- Retrofitting of decapping or recapping

DC/RC 900 Flex combines pre- and post-analytics in one compact standalone system ensuring optimum capacity utilisation along with superior efficiency. Repetitive motion injuries associated with removing or manually inserting caps are eliminated, thereby protecting human resources.

All tubes of 65 to 100 mm length and 11 to 16 mm diameter are processed in a mixed operation without pre-sorting. Push caps, stoppers and screw caps are safely removed and hygienically disposed.

The customised sample platform is compatible with most racks and carrier styles, both for analysers and archiving systems. The control software can be programmed with any tube processing criteria and is designed for online and

offline operation. Tubes of any 13 - 16 mm diameter are closed with an archiving cap. The system can be designed as a decapper or recapper only and enables subsequent retrofitting.



Identification and Accessioning – Decapping – Sorting – Aliquoting – Labelling – Recapping

The compact solution for pre- and post-analytics

- Full function pre-and post-analytical system
- Ideal in combination with any analytical platform
- Modular configuration according to customer needs with:
 - Loading platform and/or Bulk Loader
 - ID Module
 - Decapper
 - Recapper
 - Aliquoter
 - Sorter
- For all common tube types
 - 11 – 16 mm diameter
 - 65 – 100 mm length
- Compatible with most racks or carrier styles

The PVS 1625 is a tailor made automation system for pre- and post-analytical processing of samples. It is not directly linked, but can handle any kind of rack and tray type. As an open system, it is complementary to any analytical platform.

Loading of unracked or racked sample tubes is via Bulk Loader (see previous page) or in racks via the loading platform, which is suitable for closed and open tubes.

ID modules for reading bar codes, identifying tube types via camera and detecting the fill level are available.

The Decapper module is used to safely remove and hygienically dispose of caps.

Bar-coded secondary tubes are prepared and the requested volume dispensed at the Aliquoter. No more sample mix-ups will occur and the available volume will be used in the most efficient way.

Two Recapper modules for archiving or sample transport are available. Tubes are either closed with an archiving push cap (for any tube diameter between 13 and 16 mm) or screw cap (for Sarstedt tubes) with 13 or 15 mm diameter.

The PVS software communicates with the laboratory information system (LIS) in the query or batch mode (data-based).

According to requests received from LIS (laboratory information system) or a strictly defined concept, tubes are automatically sorted to any rack or carrier types.



Microvette® 100/200 – Blood collection with capillary tubes



Blood collection with assembled 100 µl or 200 µl End-to-End capillary

The Microvette® capillary blood collection system is designed to offer practical solutions for individual requirements. Choose between the Microvette® 100 and 200 with a conical or round bottom inner tube. For both versions the End-to-End capillary is preassembled and ready for use.

The Microvette® 100/200 offers all the advantages of a modern capillary blood collection system:

- Preassembled End-to-End capillary
- Cap is easy to open
- Special cap design minimises aerosol effect
- Optimised tube geometry ensures thorough sample mixing
- Colour-coded caps and print for easy identification of additives and nominal volumes
- Shelf life and batch number on each tube



Preassembled End-to-End capillary and graduation
Shelf life and batch number on each tube

Microvette® 100
100 µl sample volume, conical inner tube

Order No.	Preparation
20.1280	Serum/Clotting activator
20.1282	Plasma/Lithium Heparin

100 µl sample volume, round bottom inner tube

Order No.	Preparation
20.1278	Haematology Potassium-EDTA

Microvettes 100 are packaged in units of 100/box (1,000/case).

Microvette® 200
200 µl sample volume, conical inner tube

Order No.	Preparation
20.1290	Serum/Clotting activator
20.1292	Plasma/Lithium Heparin
20.1289	Glucose/Fluoride

200 µl sample volume, round bottom inner tube

Order No.	Preparation
20.1291	Serum-Gel/Clotting activator
20.1288	Haematology Potassium-EDTA

Microvettes 200 are packaged in units of 100/box (1,000/case).

Microvette® 300/500 – Blood collection with collection rim



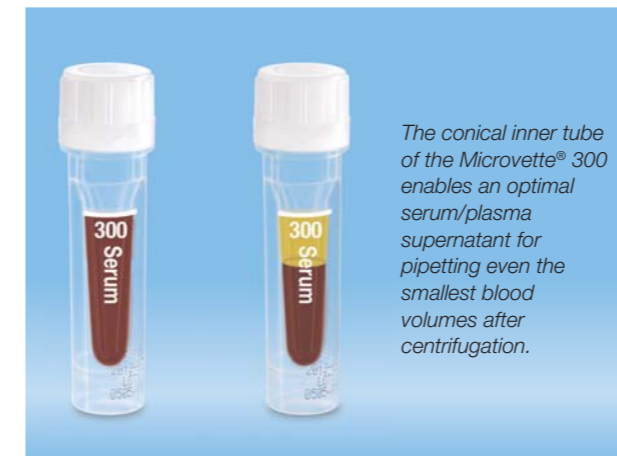
Simple peripheral blood collection thanks to ultra-thin collection rim

The Microvette® tubes are ideal for the collection of blood using the gravity-flow principle. Any part of the entire rim can be used.

The conical design of the Microvette® 300's inner tube enables thorough mixing, even with small sample volumes.

The Microvette® 300/500 stands out for the following product benefits:

- Choice of different inner tube designs with 300 or 500 µl volume capacity and corresponding graduation
- Cap is easy to open
- Optimised tube geometry ensures thorough sample mixing
- Cap can be attached to the tube bottom during collection to prevent mixup or loss
- Shelf life and batch number on each tube



The conical inner tube of the Microvette® 300 enables an optimal serum/plasma supernatant for pipetting even the smallest blood volumes after centrifugation.



300 µl or 500 µl sample volume
Shelf life and batch number on each tube

Microvette® 300
300 µl sample volume, conical inner tube

Order No.	Preparation
20.1308	Serum/Clotting activator
20.1309	Plasma/Lithium Heparin
20.1307	Glucose/Fluoride

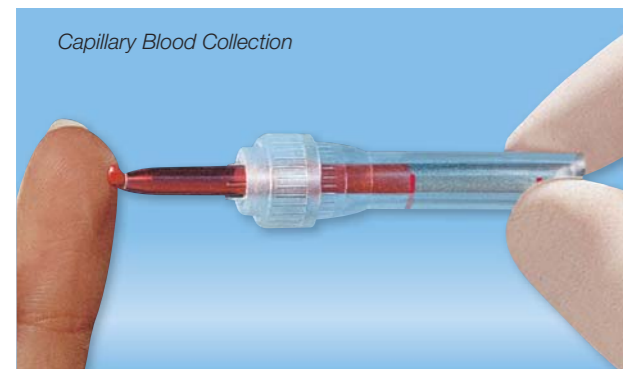
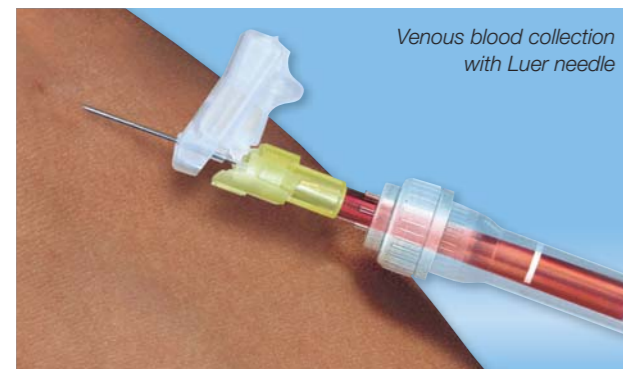
Microvette® 500
500 µl sample volume, round bottom inner tube

Order No.	Preparation
20.1343	Serum/Clotting activator
20.1344	Serum-Gel/Clotting activator
20.1345	Plasma/Lithium Heparin
20.1346	Plasma/Lithium Heparin-Gel
20.1341	Haematology Potassium-EDTA

Microvettes 300/500 are packaged in units of 100/box and 1,000/case.

Carrier tube see p. 37.

Capillary and venous blood collection in one system



Multivette® 600

For venous blood collection, a Luer needle is connected to the capillary tube of the Multivette®. Self filling of the inner tube is accomplished by normal venous pressure.

Hygienic and safe capillary blood collection with the Multivette® is performed using the End-to-End principle. The special capillary tube is designed to hold a volume of 600 µl of capillary blood.

- Venous blood collection with a Luer needle*
- Hygienic and safe capillary blood collection using the End-to-End principle
- Graduations ensure volume control
- Maximum volume 600 µl

*When collecting blood with a Luer needle, make sure to remove the needle from the vein together with the assembled Multivette® after blood collection.



Multivette® 600 600 µl sample volume

Order No.	Preparation	
15.1670	Serum/Clotting activator	
15.1674	Serum-Gel/Clotting activator	
15.1673	Plasma/Lithium Heparin	
15.1675	Plasma/Lithium Heparin-Gel	
15.1671	Haematology Potassium-EDTA	
15.1672	Glucose/Fluoride	

Multivettes are packed in boxes of 100 pcs. (1,000/case).

The system for optimum serum/plasma recovery



Microvette® CB 300

The capillary tube with push cap is supplied complete with a carrier tube that is suitable for transport and centrifugation.

After blood collection, the capillary tube is sealed with the attached push caps.

The trumpet-shaped capillary tube ensures maximum serum/plasma recovery after centrifugation.

For efficiency in the laboratory, the capillary tube accommodated in its carrier tube can be placed directly onto the analyser.

- Optimum serum/plasma recovery after centrifugation
- Two in one - sample container and centrifuge tube
- Compatible with different analysers as a primary tube for direct sampling



Order No.	Description	Packaging
55.525.003	Carrier tube with closed round bottom for Microvette®, Micro tubes, diameter 13 mm, length 75 mm	250/bag 2,000/case
55.525.002	see 55.525.505, colour: brown	250/bag 2,000/case
55.1571	Carrier tube with open round bottom for Microvette®, Micro tubes, diameter 13 mm, length 64 mm	250/bag 1,000/case
55.1571.051	see 55.1571, colour: light blue	250/bag 1,000/case
55.1577	Carrier tube, open flat bottom, for Multivette® diameter 11.5 mm, length 60 mm	250/bag 1,000/case
55.1577.002	see 55.1577, colour: brown	250/bag 1,000/case

Microvette® CB 300

Order No.	Preparation	
16.440	Serum/Clotting activator	
16.441*	Serum/clotting activator amber carrier tube	
16.443	Plasma/Lithium Heparin	
16.434*	Plasma/Lithium Heparin amber carrier tube	
16.444	Haematology Potassium-EDTA	
16.446	Glucose/Fluoride	

* Amber for bilirubin determination
Microvettes are packaged in bags of 100 pcs. (1,000/case).

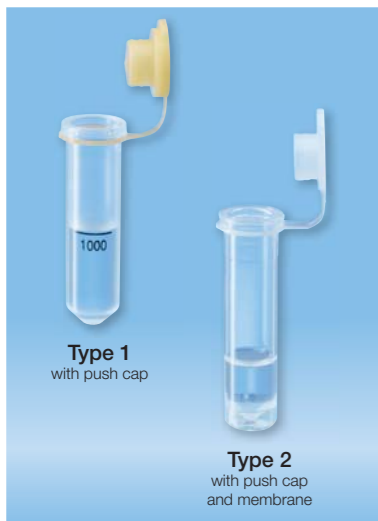
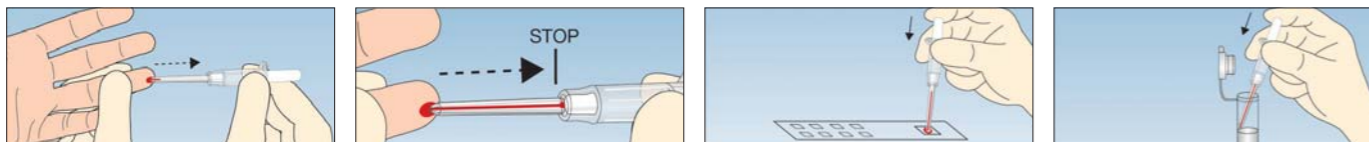


Minivette® POCT

Collection and dispensing of small capillary whole blood samples for Point-of-Care tests.

- Easy sample recovery
- Precise dispensing of small whole blood volumes
- Prevents spillage during transfer to test card

Order No.	Description	Colour code	Packaging
17.2111.010	Minivette® POCT, 10 µl, neutral		200 pcs./box 2,000 pcs./case
17.2111.020	Minivette® POCT, 20 µl, neutral		
17.2111.050	Minivette® POCT, 50 µl, neutral		
17.2112.020	Minivette® POCT, 20 µl, Lithium Heparin		200 pcs./box 2,000 pcs./case
17.2112.050	Minivette® POCT, 50 µl, Lithium Heparin		
17.2113.020	Minivette® POCT, 20 µl, Potassium-EDTA		200 pcs./box 2,000 pcs./case
17.2113.050	Minivette® POCT, 50 µl, Potassium-EDTA		
17.2111.100	Minivette® POCT, 100 µl, neutral		200 pcs./box 2,000 pcs./case
17.2112.100	Minivette® POCT, 100 µl, Lithium Heparin		
17.2111.200	Minivette® POCT, 200 µl, neutral		150 pcs./box 1,500 pcs./case
17.2112.200	Minivette® POCT, 200 µl, Lithium Heparin		



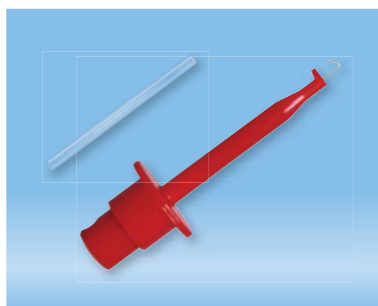
Micro tubes for glucose and HbA_{1c} determination

Prepared with haemolysis solution

The predosed volume can be checked at any time thanks to the printed control mark. Tubes are packed 100 pieces per PE bag.

Order No.	Closure colour/Preparation	Volume/Capillary	Type	Packaging pcs./case	
41.1438.904	yellow 	Haemolysis solution (Sarstedt) for glucose	1,000 µl/ 20 µl	1	1,000
41.1178.903	colourless 	Haemolysis solution (DiaSys) for glucose	1,000 µl/ 20 µl	1	1,000
41.1438.901	colourless 	Haemolysis solution (Roche Gen.2) for glucose	500 µl/ 20 µl	2	1,000
41.1443.904	yellow 	Haemolysis solution (e.g. ESAT)	1,000 µl/ 20 µl	2	1,000
41.1496.911	black 	Haemolysis solution HbA _{1c} (Roche) for HbA _{1c}	1,000 µl/ 10 µl	1	1,000

* Carrier tube see p. 37



End-to-End capillaries

Order No.	Sampling volume	Preparation	Packaging pcs./box
19.414	10 µl	NH ₄ -Heparin	100
19.447	20 µl	Potassium-EDTA	100

For the safe and easy handling of End-to-End capillaries we recommend our specially designed holder (see illustration).

Order No.: 95.1048 Packaging: 5/bag



Safety-Lancet

For safe capillary blood collection and increased patient comfort

The Safety-Lancet is primed and ready for use and enables easy handling.

It reduces the risk of needle injury and cross contamination because the needle point or blade is concealed both before and after use.

The sterile device is for single-use only and can be safely discarded. A range of penetration depths and widths are available to accommodate various volume requirements and skin types, ensuring optimum blood flow.

- User and patient safety
- Patient comfort
- Designed for targeted blood volumes

Order No.	Penetration depth (mm)	Type and size	Blood volume	Packaging
85.1015	1.6	Mini 28G	low	200/box 1,200/case
85.1016	1.8	Normal 21G	medium	200/box 1,200/case
85.1017	1.8	Extra 18G	medium to high	200/box 1,200/case
85.1018	1.6	Super blade approx. 1.50 mm wide	high	200/box 1,200/case
85.1019	1.2	Neonatal blade approx. 1.50 mm wide	medium to high	200/box 1,200/case



Safety-Heel® incision lancet

Heel punctures in preterm and term neonates

Heel punctures to investigate preterm and term neonates are a means of detecting life-threatening congenital diseases. Heel puncture is often painful. With the new Sarstedt Safety-Heel® Incision Lancet the discomfort and blood collection optimised. The semi-circular incision helps prevent formation of haematomas.

- Simple handling
- Large contact surface
- Optimised blood flow without additional massaging, minimum penetration depth
- Sufficient blood volume
- Greatly reduced discomfort level
- Rapid healing due to minimum penetration depth

Order No.	Penetration depth (mm)	Type and size	Blood volume	Packaging
85.1022	1.0	Term neonates blade approx 2.5 mm long	medium to high	50/box 200/case
85.1023	0.85	Preterm neonates blade approx 1.75 mm long	medium to high	50/box 200/case

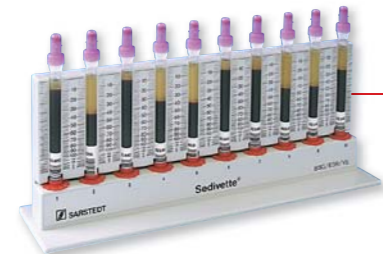


Enclosed system from blood collection to blood sedimentation

- Blood collection with the proven S-Sedivette®
- ESR determination in the collection tube
- Sample transfer avoided, no sedimentation pipette
- Hygienic and safe to use
- Economical and time-saving

S-Sedivette®

Order No.: 06.1690.001
Packaging: 500 pcs./case



ESR rack with graduated back wall

Order No.: 90.1090



Sediplus® S 200

- Designed for use in combination with the S-Sedivette® ESR system
- The value determined directly corresponds to Westergren values in mm
- 10 samples are measured simultaneously and independently
- Digital readout of results and measurement time via a multi-functional display
- With interface for LIS/printer and keyboard/BC reader

Order No.	Description
90.189.900	Sediplus® S 200, 100-240 V AC 50/60 Hz

Sediplus® S 2000

- 40-channel ESR timer in enclosed S-Sedivette® system
- The value determined directly corresponds to Westergren values in mm
- 40 samples are measured simultaneously and independently
- Digital readout of results and measurement time via a multi-functional display
- With interface for LIS/printer and keyboard/BC reader
- Extendable to 160 measuring channels by extension modules of 40 channels each

Order No.	Description
90.189.700	Sediplus® S 2000, 100-240 V AC 50/60 Hz
90.189.710	Extension module



Test Sedivettes

- For functional tests on the Sediplus® S 2000

Order No.	Description
91.189.715	Test Sedivettes, 1 set, German print
91.189.716	Test Sedivettes, 1 set, English print

SediTest

- For functional tests on the Sediplus® S 200

Order No.	Description
92.189.915	SediTest S 200 for Sediplus® S 200

Thermo Printer

- To issue measuring data from the Sediplus® S 100, S 200 and S 2000

Order No.	Description
90.189.720	Thermo printer with power supply 230/6 and connecting cable
90.189.722	Thermo printer with UK power supply 230/6 and connecting cable
90.188.055	Paper roll for thermo printer, 5 pieces

Barcode Scanner

- For sample identification on the Sediplus® S 100, S 200 and S 2000

Order No.	Description
90.189.730	Barcode scanner for Sediplus® S 100, S 200 and S 2000

Sediplus® Data Manager

- Multifunctional interface for Sediplus® S 100, S 200 and S 2000

Order No.	Description
90.189.750	Sediplus® Data Manager

Sarmix® M 200

- Special mixer for 2 or 4 S-Sedivettes

Order No.	Description
90.180.700	Sarmix® M 200

Sarmix® M 2000

- Rotating mixer for haematology and research applications

Order No.	Description
90.180.600	Sarmix® M 2000
92.180.615	Block rotor for 40 tubes up to diameter 8.5 mm (S-Sedivette®)



Combined system for safe blood collection and sedimentation

- Automatic and manual determination in accordance with Westergren
- Safety cap in sedimentation pipette prevents leakage of blood
- Simple adjustment of the blood column to zero through thread
- Bubble-free filling of pipettes
- Sedimentation pipettes with assembled piston insert

Order No.	Description	Packaging pcs./case
05.1079	S-Monovette® 2 ml, ESR, 66 x 11 mm, with transparent plastic label	500
05.1079.001	S-Monovette® 2 ml, ESR, 66 x 11 mm, with coloured paper label	500
47.410	Screw cap tube 2 ml, ESR, 66 x 11 mm, with printing	500
86.1996	ESR pipette with O graduation	1,000
86.1996.062	ESR pipette with printed graduation	1,000
90.189.800	Sediplus® S 100 for automated ESR analysis	1
90.1060	ESR rack with graduated back wall	1
90.1060.062	ESR rack without back wall (for graduated pipettes)	1

Automatic and manual determination in accordance with Westergren



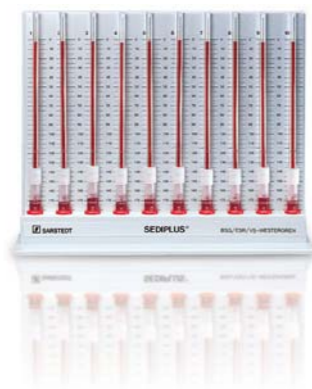
Sediplus® S 100

Order No.: 90.189.800

- Optimum results when used in combination with the Sediplus® ESR system with S-Monovette® ESR and Westergren pipette
- 10 samples are measured simultaneously and independently
- Digital readout of results and measurement time via a multi-functional display

ESR rack with graduated back wall

Order No.: 90.1060



ESR rack without graduated back wall

(for graduated pipettes)
Order No.: 90.1060.062



For further information request our special brochure.



Microvette® CB 200 ESR

Measurement of sedimentation in capillary blood

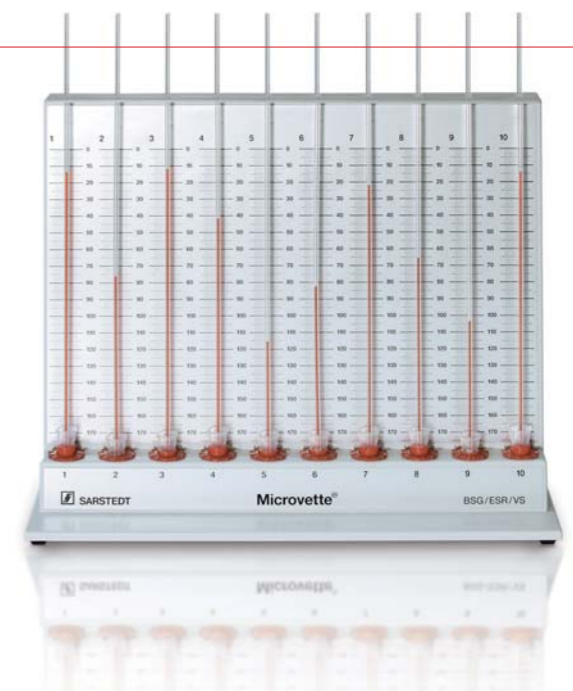
The Microvette® CB 200 ESR preloaded with citrate comes with an attached stopper, an assembled and prepared End-to-End collection capillary, and a sedimentation capillary.

- Proven to perform well in comparison with the Westergren method
- Collection volume of only 200 µl ensures minimum patient discomfort

Order No.	Description	Packaging pcs./case
18.1325	Microvette® CB 200 ESR	500

ESR Rack

- The ESR rack with graduated back wall with 10 measurement positions is designed specially for the Microvette® CB 200 ESR.



ESR rack for Microvette® CB 200

Order No.	Material	Description	Packaging pcs./case
90.1091	Plastic	ESR rack for Microvette® CB 200	1



Venous and arterial sampling

The Blood Gas Monovette® is available in 1 and 2 ml options and is designed for venous and arterial blood collection.

The Ca²⁺ balanced heparin preparation is also ideal for electrolyte analysis. The Blood Gas Monovette® is pre-dosed with liquid heparin enabling swift and thorough mixing of the blood and anticoagulant.

(Refer to the study: *Clinica Chimica Acta* 395 (2008) 187, Elsevier B.V., journal homepage: www.elsevier.com/locate/clinchim)

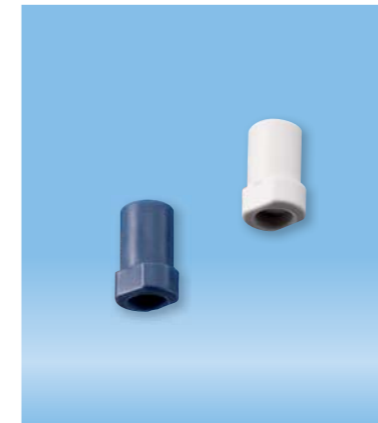
Order No.	Description	Nominal Volume	Packaging box/case
05.1146	Blood Gas Monovette®	1.0 ml	500/50
05.1146.020	Blood Gas Monovette®	1.0 ml	500/100 individually wrapped, sterile
05.1147	Blood Gas Monovette®	2.0 ml	500/50
05.1147.020	Blood Gas Monovette®	2.0 ml	500/100 individually wrapped, sterile
05.1147.028	Blood Gas Monovette® with membrane adapter	2.0 ml	500/100 individually wrapped, sterile
05.1147.048	Blood Gas Monovette® with ventilator	2.0 ml	500/100 individually wrapped, sterile
14.1148	Ventilator		1,000/500
14.1112	Membrane adapter		1,000/500



Blood gas capillary sets

- Convenient ordering units with all capillary sizes, compatible caps and mixing wires

Order No.	Description	Packaging pcs./case
51.931.100	100 µl blood gas capillary set: capillaries, caps and mixing wires	1,000
51.931.125	125 µl blood gas capillary set: capillaries, caps and mixing wires	1,000
51.931.140	140 µl blood gas capillary set: capillaries, caps and mixing wires	800
51.931.175	175 µl blood gas capillary set: capillaries, caps and mixing wires	800



Caps

- Range of sizes compatible with capillaries of different outer diameter
- Flexible TPE material provides secure sealing
- Optimal grip thanks to flat shape

Order No.	Description	Packaging pcs./case
65.935.205	Cap, white for blood gas capillary with 2.05 mm outer diameter	500
65.935.230	Cap, blue for blood gas capillary with 2.35 mm outer diameter	400



Mixing wire and bell-shaped magnet

- Mixing wire is compatible with all blood gas capillaries from Sarstedt
- Easy grip thanks to ergonomically shaped magnet

Order No.	Description	Packaging pcs./case
95.936	Mixing wire, diameter 1 mm, length 9 mm	250
95.937	Bell-shaped magnet, red	10



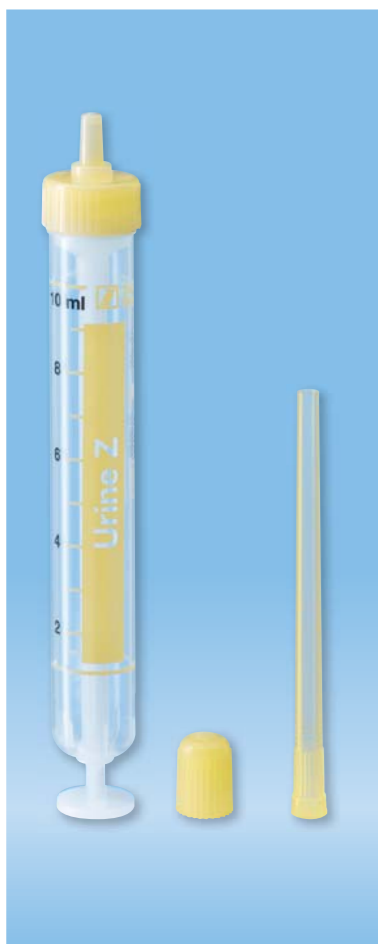
Blood gas capillaries from PET

- Break-resistant
- Reduced gas permeability
- Anticoagulants: 70 I.U./ml Ca²⁺ balanced heparin
- Range of volumes

Order No.	Description	Ø/Length in mm	Packaging pcs./case
19.930.100	Plastic blood gas capillaries 100 µl	2.05/100	250
19.930.125	Plastic blood gas capillaries 125 µl	2.05/110	250
19.930.140	Plastic blood gas capillaries 140 µl	2.3/75	200
19.930.175	Plastic blood gas capillaries 175 µl	2.3/100	200

Suitable transport container Order No. 95.997 see p. 160.

Suitable transport container Order No. 95.997 see p. 160.



Urine Monovette® for hygienic urine collection, transport and analysis

Three functions combined in one disposable product:

- 1. Hygienic urine collection**
With the Urine Monovette®, urine can be collected from any sample container by connecting the suction tip and withdrawing the piston. Luer-lock version allows direct connection to needleless catheter ports. Connect Luer needle for veterinary cystocentesis.
- 2. Vessel for test strips**
The test strip, e.g. Combur9-test, can be immersed directly into the filled Urine Monovette® for urine analysis.
- 3. Centrifuge tube for sedimentation**
The Urine Monovette® can be placed into a centrifuge for sedimentation.

Order No.	Volume in ml	Tube length/diameter in mm	Description	Packaging pcs./case
10.250.001	3.2	75/13	paper label	512
10.258	8.5	92/15	---	512
10.258.020	8.5	92/15	individually wrapped, sterile	500
10.252	10	102/15	---	512
10.252.001	10	102/15	paper label	512
10.252.030	10	102/15	white, UV light protection	512
10.252.020	10	102/15	individually wrapped, sterile	500

Urine Monovette® with stabiliser

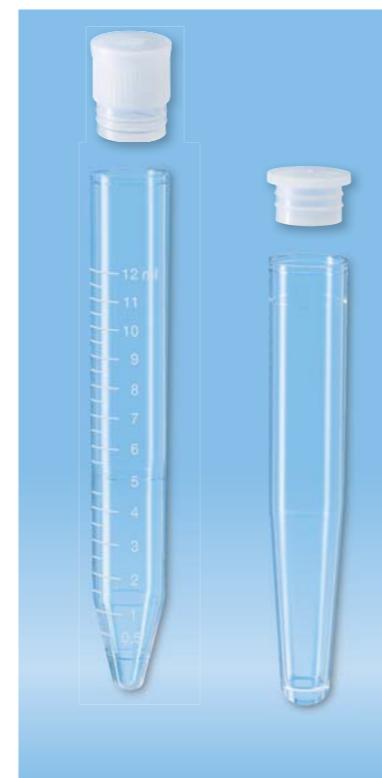
for bacteriological urine analysis

- The Urine Monovette® prepared with boric acid effectively stabilises microorganisms from sample collection to analysis
- The bacteriostatic effect of boric acid on the most important causes of urinary tract infections has been proven
- Urine collection and sample transport in one container

Order No.	Volume in ml	Tube length/diameter in mm	Description	Packaging pcs./case
10.253	10	102/15	---	512
10.253.001	10	102/15	paper label	512
10.253.020	10	102/15	individually wrapped, sterile	500
10.253.021	10	102/15	paper label, individually wrapped, sterile	500

Single suction tip

Order No.	Length in mm	Diameter in mm	Packaging pcs./case
10.251	76	8	5,000



Tubes with conical base, push cap

Volume in ml	Order No. Material	Tube length/diameter in mm	Packaging pcs./case	Suitable Cap No.*
12	57.462 with graduation PS	110/17	1,000	65.793
	57.527 with graduation PP			65.816
12	57.464 PS	105/16,8	1,000 888 1,000	65.793
	57.513 PP			65.816 65.720
10	57.469 PS	95/16,8	1,000	65.793
	57.519 PP			65.816 65.720

888 = in the practical and space-saving Sarstedt StackPack.

Tube with conical base, push cap assembled, sterile

Volume in ml	Order No. Material	Tube length/diameter in mm	Packaging pcs./case	Description
12	57.464.001 PS	105/16.8	500	sterile, 100/bag

Tubes with conical base, screw cap, graduation and writing space

Volume in ml	Order No. Material	Tube length/diameter in mm	Packaging pcs./case	Description
15	62.554.001 not shown PP	120/17	50/bag 500/case	red cap, assembled
15	62.554.502 not shown PP	120/17	50/bag 500/case	red cap, assembled, sterile, non-pyrogenic/endotoxin-free
15	62.553.041 not shown PS	120/17	50/bag 500/case	yellow cap, assembled
15	62.553.542 not shown PS	120/17	50/bag 500/case	red cap, assembled, sterile, non-pyrogenic/endotoxin-free
10	62.9924.283 PP	100/16	1,000/case	neutral cap, enclosed
10	62.9924.284 PP	100/16	100/bag 1,000/case	yellow cap, assembled, sterile

30 and 50 ml tubes with screw cap and conical base see pp. 70 and 71.
Tubes 120 mm x Ø 17 mm see p. 70.

PS tubes with conical, skirted base, screw cap

Volume in ml	Order No. Material	Tube length/diameter in mm	Packaging pcs./case	Description
10	60.9921.821 PS	97/16	1,000/case	neutral cap, enclosed
10	60.9921.830 PS	97/16	100/bag 1,000/case	yellow cap, assembled
10	60.9921.829 PS	97/16	100/bag 1,000/case	yellow cap, assembled, sterile

PS = polystyrene transparent, PP = polypropylene translucent to opaque
* Caps see pp. 78-79.

The vacuum system for enclosed urine transfer



Urine analysis V-Monovette® Urine without preparation, round bottom, paper label, sterile

Order Number	Description	Tube Length/Ø mm	Packaging pcs./case
11.2252.001	V-Monovette® Urine Z 4 ml	75/13	500
11.2352.001	V-Monovette® Urine Z 6 ml	100/13	500
11.2452.001	V-Monovette® Urine Z 10 ml	100/15	500

V-Monovette® Urine without preparation, conical base, paper label, sterile

- Optimal centrifuge tube for sediment recovery
- Improved centering in rack thanks to flanges at the conical bottom
- Ideally suited to accommodate a "KOVA pipette" for standardised analysis of the urine sediment

Order Number	Description	Tube Length/Ø mm	Packaging pcs./case
11.2552.001	V-Monovette® Urine Z 9.5 ml	100 / 15	500



Urine culture V-Monovette® Urine with stabiliser, round bottom, paper label, sterile

- Stabilisation of micro organisms in urine combined with the advantages of an enclosed system
- When the tube is filled to nominal volume, urine is efficiently stabilised for up to 48h at room temperature

Order Number	Description	Tube Length/Ø mm	Packaging pcs./case
11.2253.001	V-Monovette® Urine 4 ml with boric acid	75/13	500
11.2453.001	V-Monovette® Urine 10 ml with boric acid	100/15	500

Urine transfer



Urine cup, 100 ml with integrated transfer device

- Recessed transfer device to exclude the risk of exposure
- Safety label with sharp hazard warning note
- Safety label guarantees sterility
- Stackable, highly transparent
- Enclosed urine transfer for volumes > 20 ml

Order Number	Description	Height/Ø mm	Packaging pcs./case
75.562.400	Urine cup, 100 ml with integrated transfer device	72/62	200



3.0 Liter urine container with integrated sampling port

- Convenient horizontal sampling at volumes >1,200 ml. The integrated sampling port is positioned opposite the recessed grip.
- Enables inverted sampling of small volumes > 700 ml
- Ergonomically shaped recessed grip for convenient handling
- Transparent inspection strip with 100 ml graduation
- Large opening diameter (80 mm)
- 3 Liter volume

Order Number	Description	Height mm	Packaging pcs./case
77.575.401	3 Liter urine container with integrated sampling port, self-adhesive label enclosed	255	30

Self-adhesive label for urine container

for Order No. 77.575.401, 77.575.001 and 77.580

- Single, with instructions for the collection of 24 hour urine

Order Number	Description	Packaging
84.1402.001	Size 150 x 55 mm	300/box (10 x 30/bag) 1,800/case



Transfer device

- Urine sampling from open containers for small volumes < 20 ml
- 10 cm tubing
- Wings on tubeholder enable one-handed operation
- Compatible with any tube size

Order Number	Description	Packaging pcs./case
11.1240	Transfer device, tube length 10 cm	500



3.0 Liter Urine container from polyethylene with assembled yellow cap

- Filling volume 3,000 ml
- Ergonomically shaped for safe handling
- Large opening diameter
- Transparent volume strip

Order Number	Volume	Description	Packaging pcs./case
77.575.001	3.0 Liter	self adhesive label enclosed	30

Self adhesive label for urine container

for Order No. 77.575.001, 77.575.401 and 77.580

- Single, with instructions for the collection of 24 hour urine

Order Number	Description	Packaging
84.1402.001	Size: 150 x 55 mm	300/box (10 x 30/bag) 1,800/case



Urine container from polyethylene with assembled yellow cap

Order Number	Volume	Description	Packaging pcs./case
77.580	2.0 Liter	self adhesive label enclosed	30

Self adhesive label for urine container

for Order No. 77.575.001, 77.575.401 and 77.580

- Single, with instructions for the collection of 24 hour urine

Order Number	Description	Packaging
84.1402.001	Size: 150 x 55 mm	300/box (10 x 30/bag) 1,800/case



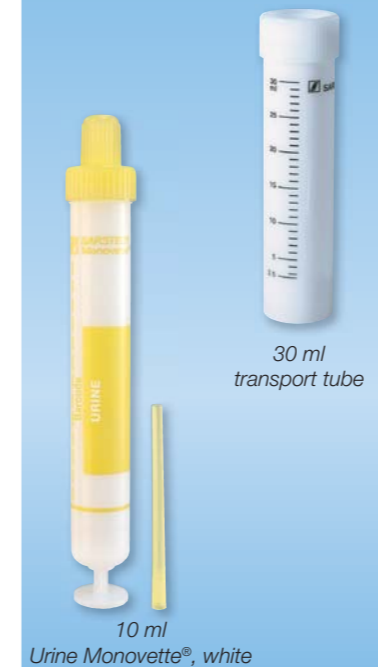
Urine containers from polyethylene with black screw cap

Order Number	Volume	Description	Packaging pcs./case
77.582	0.5 Liter	brown translucent	100
77.577	0.25 Liter	white	120



500 ml collection cup

stabiliser



10 ml Urine Monovette®, white

UriSet 24

Complete set for standardised and patient-friendly 24 hour urine collection

- **Urine container** - 3,000 ml container with ergonomically shaped, wide 80 mm Ø opening and transparent inspection strip for optimal volume reading.
- **Receptacle** - 500 ml cup enables patient-friendly urine collection and transfer from the urine container into the transport tube.
- **Stabiliser** - A glass bottle with integral safety dropper contains 9 ml of 20% hydrochloric acid concentration, requiring no additional working steps and providing improved patient safety. The amount and concentration of hydrochloric acid has been dosed to ensure optimal stabilisation of the urine for up to 7 days for the analysis of catecholamines, metanephrines, homovanillic acid and 5-hydroxyindole-acetic acid. This long-term stability at room temperature enables the collection of urine samples at the laboratory and collective processing per batch.
- **Transport tube or Urine Monovette®** - Only the enclosed 30 ml tube or Urine Monovette® is transported to the doctor or the laboratory while the urine container is discarded by the patient. The system reduces the waste volume at the doctor's practice or laboratory. A self-adhesive label for reliable patient identification is enclosed with the transport tube.

UriSet 24

Order Number	Description	Packaging pcs./case
77.578	with stabiliser and 30 ml transport tube	30
77.578.252	with stabiliser and white Urine Monovette®	30
77.578.010	without stabiliser with white Urine Monovette®	30

500 ml Urine collection cup, separately

Order Number	Length mm	Opening Ø mm	Packaging pcs./case
75.1356	148	80	250

Transport tube, separately

Order Number	Volume	Length/Ø mm	Description	Packaging pcs./case
10.252.030	10	102/15	Urine Monovette® white	512
62.543.030	30	107/25	white tube with screw cap	500



250 ml container, polystyrene, white

Order Number	Length mm	Aperture Ø mm	Packaging pcs./case
75.560	100	73	500

Snap-on lid, polystyrene

76.561	---	---	500
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125 ml container, polypropylene, neutral

Order Number	Length mm	Aperture Ø mm	Packaging pcs./case
75.565	85	62	500



125 ml container, polypropylene, highly transparent

Order Number	Length mm	Aperture Ø mm	Packaging
75.1355	67	66	1,000/case
75.1355.100	67	66	100/bag 1,000/case

Snap-on lid, polyethylene, red

Order Number	Description	Pcs./bag	Packaging pcs./case
76.1477	with spout	1,000	1,000
76.1477.100	with spout	100	
76.1414	without spout	1,000	
76.1414.100	without spout	100	



100 ml container, polystyrene, white

Order Number	Length mm	Aperture Ø mm	Packaging pcs./case
75.570	49	70	1,000

Snap-on lid, polystyrene

76.571	---	---	1,000
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500 ml container, polypropylene

- For collection of complete urine quantities of 24 h urine

Order Number	Length mm	Aperture Ø mm	Packaging pcs./case
75.1356	148	80	250



100 ml container, polypropylene, neutral, screw cap from green polypropylene

Order Number	Length/Ø mm	Description	Packaging pcs./case
75.1354.001	47/58	Container with enclosed cap	500



Safety label ensures sterility prior to use and provides a convenient writing space

100 ml containers, transparent polypropylene, neutral HD-PE screw cap

Order Number	Length/Ø mm	Description	Packaging bag/case
75.563	72/62	Container without cap	50/500
76.564	14/62	Screw cap	50/500
75.562.105	73/62	Container with cap, assembled, sterile, with safety label	5/200
75.562.005	73/62	Container with cap, assembled	5/200
75.562.300	72/62	Container with enclosed cap	50/250

100 ml container, brown

- Safe light protection for urine samples, e.g. light-sensitive crosslinks with deoxy-pyridinoline assays

Order Number	Length/Ø mm	Description	Packaging bag/case
75.562.011	72/62	Brown cap and container, cap enclosed	50/250



70 ml container assembled with yellow screw cap

- Highly-transparent PP container, reliable sealing with HD-PE closure
- For universal use, e.g. for urine, sputum or pathological samples

Order Number	Volume ml	Length/Ø mm	Description	Packaging bag/case
75.9922.744	70	55/44	Assembled cap	500
75.9922.745	70	55/44	Assembled cap, with standard label	500
75.9922.721	70	55/44	Assembled cap, sterile, ind. wrapped, with standard label	200



Tubes with conical skirted base and screw cap

Order Number	Material	Volume ml	Length/Ø mm	Description	Packaging pcs./case
62.543 with printed graduation	PP	30	107/25	Assembled cap	500
62.543.001 with printed graduation	PP	30	107/25	Assembled cap, sterile	400
60.9922.241	PP	25	90/25	Assembled cap	500
63.9922.252	PP	25	90/25	Assembled cap, with label	500
60.9922.243	PP	25	90/25	Yellow cap, assembled, sterile	500
63.9922.254	PP	25	90/25	Yellow cap, assembled, with label, sterile	500
60.732	PP	15	76/20	Enclosed cap	500
60.732.001	PP	15	76/20	Assembled cap, sterile	500

*PP = polypropylene, HD-PE = High Density polyethylene
Additional cups are shown on pp. 149 – 150.*



Containers with screw cap

Order Number	Length/Ø mm	Tube Material	Description	Packaging pcs./case
80.622	107/25	PP	sterile	400
80.622.111	107/25	PP	non-sterile	500
80.623	101/16.5	PP	sterile	500
80.623.111	101/16.5	PP	non-sterile	500
80.734.001	76/20	PP	sterile	500
80.734	76/20	PP	non-sterile	500
80.734.311	76/20	PP	sterile, with label	500
80.734.301	76/20	PP	non-sterile, with label	500
80.734.401	76/20	PP white	non-sterile, with label	500

Appropriate mailing containers for faeces tubes are shown on pp. 157 -159. All containers are available with individual print or label on request.

Faeces containers with flat base and push cap (not illustrated)

Order Number	Length/Ø mm	Tube Material	Description	Packaging pcs./case
80.621	75/23.5	PS	sterile	250
80.620	75/23.5	PS	non-sterile	500



Tube with screw cap for collection of a defined faeces sample

This faeces tube enables a clean and simple separation of a defined faeces sample of 1 ml, approx. 1 g.

The spoon has a capacity of 1 ml. Any excess is removed with the enclosed spatula.

The spoon is fixed to the cap and projects down the middle of the tube.

This construction enables centrifugation and separation of a supernatant without disturbance on opening.

Example:

Immunological procedure for the determination of occult blood

When adding e.g. 2 ml distilled water to the faeces tube, a suspension is produced by simple mixing. After centrifugation, proteins such as human haemoglobin and albumin can be analysed from the supernatant by means of immunological procedures.

Literature on this procedure is available on request.

Order Number	Length/Ø mm	Tube Material	Description	Packaging pcs./case
80.623.022	101/16.5	PP	Faeces tube incl. spatula	1,000

PS = Polystyrene transparent, PP = Polypropylene



25 ml and 70 ml faeces containers

The 25 and 70 ml containers are manufactured from robust white polypropylene. The brown screw cap includes an integral sampling scoop. The containers are primarily used for the collection of faeces samples for pathology. They are also very convenient for the collection of grain and soil samples.

Order Number	Material	Volume	Length/Ø mm	Description	Packaging pcs./case
80.9924.014	PP	25	54/28	white with brown cap, label	500
80.9924.027	PP	70	55/44	white with brown cap, label	500



Thrombo Plus® for direct platelet counting

- Simple and quick
- Accurate counting of platelets even with low numbers
- Reagent pipetting avoided to exclude contamination
- Eliminates requirement for erythrocyte or leukocyte pipettes
- Eliminates requirement for humidity chamber
- Platelets appear as bright discs during microscopy
- Sample is stable for at least 24 hours at 4°C

Thrombo Plus®

Order Number	Length/Ø mm	Packaging pcs./case
51.334	75/11.5	500

End-to-End capillaries prepared with potassium EDTA

Order Number	Volume	Packaging pcs./box
19.447	20 µl	100



Micro tube for reticulocyte counting

Each tube is pre-dosed with 100 µl of 1% brilliant-cresyl-blue stain solution. This preparation is suitable for the addition of 100 µl of venous blood anticoagulated with EDTA. After a reaction time of 15-30 minutes, the smear can be made.

Micro tube with 100 µl brilliant-cresyl-blue stain solution

Order Number	Material	Packaging pcs./case
42.117	polypropylene	250

Saliva collection with the Salivette® is easily carried out by chewing a swab. Recovery of the saliva sample is achieved by returning the swab to the Salivette® and centrifuging the container. A clear, fluid sample is obtained which can be used for analysis.



Applications

Saliva analyses are very helpful in diagnosis and therapeutic monitoring of many diseases.

- **Economical**
Sampling can be effected at home without any specialised training.
- **Patient acceptability**
Sampling is painless and can be repeated without distress.
- **Transportation**
The Salivette® enables easy and safe transportation to the laboratory.
- **Hygienic**
The design of the Salivette® guarantees a clean and hygienic saliva sample.
- **Sample quality**
After centrifugation a clear fluid sample is obtained for analysis. Freezing, which is often required prior to analysis of saliva samples collected using other methods, is not necessary.

Order No.	Length/diameter in mm	Cap colour	Description	Packaging
51.1534	97/16.8	neutral colour	Cotton swab without preparation	500/case (100/bag)
51.1534.001	97/16.8	green	Cotton swab with citric acid preparation	500/case (100/bag)
51.1534.500	97/16.8	blue	Synthetic swab for cortisol determination	500/case (100/box)

Test for the detection of occult blood in faeces based on chromagen guaiac resin



- **Eliminates risk of mix-ups**
One Hemoplus® test card contains all 12 test positions. The risk of mix-ups with other test cards is excluded.
- **Balanced sensitivity**
Hemoplus® will not detect normal physiological blood loss. The test sensitivity has been established to be within the range required for colorectal cancer screening.

The test principle is based on the pseudo-peroxidase activity of haemoglobin which may be present in faeces. The 12 test positions on each test card contain chromatographic filter paper impregnated with distilled guaiac resin as an indicator in the application fields on the test cards. A stabilised alcoholic hydrogen peroxide solution acts as a developing reagent.

Haemoglobin catalyzes the oxidation of the chromagen guaiac resin in the presence of hydrogen peroxide to form a blue-coloured compound.

Hemoplus® Set

Order No.: 51.1444.001 (one kit contains 50 x 3 tests)

Test concept

1 Hemoplus® Kit contains:

- 50 envelopes (one test card for 3 faeces tests and 12 cardboard spatulae per envelope)
- Two 30 ml bottles of developing reagent
- Detailed instructions for use:

- **Variable application**
Each test card is divisible into 3 separate sections which allows Hemoplus® to be used for individual patient tests as well as for multiple testing.
- **Test confidence**
The recommended use of four test positions for each investigation increases the probability of detecting a positive result in a non-homogeneous faeces sample.
- **Simple analysis**
A positive result is clearly indicated with Hemoplus® by a blue colouration which is stable for at least 60 seconds.

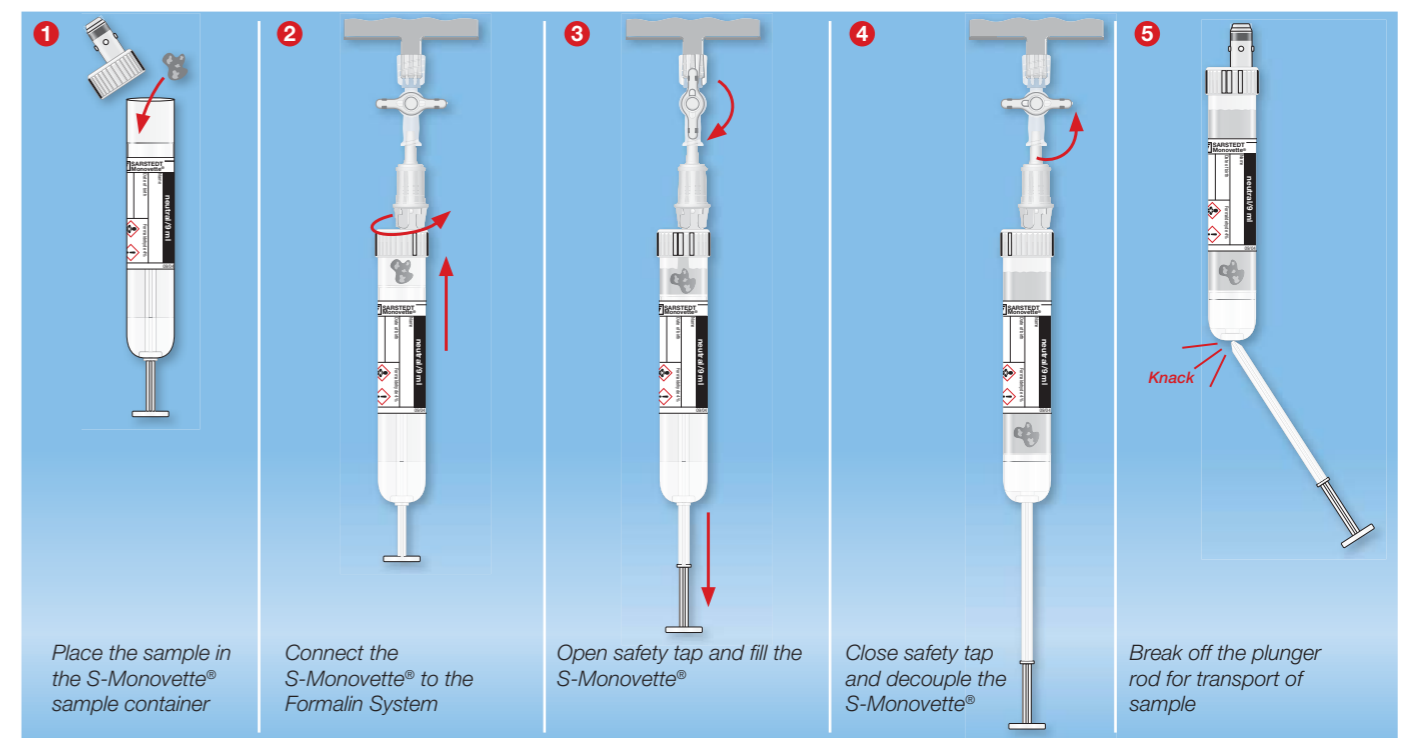
Enclosed formalin system • Optimised protection from toxic formalin fumes



The new Formalin System from Sarstedt is an enclosed system. This enables contamination-free fixation of tissue samples with no user contact with the formalin. In contrast to conventional methods, the tissue sample is transferred after sampling to a neutral S-Monovette® that is not prepared or pre-filled. It is then connected to the Sarstedt Formalin System and filled with formalin. Embedding of the sample is then complete.

- **High level of occupational safety**
The enclosed Formalin System prevents dispersal of toxic formalin fumes and makes contamination-free fixation of tissue samples possible
- **Flexible formalin dosing**
Individual determination of the filling volume means considerable cost reduction for formalin and its disposal

Order No.	Description	Sales unit
51.1703	Formalin System with 450 ml formaldehyde solution (4%)	6 pcs.
51.1703.009	Formalin Set 9 ml, comprising Formalin System and 100 S-Monovettes 9 ml	1 pc.
51.1703.025	Formalin Set 25 ml, comprising Formalin System and 50 S-Monovettes 25 ml	1 pc.
09.1704.001	S-Monovette® 9 ml, 92 x 16 mm, 50 pcs./bag	500 pcs.
09.1705.001	S-Monovette® 25 ml, 97 x 25 mm, 50 pcs./bag	250 pcs.
95.1706	Wall holder for Formalin System	1 pc.



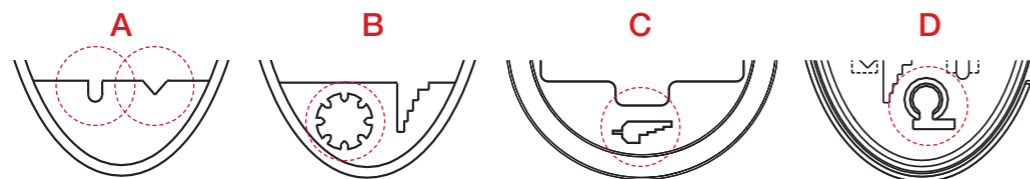
For the SAFE disposal of contaminated sharps!

Our prevention strategy to minimise needle stick hazards is to provide a wide product range for optimal handling that conforms to most recent national and international directives.

Benefits of Multi-Safe Sharps container:

- Range of sizes for the user-friendly disposal of sharps in wards and for ambulatory use
- The size of the opening on all options with an oval day lid may be customised by breaking off the two perforated sections (exception: "vario")
- Range of holders (refer to p. 62) for secure fixation in various environments (exception: "opti 500 T" – special option for phlebotomy trays)
- No additional holder required for the stackable large-volume boxes
- Additional brackets for easy transport (refer to p. 62)
- The Multi-Safe sharps containers are made from high-grade polypropylene for enhanced break resistance. The containers are resistant to stress cracks and are dimensionally stable.
- Depending on the option, the following removal aids are included in the lid (see legend below):

- A: Luer systems**
- B: Insulin pens**
- C: Scalpels, contaminated needles, Luer systems**
- D: Scalpels**



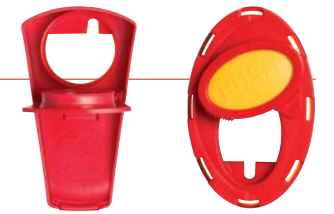
Certifications

- TRBA 250, ISO 23907 also available with separate absorbent liner, UN, AFNOR



Multi-Safe sani 0.2 l & mini 0.3 l

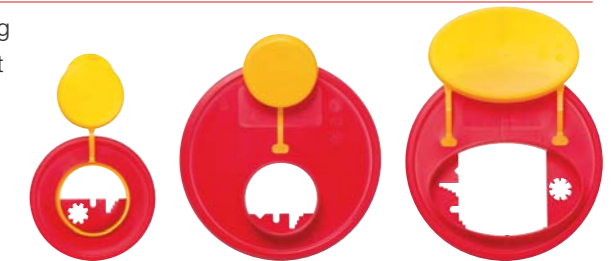
- Sharps sharps container conveniently sized for mobile use
- Ideal for physicians, nurses and rescue teams



	Order No.	Description	Removal aid	Packaging
1	77.3890.002	Multi-Safe sani 200	A	110/case
2	77.3890.003	Multi-Safe mini 300	A	135/case

Multi-Safe quick 0.5 • 1.0 • 1.5 • 2.0 • 2.5 l & quick S 1.5 • 2.0 • 2.5 l

- quick option with small lid opening
- quick S with large lid opening that can be customised by breaking the perforated section
- Round shape



	Order No.	Description	Removal aid	Compatible holder*	Packaging
3	77.3891.005	Multi-Safe quick 500	A, B, C	a, e	170/case
4	77.3891.010	Multi-Safe quick 1000	A, B, C	a, e	100/case
5	77.3891.015	Multi-Safe quick 1500	A, C	a, e, g	120/case
6	77.3891.020	Multi-Safe quick 2000	A, C	a, e, g	90/case
7	77.3891.025	Multi-Safe quick 2500	A, C	a, e, g	50/case
8	77.3892.015	Multi-Safe quick S 1500	A, B, C	a, e, g	80/case
9	77.3892.020	Multi-Safe quick S 2000	A, B, C	a, e, g	65/case
10	77.3892.025	Multi-Safe quick S 2500	A, B, C	a, e, g	45/case

Multi-Safe vario 1.5 • 2.3 l

- Very large lid opening
- Suitable for small bulky waste
- Oval shape



	Order No.	Description	Removal aid	Compatible holder*	Packaging
11	77.3893.015	Multi-Safe vario 1500	A, B, C	c, d, f	60/case
12	77.3893.023	Multi-Safe vario 2300	A, B, C	c, d, f	45/case

* See also p.62



Multi-Safe twin 0.7 • 1.8 • 2.1 • 3.0 • 5.0 l

- 5l box also suited for long-stemmed objects
- Oval shape



Order No.	Description	Removal aid	Compatible holder*	Packaging
13 77.3894.007	Multi-Safe twin 700	A, B, C	a, e	200/case
14 77.3894.018	Multi-Safe twin 1800	A, B, C	a, e, h	100/case
15 77.3894.021	Multi-Safe twin 2100	A, B, C	a, e, h	100/case
16 77.3894.030	Multi-Safe twin 3000	A, B, C	a, e, h	60/case
17 77.3894.050	Multi-Safe twin 5000	A, B, C	a, e, h	45/case



Multi-Safe opti 0.5 T • 0.7 • 1.7 • 2.1 • 3.0 l

- Ideally suited for use with phlebotomy trays
- Oval shape



Order No.	Description	Removal aid	Compatible holder*	Packaging
18 77.3895.005	Multi-Safe opti 500 T	A, B	—	110/case
19 77.3895.007	Multi-Safe opti 700	A, B, C	a, e, g	170/case
20 77.3895.017	Multi-Safe opti 1700	A, B, C	a, e, g	110/case
21 77.3895.021	Multi-Safe opti 2100	A, B, C	a, e, g	80/case
22 77.3895.030	Multi-Safe opti 3000	A, B, C	a, e, g	50/case



Multi-Safe euroMatic® 3.0 • 4.0 • 6.0 • 7.0 l

- Innovative day lid and permanent closure for single-handed use (the day lid opens automatically with the push of a button)
- Square shape
- in quarter II with new labelling



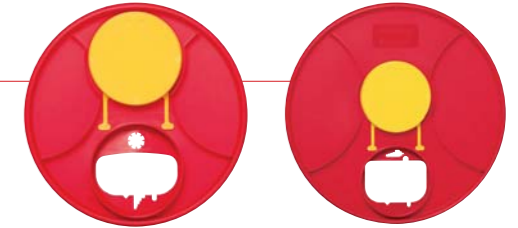
Order No.	Description	Removal aid	Compatible holder*	Packaging
23 77.3897.030	Multi-Safe euroMatic® 3000	A, C, D	b, e	55/case
24 77.3897.040	Multi-Safe euroMatic® 4000	A, C, D	b, e	50/case
25 77.3897.060	Multi-Safe euroMatic® 6000	A, C, D	b, e	40/case
26 77.3897.070	Multi-Safe euroMatic® 7000	A, C, D	b, e	37/case

* See also p.62



Multi-Safe medi 6 • 11 l

- For large-volume waste
- Carrier handle for convenient transport



Order No.	Description	Removal aid	Packaging
27 77.3898.006	Multi-Safe medi 6	A, B, C	576/pallet
28 77.3898.011	Multi-Safe medi 11	A, C	330/pallet
29 77.3898.106	Multi-Safe medi 6 with handle	A, B, C	576/pallet
30 77.3898.111	Multi-Safe medi 11 with handle	A, C	330/pallet
31 77.3898.206	Multi-Safe medi 6, with handle, Label	A, B, C	384/pallet (24 pcs./case)

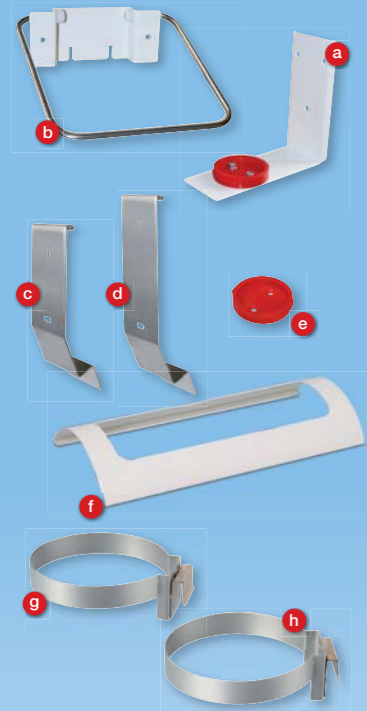


Multi-Safe eco 25 • 50 l & Multi-Safe 25 • 50 l

- Silicone rim for easy, secure and leak-proof closure
- Stackable both empty and filled
- Disposal of clinical waste
- Lid-in-lid system for customised size of opening. Both lids have a silicone rim for leak-proof permanent closure.
- No additional holders required



Order No.	Description	Packaging
32 77.3899.025	Multi-Safe eco 25	160/pallet
33 77.3899.050	Multi-Safe eco 50	125/pallet
34 77.3899.125	Multi-Safe 25	160/pallet
35 77.3899.150	Multi-Safe 50	125/pallet



Multi-Safe steri 35 • 60 I

- Optimal robust option for the disposal of contaminated waste. Autoclaving at 121°C is possible.
- No additional holders required

Order No.	Description	Packaging
36 77.3899.035	Multi-Safe steri 35	150/pallet
37 77.3899.060	Multi-Safe steri 60	120/pallet

Multi-Safe holders

Order No.	Description	Packaging
a 95.963	Wall holder	30
b 95.963.001	Wall holder euroMatic®	20
c 95.963.015	Wall holder vario 1500	25
d 95.963.023	Wall holder vario 2300	30
e 95.965.001	Adhesive adapter	150
f 95.965.003	Base adapter vario	1
g 95.963.003	Holder for bed rails (inner Ø 130 mm)	10
h 95.963.004	Holder for bed rails (inner Ø 140 mm)	10

Customised sharps container (Pimp your “box”)

- Depending on the required quantity, sharps containers can be custom-made to fit your requirements (e.g. colour, personalised label etc.).

Please call customer service or check our brochure on Multi-Safe Sharps Containers for more detailed information.



Safety-Tray – efficient design for improved organisation

Specially designed for use in blood collection, the configuration of the Safety-Tray can be adjusted to suit your requirements.

Note: The accessories shown below are not included and must be ordered separately.

Order No.	Description		Packaging
93.1650	Safety-Tray without insert plate 429 x 283 x 80 mm		1/case
93.1650.010	Version I 1 S-Monovette® Rack D17 with handle 2 Dispenser boxes with lid 1 Multi-Safe opti 700 3 Disposable containers 1 Disinfectant spray		1/case
93.1650.020	Version II 2 Dispenser boxes with lid 1 Multi-Safe vario 1500 6 Disposable containers 1 Disinfectant spray		1/case
93.1650.030	Version III 2 Dispenser boxes with lid 1 Multi-Safe opti 700 8 Disposable containers 1 Disinfectant spray		1/case
93.1650.040	Version IV 1 S-Monovette® Rack D17 with handle 2 Dispenser boxes with lid 1 Multi-Safe vario 1500 1 Disposable containers 1 Disinfectant spray		1/case
93.1650.050	Version V 1 S-Monovette® Rack D17 with handle 1 Dispenser boxes with lid 1 Multi-Safe Box twin 1800 4 Disposable containers 1 Disinfectant spray		1/case

Accessories

Order No.	Description	Description	Packaging
77.3895.007	Multi-Safe opti 700	0.7 l suitable for versions I and III	200/case
77.3893.015	Multi-Safe vario 1500	1.5 l suitable for versions II and IV	60/case
77.3894.018	Multi-Safe twin 1800	1.8 l suitable for version V	100/case
95.813.001	Dispenser box	with lid for Safety-Tray	35/case
75.1355.100	Disposable container	125 ml for Safety-Tray	1,000/case
93.851	Rack D17	with handle, grey	12/case
93.851.171	Rack D17	with handle, red	
93.851.172	Rack D17	with handle, yellow	
93.851.173	Rack D17	with handle, green	
93.851.174	Rack D17	with handle, blue	
93.851.175	Rack D17	with handle, orange	

We create products
enabling reproducibility



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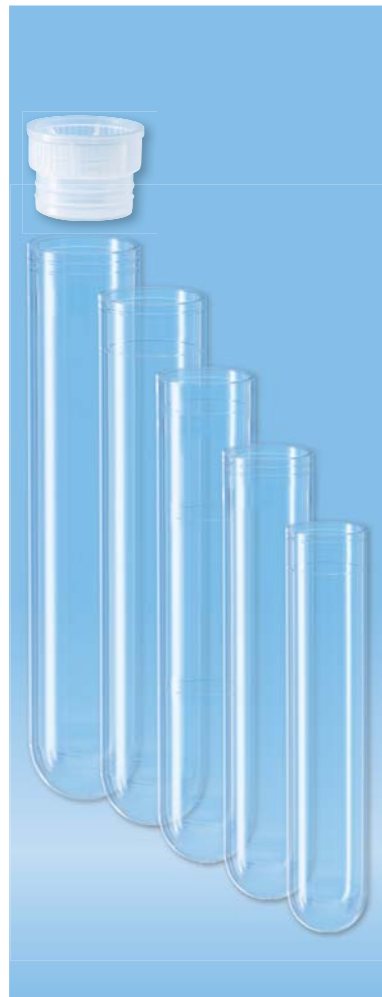
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Reagent and centrifuge tubes in compact StackPack

All tubes marked ☼ are supplied in the convenient space-saving StackPack version.

These tubes can also be supplied "loose in bags" by adding a .005 to the article number (e.g. 55.476.005 = 75/12 PS loose).

Comparison of packing volume:

loose in bags	StackPack
	
2,000 pcs. 44.1 liter	2,000 pcs. 25.2 liter

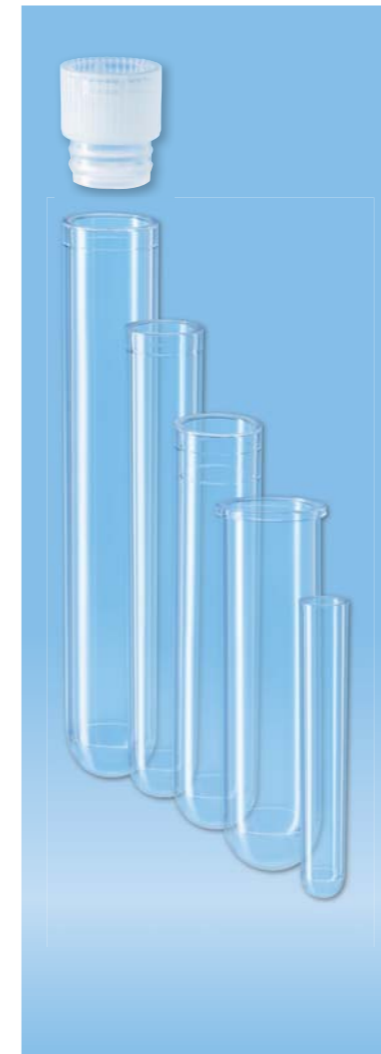
Tubes with round base, push cap

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Compatible Caps*
30	55.517 PP	95/24.8	500	65.791
26	55.471 PS	87/23.5	500	65.790
20	55.465 PS 55.514 PP	100/21.5	500 1,000	65.529
16.5	55.460 PS 55.510 PP	130/17	1,000	65.793 65.816 65.720
14	55.461 PS 55.511 PP	119/15.5	1,000	65.793 65.816 65.720
14	55.463 PS 55.538 PP	105/16.8	1,000 ☼ 1,000	65.793 65.816 65.720
13	55.459 PS 55.515 PP	100/16	1,000	65.793 65.816 65.725 *2
13	55.468 PS 55.468.005 PS 55.518 PP	95/16.8	1,000 ☼ 1,000 1,000	65.793 65.816 65.720
13	62.492 with graduation and writing space PS	95/16.8	1,000	65.793 65.816 65.720
11.5	55.466 PS 55.466.005 PS 55.539 PP 55.539.250 PP	100/15.7	1,000 ☼ 1,000 1,000 1,000 ☼	65.803 65.802 65.727
11	55.474 PS 55.524 PP	82/16.8	1,000	65.793 65.816 65.720
9	55.481 PS 55.533 PP	67/16.8	2,000	65.793 65.816 65.720
8.5	55.495 PS	75/15.7	2,000	65.803 65.802 65.727
8	55.467 PS 55.467.005 PS 55.516 PP	100/13	2,000 ☼ 2,000 2,000	65.806 65.818 65.724
8	55.473 PS	84/14.5	2,000	65.804
7	55.482 PS	65/15.7	2,000	65.803 65.802 65.727
6.5	55.472 PS	85/13	2,000	65.806 65.818 65.724

PS = polystyrene, transparent, PP = polypropylene
☼ = StackPack

* caps are shown on pp. 78-79

*2 Cap 65.725 is only suitable for 100 x 16 tubes from PP and not for tubes from PS.



Tubes with round base, push cap

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Compatible Caps*
5	55.475 PS 55.475.005 PS 55.525.500 PP 55.525.505 PP	75/13	2,000 ☼ 2,000 2,000 ☼ 2,000	65.806 65.818 65.724
5	62.493 with graduation and writing space PS	75/13	2,000	65.806 65.818 65.724
5	55.476 PS 55.476.005 PS 55.526 PP 55.526.005 PP	75/12	2,000 ☼ 2,000 4,000 ☼ 4,000	65.809 65.719
5	62.476.022 with graduation and writing space PS	75/12	2,000	65.809 65.719
4	55.532 PP	75/11.5	2,000	65.809 65.719
4	55.655 PS	50/14	3,000	65.804.001
3.5	55.484 PS 55.484.005 PS 55.535 PP	55/12	4,000 ☼ 4,000 5,000	65.809 65.719
3	55.528 PP	75/10	2,000	65.782

Tubes with round base, push cap assembled, sterile

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Cap Colour
13	55.468.001 PS	95/16.8	500	neutral
5	55.475.001 PS	75/13	1,000	neutral
3.5	55.484.001 PS	55/12	2,000	neutral

Additional tube sizes with assembled push cap, sterile, are available on request.

PS = polystyrene, transparent

PP = polypropylene

☼ = StackPack

* caps are shown on pp. 78-79



Tubes with round base from PP, screw cap in various colours from HD-PE

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Cap Colour	Description
13	60.541.500 PP	101/16.5	1,000	neutral	Cap enclosed
	60.541.003 PP			red	
	60.541.929 PP			yellow	
	60.541.021 PP			blue	
13	60.541.545 PP	101/16.5	1,000	neutral	Cap assembled
13	60.540.012 PP	101/16.5	500	neutral	Cap assembled, sterile
					100/bag
13	60.540.500 PP	101/16.5	500	neutral	Cap assembled, sterile
	60.540.022 PP			red	
	60.540.014 PP			yellow	
	60.540.052 PP			blue	

Tubes with round base from PP, screw cap from PP, with O-ring

- Tube with cap* autoclavable at 121°C, important notes on autoclaving: see p. 201

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Cap Colour	Description
13	60.541.004 PP	101/16.5	1,000	neutral	Cap enclosed
13	60.540.016 PP	101/16.5	500	neutral	Cap assembled, sterile

Colour-coded inserts for screw cap Ø 16,5 mm**

Order No.	Colour	Packaging
65.744.999	Colour mix (white, red, yellow, blue, green and violet)	5,000/case

Tubes with round base from PP, screw cap from HD-PE

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Cap Colour	Description
10	60.610 PP	92/15.3	1,000	neutral	Cap enclosed
10	60.610.001 PP	92/15.3	500	neutral	Cap assembled, sterile
					100/bag
10	60.610.100 PP	92/15.3	1,000	neutral	Cap assembled
					100/bag
10	62.610.201 with graduation and writing space	92/15.3	500	neutral	Cap assembled, sterile
10	60.506 not illustrated	79/16	1,000	neutral	Cap enclosed
					500/bag
10	60.506.001 not illustrated	79/16	1,000	neutral	Cap assembled, sterile
					500/bag
7	60.550.100 PP	82/13	1,000	neutral	Cap enclosed
7	60.550.115 PP	82/13	1,000	neutral	Cap assembled
7	60.550.109 PP	82/13	1,000	neutral	Cap assembled, sterile
					Cap assembled, sterile
6	60.546 PP	92/11.5	1,000	neutral	Cap enclosed
6	60.546.002 PP	92/11.5	1,000	neutral	Cap assembled, sterile
					Cap assembled, sterile
4.5	60.557 not illustrated	75/12	2,000	neutral	Cap enclosed
					Cap enclosed
4.5	60.557.001 not illustrated	75/12	1,000	neutral	Cap assembled, sterile

Screw cap from polyethylene (HD-PE), neutral

Order No.	Compatible Tubes	Packaging
65.1121	for tubes Ø 11.5 and Ø 12 mm	5,000/case
65.726	for tubes 82 x 13 mm	5,000/case
65.729	for tubes Ø 15.3 mm	5,000/case
65.176	for tubes Ø 16 and 16.5 mm	5,000/case

Screw cap from polypropylene (PP) with O-ring

Order No.	Compatible Tubes	Packaging
65.714	for tubes Ø 16 and 16.5 mm	5,000/case

* Do not seal the cap tightly when autoclaving

** Not compatible with O-ring cap

PP = polypropylene, HD-PE = High Density polyethylene



Tubes, PP, round base and tapered external thread

Order No. Material	Volume ml	Length/Ø mm	Packaging pcs./case
60.504.010 PP	5	75/13	2,000
60.504.015 PP	5	75/13	2,000

Screw cap, HD-PE

65.163	-	-	5,000
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Tubes with round base from PC, screw cap from PP

- High temperature resistance up to 138°C, high stability
- Tubes with cap, autoclavable at 121°C**, important notes on autoclaving: see p. 201

Volume ml	Order Number Material	Length/Ø mm	Packaging pcs./case	Cap Colour	Description
12	60.9922.936 PC	99/16	1,000	white	Cap enclosed
12	60.9922.937 PC	99/16	1,000	yellow	Cap assembled, sterile



Tubes with conical base, push cap

Volume ml	Order Number Material	Length/Ø mm	Packaging pcs./case	Compatible Caps*	
12	57.462 PS	110/17	1,000	65.793 65.816	
	57.527 with graduation PP		1,000		
12	57.464 PS	105/16.8	1,000	65.793 65.816 65.720	
			57.464.005 PS		1,000
			57.513 not illustrated PP		1,000
12	57.464.001 sterile not illustrated PS	105/16.8	500	Cap assembled, sterile	
10	62.9924.272 with graduation and writing space PP	100/16	1,000	65.793 65.816 65.720	
10	57.469 PS	95/16.8	1,000	65.793 65.816 65.720	
					57.519 PP
4.5	57.477 PS	75/12	2,000	65.809 65.719	
	57.512 PP		4,000		

= StackPack

* Caps are shown on pp. 78-79

** Do not seal the cap tightly when autoclaving

PS = polystyrene, transparent, PP = polypropylene, PC = polycarbonate, transparent

HD-PE = High Density polyethylene

Tubes with conical base, screw cap from HD-PE, with graduation and writing space

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging
50	62.548.004 PP	114/28	Red cap, assembled	25/bag 300/case
50	62.548.304 PP	114/28	Brown colouration, red cap, assembled	25/bag 300/case
50	62.547.004 PP	114/28	Red cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic, 2-colour print	25/Styrofoam rack 300/case
50	62.547.254 PP	114/28	Red cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic	25/bag 300/case
50	62.547.274 PP	114/28	Neutral cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic	25/bag 300/case
50	62.547.354 PP	114/28	Brown colouration, red cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic	25/bag 300/case
30	60.544** PP	107/25	Neutral cap, assembled	250/bag 500/case
30	60.545** PP	107/25	Neutral cap, assembled, sterile	50/bag 500/case
15	62.554.001 PP	120/17	Red cap, assembled	50/bag 500/case
15	62.554.002 PP	120/17	Red cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic, 2-colour print	50/Styrofoam rack 500/case
15	62.554.502 PP	120/17	Red cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic	50/bag 500/case
15	62.554.016 PP	120/17	Neutral cap, assembled, sterile, non-pyrogenic/endotoxin-free, non-cytotoxic	50/bag 500/case
15	62.553.041 PS	120/17	Yellow cap, assembled	50/bag 500/case
15	62.553.042 PS	120/17	Yellow cap, assembled, sterile, non-pyrogenic/endotoxin-free	50/Styrofoam rack 500/case
15	62.553.542 PS	120/17	Yellow cap, assembled, sterile, non-pyrogenic/endotoxin-free	50/bag 500/case
10	62.9924.283 PP	100/16	Neutral cap, assembled	500/bag 1,000/case
10	62.9924.284 PP	100/16	Yellow cap, assembled, sterile	100/bag 1,000/case

** without graduation and writing space
PS = polystyrene, transparent, PP = polypropylene, HD-PE = High Density polyethylene

50 ml tube with skirted base on p. 71.

Racks for centrifuge tubes

Suitable for tubes up to Ø 30 mm as well as for 25 ml S-Monovettes

- Autoclavable
- Rack with convenient handles
- Dimensions in mm (WxDxH) 295 x 114 x 65

Order No.	Capacity	Format	Packaging bag/case
93.1707	18	3 x 6	1/10

Tubes with conical skirted base from PP, screw cap from HD-PE

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
50	62.559 PP with printed graduation and writing space	115/28	Red cap, assembled, 2-colour print	300	
50	62.559.001 PP with printed graduation and writing space	115/28	Red cap, assembled, sterile, non-pyrogenic/endotoxin-free, 2-colour print	300	
50	62.559.010 PP with printed graduation and writing space	115/28	Neutral cap, assembled, sterile	300	
30	62.543 PP with printed graduation	107/25	Neutral cap, assembled	500	
30	62.543.001 PP with printed graduation	107/25	Neutral cap, assembled, sterile	400	
25	60.9922.241 PP	90/25	Neutral cap, assembled	500	
25	63.9922.252 PP	90/25	Neutral cap, assembled, with label	500	
25	60.9922.243 PP	90/25	Yellow cap, assembled, sterile	500	
25	63.9922.254 PP	90/25	Yellow cap, assembled, with label, sterile	500	

Tubes with conical skirted base, screw cap from HD-PE

- Tube 76 x Ø 20 mm from high-quality PP with high transparency
- Tube 97 x Ø 16 mm made from clear PS ensuring high visibility of the sample material

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
15	60.732 PP	76/20	Neutral cap, enclosed	500	
15	60.732.001 PP	76/20	Neutral cap, assembled, sterile	500	
15	62.732.519 PP	76/20	Printed graduation, neutral cap enclosed	500	
10	60.9921.821 PS	97/16	Neutral cap, enclosed	1,000	
10	60.9921.830 PS	97/16	Yellow cap, assembled	1,000	
10	60.9921.829 PS	97/16	Yellow cap, assembled, sterile	1,000	

PS = polystyrene, transparent, PP = polypropylene, HD-PE = High Density polyethylene



Skirted tubes with conical base, screw cap in HD-PE

- Tube 66 x Ø 11.5 mm is ideally suited for sample storage in combination with block rack no. 93.854 (see p. 163)

Volume ml	Order No.	Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
5	60.558	PP	57/15.3	Neutral cap, enclosed	1,000	
5	60.558.001	PP	57/15.3	Neutral cap, assembled, sterile	1,000	
5	62.558.201	PP	57/15.3	Neutral cap, assembled, sterile with graduation and writing space	1,000	
3.5	60.549	PP	66/11.5	Neutral cap, enclosed	2,000	
3.5	60.549.001	PP	66/11.5	Neutral cap, assembled, sterile	1,000	

Skirted tubes with flat base, screw cap in HD-PE

Volume ml	Order No.	Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
13	60.541.685	PP	101/16.5	Neutral cap, enclosed	1,000	
13	60.540.686	PP	101/16.5	Neutral cap, assembled, sterile	500	
10	60.551	PP	79/16.0	Neutral cap, enclosed	1,000	
10	60.551.001	PP	79/16.0	Neutral cap, assembled, sterile	1,000	
10	62.551.201	PP	79/16.0	Neutral cap, assembled, sterile with graduation and writing space	1,000	

Tubes, PP, with conical false bottom, screw cap in HD-PE

- Conical false bottom is especially suitable for small volumes and platform compatibility
- Fulfills IATA requirements for sample transport
- 75 x 13 mm
 - Rounded base to accommodate rack requirements
 - Suitable for deep freezing
 - Centrifugation to 4,500 x g, 10 min.
 - Convenient, compact StackPack packaging

PP = polypropylene, HD-PE = High Density polyethylene

Order No.	Length/Ø	Volume	Description	Tube Base	Packaging
60.614.010	75/13 mm	2.5 ml	without cap	round	2,000 pcs./case
60.614.015	75/13 mm	2.5 ml	without cap	round	2,000 pcs./case
60.614.011	75/13 mm	2.5 ml	cap assembled	round	2,000 pcs./case

65.647	65.647.020	65.806	65.1379	65.163
Archiving cap	Archiving cap with filter	Push cap	Universal cap	Screw cap
5,000 pcs./case	5,000 pcs./case	10,000 pcs./case	10,000 pcs./case	5,000 pcs./case

Order No.	Length/Ø	Volume	Description	Tube Base	Packaging
60.617.010	92/13 mm	3.5 ml	without cap, without print	round	1,000 pcs./case
62.617	92/13 mm	3.5 ml	screw cap assembled, with print	round	
60.613.010	92/13 mm	3.5 ml	without cap, without print	flat	
62.613	92/13 mm	3.5 ml	screw cap assembled, with print	flat	

65.647	65.647.020	65.806	65.1379	65.728
Archiving cap	Archiving cap with filter	Push cap	Universal cap	Screw cap
5,000 pcs./case	5,000 pcs./case	10,000 pcs./case	10,000 pcs./case	5,000 pcs./case

Order No.	Length/Ø	Volume	Description	Tube Base	Packaging
60.612.010	92/15.3 mm	5.0 ml	without cap, without print	round	1,000 pcs./case
62.612	92/15.3 mm	5.0 ml	screw cap assembled, with print	round	
60.611.011	92/15.3 mm	5.0 ml	without cap, without print, amber	flat	
60.611.010	92/15.3 mm	5.0 ml	without cap, without print	flat	
62.611	92/15.3 mm	5.0 ml	screw cap assembled, with print	flat	

65.647	65.647.020	65.803	65.1379	65.645*	65.729
Archiving cap	Archiving cap with filter	Push cap	Universal cap	Screw cap	Screw cap
5,000 pcs./case	5,000 pcs./case	5,000 pcs./case	10,000 pcs./case	5,000 pcs./case	5,000 pcs./case

= StackPack


* recommended for RC 1200 from Sarstedt

Tubes with flat base, screw cap

Volume ml	Order No.	Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
120	60.597	PP	114/42	neutral cap, enclosed	250	
120	60.597.001	PP	114/42	neutral cap, assembled, sterile	100	
60	60.596	PP	126/28.5	neutral cap, enclosed	250	
60	60.596.001	PP	126/28.5	neutral cap, assembled, sterile	250	
40	62.555	PP	85/28.5	neutral cap, enclosed	450	
40	62.555.001	PP	85/28.5	neutral cap, assembled, sterile	450	
25	60.9922.113	PS	54/27	neutral cap, enclosed	500	
25	60.9922.115	PS	54/27	yellow cap, assembled, sterile	500	
8	60.542	PP	57/16.5	neutral cap, enclosed	1,000	
8	60.542.024	PP	57/16.5	neutral cap, assembled, sterile	1,000	
7	60.550.050	PP	82/13	neutral cap, enclosed	1,000	
5	63.542.709	PP	57/16.5	neutral cap, enclosed	1,000	



Tube with flat base from PP, screw cap from PP with O-ring

- Highly reliable sealing for the transport of infectious material
- Tube with cap* autoclavable at 121°C. Important notes on autoclaving: see p. 201

Volume ml	Order No.	Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
8	60.542.007	PP	57/16.5	Cap with O-ring enclosed	1,000	

Tubes with flat base from PC, screw cap from PP

- Clear, highly-resistant tubes
- High temperature resistance, autoclavable at 121°C* (Important notes on autoclaving: see p. 201)
- Cold-resistant down to -80°C

Volume ml	Order No.	Material	Length/Ø mm	Description	Packaging pcs./case	Base Shape
30	60.9922.212	PC	80/27	Cap enclosed	500	
7	71.9923.610	PC	47/20	Cap enclosed	1,000	

Additional screw cap tubes on p. 150 "Disposable Containers".
 PS = polystyrene, transparent, PP = polypropylene, PC = polycarbonate, transparent
 * Do not seal the cap tightly when autoclaving.

Tubes with flat base, push cap

Volume ml	Order No.	Material	Length/Ø mm	Packaging pcs./case	Compatible Caps*
35	58.537	PP	115/23.5	500	65.790
23	58.490 58.631	PS PP	75/23.5	1,000	65.790
21	58.489	PS	65/23.5	1,000	65.790
12	58.487	PS	40/23.5	2,000	65.790
12	58.491 58.505	PS PP	95/16.5	1,000	65.793 65.816 65.720
12	62.470	PS	95/16.5	1,000	65.793 65.816 65.720
7	58.485 58.536	PS PP	50/16	2,000	65.793 65.816 65.720
7	62.486	PS	50/16	2,000	65.793 65.816 65.720

Tube with flat base, push cap assembled, sterile

Volume ml	Order No.	Material	Length/Ø mm	Packaging pcs./case	Cap Colour
7	58.485.001	PS	50/16	1,000	neutral

PS = polystyrene, transparent, PP = polypropylene, *caps see pp. 78-79

Laboratory Products

Laboratory Products



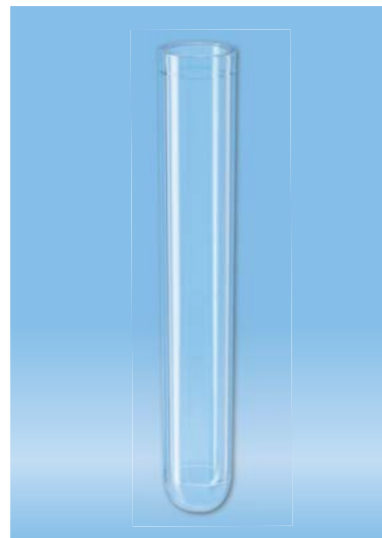
Tubes with assembled two-position ventilation cap

Position 1: cap lightly pushed on → ventilated
 Position 2: cap tightly pushed on → sealed

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging	Pcs./case	
5	55.526.006 55.476.013	PP PS	75/12	without print	25/bag, sterile	1,000
5	62.526.028 62.476.028	PP PS	75/12	with printed graduation	ind. wrapped, sterile	500
13	62.515.006	PP	100/16	with printed graduation	25/bag, sterile	500
13	62.515.028	PP	100/16	with printed graduation	ind. wrapped, sterile	500

Ventilation cap, from LD-PE, supplied separately

Order No.	Compatible Tube	Packaging
65.722	75/12 mm Ø	5,000
65.725	100/16 mm Ø	5,000



Tubes for special analysers

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging	
5	55.1578 highly transparent	PP	75/12 (round base)	Tube for flow-cytometer FACScan	2,000/case
5	55.476.061	PS	75/12 (round base)	Tube for Vitek and Vitek 2 from bioMérieux	500/StackPack 2,000/case
5	55.1579	PS	75/12 (round base)	Tube for flow-cytometer FACSAria, FACSCanto, FACSCalibur, LRS II, FC 500	500/StackPack 2,000/case
5	55.1579.002	PS	75/12 (round base)	Tube for flow cytometer FACSAria, FACSCanto, FACSCalibur, LRS II, FC500, sterile	50/bag 1,000/case
5	55.526.053	PP	75/12 (round base)	Tube for Abbott m1000	500/StackPack 2,000/case
5	55.475.200	PS	75/13 (round base)	Tube for Tecan Genesis, FE500	490/StackPack 1,960/case

Conical tube for Pharmacia/LKB Gamma Counter and Gamma Counter Cobra from Packard

- With conical base for optimal sediment recovery
- Transparent polypropylene
- Suitable for all rack and instrument types, old and new

Volume ml	Order No. Material	Length/Ø mm	Packaging pcs./case	Compatible Caps*	
4.5	57.477.500	PP	75/12	4,000	65.809 65.719

Glass tube for Coombs Test

- Regular wall thickness, safe packaging

Volume ml	Order No.	Length/Ø mm	Packaging pcs./case
5	86.1509	75/11.5	294/box 2,352/case

PS = polystyrene, transparent, PP = polypropylene, *caps see pp. 78-79



CSF Monovette® & CSF tubes

The clear, sterile tubes are specifically suited for cerebrospinal fluid because high-grade material properties are vital for analyte recovery (e.g. low-concentration proteins). The tubes are securely closed with a screw cap and are, therefore, also ideal for transport and storage.

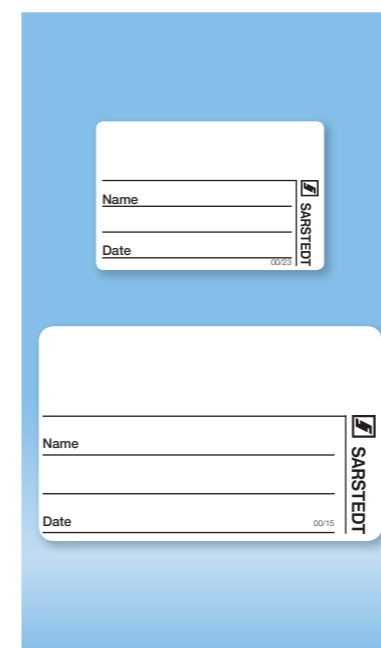
CSF: cerebrospinal fluid, liquor cerebrospinalis

Volume in ml	Order No. Material	Length/Ø mm	Description	Packaging pcs./case	
10	10.252.027	PP	102/15	Monovette® with coloured paper label, individually wrapped sterile, blue Luer screw cap	500
12	60.9924.952 (Styrol-Acryl-Nitril)	SAN	99/16	round base, with graduation, set of 4 tubes, sterile, yellow screw cap	250
10	62.610.018	PP	92/15,3	round base, with graduation, ind. wrapped, sterile, screw cap	500



Screw cap tubes, individually wrapped, sterile

Volume ml	Order No. Material	Length/Ø mm	Description	Packaging pcs./case	
25	63.9922.248 with standard label	PP	90/25	yellow cap, assembled	300
15	62.553.020 with graduation and writing space	PS	120/17	yellow cap, assembled	500
13	60.540.108	PP	101/16.5	neutral cap, assembled	500



Tubes with adhesive paper label

Standard label

Instead of print, tubes are also available with standard 40 x 26 mm and 62 x 40 mm paper labels as illustrated. These labels can be printed with additional information at extra cost.

The labels are available in white with black print.

Special label separately on rolls

Standard labels as illustrated. Available in full rolls only.

Order No.	Label Size	Qty./roll
84.1556.010	40 x 26 mm	5,000
84.1027.010	62 x 40 mm	5,000

Special label/barcode label

The labels detailed above are also available with customised print. Tubes can also be supplied with barcode labels.

The minimum order quantity for special labels on tubes is 20,000 pieces. Individual labels with special print are available on request.

PS = polystyrene, transparent, PP = polypropylene

Push caps for reagent and centrifuge tubes



For tube size
95 x 24.8 mm

Order No.	Colour	Material
65.791	neutral	LD-PE

2,000 pcs./case



For tube sizes
115 x 23.5 mm 87 x 23.5 mm
75 x 23.5 mm 65 x 23.5 mm
40 x 23.5 mm

Order No.	Colour	Material
65.790	neutral	LD-PE

2,000 pcs./case



For tube sizes
100 x 21.5 mm

Order No.	Colour	Material
65.529	neutral	LD-PE

5,000 pcs./case



For tube sizes
130 x 17.0 mm 95 x 16.8 mm
119 x 15.5 mm 95 x 16.5 mm
110 x 17.0 mm 82 x 16.8 mm
105 x 16.8 mm 50 x 16.0 mm
100 x 16.0 mm 67 x 16.8 mm

Order No.	Colour	Material
65.793	neutral	LD-PE
65.793.513	blue	LD-PE
65.793.514	yellow	LD-PE
65.793.515	green	LD-PE
65.793.517	white	LD-PE
65.793.518	red	LD-PE
65.793.520	violet	LD-PE

5,000 pcs./case



Order No.	Colour	Material
65.816	neutral	LD-PE

10,000 pcs./case



Skirted push cap

Order No.	Colour	Material
65.720	neutral	HD-PE

2,000 pcs./case



For tube sizes
100 x 15.7 mm
75 x 15.7 mm
65 x 15.7 mm

Order No.	Colour	Material
65.803	neutral	LD-PE
65.803.002	green	LD-PE
65.803.005	violet	LD-PE
65.803.512	red	LD-PE
65.803.932	yellow	LD-PE

5,000 pcs./case



Order No.	Colour	Material
65.802	neutral	LD-PE

10,000 pcs./case



For tube sizes
84 x 14.5 mm

Order No.	Colour	Material
65.804	neutral	LD-PE

5,000 pcs./case



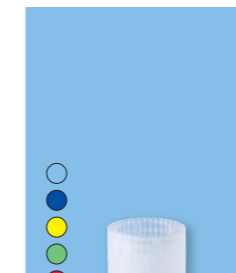
For tube sizes
50 x 14 mm

Order No.	Colour	Material
65.804.001	neutral	LD-PE

10,000 pcs./case

HD-PE = High Density polyethylene
LD-PE = Low Density polyethylene

Push caps for reagent and centrifuge tubes



For tube sizes
100 x 13 mm
85 x 13 mm
75 x 13 mm

Order No.	Colour	Material
65.806	neutral	LD-PE
65.806.506	blue	LD-PE
65.806.507	yellow	LD-PE
65.806.508	green	LD-PE
65.806.510	red	LD-PE
65.806.511	violet	LD-PE
65.806.512	white	LD-PE

10,000 pcs./case



Order No.	Colour	Material
65.818	neutral	LD-PE

10,000 pcs./case



For tube sizes
75 x 12.0 mm
75 x 11.5 mm
55 x 12.0 mm

Order No.	Colour	Material
65.809	neutral	LD-PE
65.809.003	violet	LD-PE
65.809.499	red	LD-PE
65.809.500	blue	LD-PE
65.809.501	yellow	LD-PE
65.809.502	green	LD-PE
65.809.503	orange	LD-PE
65.809.505	white	LD-PE

10,000 pcs./case



Skirted push cap

Order No.	Colour	Material
65.719	neutral	LD-PE

5,000/case



Ventilation cap
(with two-position fit)

For tube size
75 x 12 mm

Order No.	Colour	Material
65.722	neutral	LD-PE

5,000 pcs./case



For tube size
100 x 16 mm PP

Order No.	Colour	Material
65.725	neutral	LD-PE

5,000 pcs./case



For tube sizes
75 x 10 mm
63 x 11 mm

Order No.	Colour	Material
65.782	neutral	LD-PE

10,000 pcs./case



Anti-evaporation cap
for S-Monovette® Ø 15 mm

Order No.	Colour	Material
65.648	neutral	HD-PE

5,000 pcs./case



Archiving Cap
for tubes Ø 13 to 16 mm

Order No.	Colour	Material
65.647	light blue	HD-PE
65.647.020	light blue with filter	HD-PE

5,000 pcs./case



Universal Cap
for S-Monovette® Ø 13 mm
and for tubes Ø 12 to 17 mm

Order No.	Colour	Material
65.1379	neutral	LD-PE
65.1379.002	red	LD-PE
65.1379.004	yellow	LD-PE
65.1379.006	blue	LD-PE

10,000 pcs./case

HD-PE = High Density Polyethylene
LD-PE = Low Density Polyethylene

Sarmix® M 2000

- Rotating mixer with variable speed and shaking function
- Ideal for use in haematology and research
- Mixing programs for a range of requirements
- Exchangeable rotors for various tube sizes

Order No.	Description
90.180.600	Sarmix® M 2000, including 12 V DC power pack – basic version without rotor, with EU/UK/US plug
92.180.610	Plate rotor for 23 tubes Ø 8 - 12 mm
92.180.611	Plate rotor for 2 tubes up to Ø 35 mm and 6 tubes up to Ø 20 mm and 6 tubes up to Ø 12.5 mm
92.180.612	Block rotor for 40 tubes up to Ø 11.5 mm
92.180.613	Block rotor for 24 tubes up to Ø 15 mm
92.180.614	Block rotor for 7 tubes up to Ø 28 mm
92.180.615	Block rotor for 40 tubes up to Ø 8.5 mm (S-Sedivette®)
92.180.616	Block rotor for 14 tubes up to Ø 28 mm
92.180.617	Block rotor for 24 tubes up to Ø 17 mm (15 ml tubes)
92.180.618	Block rotor for 36 tubes up to Ø 15 mm

Sarmix® GM 1

- Gyrating mixer with 3-dimensional motion
- Accommodates any tube size; dimpled rubber mat holds tubes securely in place

Order No.	Description
90.181.400	Sarmix® GM 1, 230 V, EU plug
90.181.402	Sarmix® GM 1, 230 V, UK plug
90.181.403	Sarmix® GM 1, 230 V, CH plug
92.181.410	Rubber mat, replacement

Sarmix® SM 1

- Rocking mixer for any standard tube
- Thorough sample mixing

Order No.	Description
90.180.200	Sarmix® SM 1, 230 V, EU plug
90.180.203	Sarmix® SM 1, 230 V, CH plug

Quality racks for all tube options

Our versatile rack range includes more than 60 different options offering solutions for any application. Whether for S-Monovettes, tubes with a wide range of different diameters, micro tubes or reaction cups, the Sarstedt rack range provides multipurpose solutions to suit all requirements. The high-grade, resistant rack material is durable and can be autoclaved. Special features facilitate laboratory work, e.g. notched apertures enable single-handed opening and closing of Sarstedt micro tubes.



Additional information on 161-166

Guaranteed reliability and reproducibility

Cleanroom conditions, skilled personnel in protective clothing as well as automated processes form the basic prerequisites for award of the certified Sarstedt quality standards, PCR Performance Tested and Biosphere® plus.

Since 1995, we have provided our customers with a product quality tailored to their specific applications to ensure utmost reproducibility in their analyses. Our certification standards are continually adjusted to keep up with the state of research so that we can provide you with the required level of purity in your routine work at all times.



PCR Performance Tested Quality • The Sarstedt quality and purity standard

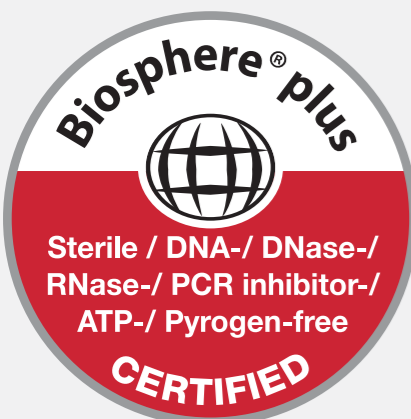
PCR Performance Tested has been tailored to accommodate the specific requirements and needs involved in working with nucleic acids (e.g. qPCR, PCR, purification and storage). Thanks to this quality grade, customers can use Sarstedt disposables directly in nucleic acid analytics.

PCR Performance Tested products meet the following purity criteria, which are certified by an independent laboratory:

- ✓ DNA-free
- ✓ DNase/RNase-free
- ✓ PCR inhibitor-free

We guarantee that the following limit values are not exceeded:

Human DNA < 0.5 pg/µl · Bacterial DNA < 0.02 pg/µl · DNase < 1x10⁻⁵ U/µl
RNase < 1x10⁻⁹ Kunitz units/µl



Biosphere® plus quality • Unrivalled purity

In recent years, scientific analysis methods have been continuously refined to the point where it is now even possible to identify individual molecules.

As sensitivity increases, disposables are required to meet significantly more exacting requirements than even just a few years ago so that users can be certain that even the smallest contamination will be reliably excluded.

The new Biosphere® plus quality constitutes a purity standard that enables utmost protection against any possible contamination.

In addition to our high-purity production conditions, all products certified Biosphere® plus are subjected to a validated decontamination process to ensure that the relevant values are significantly lower than the thresholds guaranteed for the PCR Performance Tested quality. Furthermore, Biosphere® plus products are ATP-free and non-pyrogenic/ endotoxin-free, as well as sterile in accordance with ISO 11135.

Biosphere® plus products meet the following purity criteria, which are certified by an independent laboratory:

- ✓ Sterile
- ✓ DNA-free
- ✓ DNase/RNase-free
- ✓ PCR inhibitor-free
- ✓ ATP-free
- ✓ Non-pyrogenic/ endotoxin-free

We guarantee that the following limit values are not exceeded:

Human DNA < 5.0 fg/µl · Bacterial DNA < 0.2 fg/µl · DNase < 5x10⁻⁷ U/µl
RNase < 5x10⁻¹¹ Kunitz units/µl · ATP < 1x10⁻¹² mmol/µl · Pyrogens < 0.002 EU/ml
Sterility validated in accordance with ISO 11135

Products for superior quality requirements

Over 35 years ago, Sarstedt introduced a new laboratory standard: the safe screw cap micro tube. Sarstedt's screw cap micro tubes are now used worldwide and are a crucial part of daily research and diagnostic work, e.g. for storage, transport and centrifugation.

The Sarstedt micro tube range provides a multitude of tube and cap options with volumes from 0.5 to 2.0 ml.



Alternatively also available without knurls enabling a larger labelling space.

Transport and storage container for high-grade synthesised oligonucleotides, enzymes, buffers etc.



Various coding possibilities with colour-coded inserts for attached loop caps

Practical single-handed opening and closing in special Sarstedt rack

Certified Screw Cap Micro Tubes

For uncompromising quality and purity

- Enhanced safety with DNA-/DNase-/RNase-free tubes and screw caps for the storage of high-grade synthesised oligonucleotides, enzymes, buffers etc.
- Sterile Biosphere® products prevent false positive results in DNA/human DNA analytics for forensic and diagnostic applications



Micro tubes 0.5 ml, Type A, with skirted base, neutral cap

Order No.	Description		Packaging
72.730.217	with looped screw cap, non-assembled, with print, sterile		25/bag 250/box 500/case
72.730.416	with looped screw cap, assembled, with print		100/bag 500/box 1,000/case
72.730.406	with screw cap, assembled, with print		100/bag 500/box 1,000/case

Micro tubes 1.5 ml, Type C, with skirted base, neutral cap

Order No.	Description		Packaging
72.703.217	with looped screw cap, non-assembled, with print, sterile		25/bag 250/box 500/case
72.703.416	with looped screw cap, assembled, with print		100/bag 500/box 1,000/case
72.703.406	with screw cap, assembled, with print		100/bag 500/box 1,000/case

Micro tubes 1.5 ml, Type D, without skirted base, neutral cap

Order No.	Description		Packaging
72.692.210*	with looped screw cap, non-assembled, without print, sterile		25/bag 250/box 500/case
72.692.415*	with looped screw cap, assembled, without print		100/bag 500/box 1,000/case
72.692.405*	with screw cap, assembled, without print		100/bag 500/box 1,000/case

Micro tubes 2.0 ml, Type I, with skirted base, neutral cap

Order No.	Description		Packaging
72.694.217	with looped screw cap, non-assembled, with print, sterile		25/bag 250/box 500/case
72.694.416	with looped screw cap, assembled, with print		100/bag 500/box 1,000/case
72.694.406	with screw cap, assembled, with print		100/bag 500/box 1,000/case

Micro tubes, 2.0 ml, Type H, without skirted base, neutral cap

Order No.	Description		Packaging
72.693.465	with screw cap, assembled, without print		100/bag 500/box 1,000/case

* For technical reasons available without print only.

Screw Cap Micro Tubes

For transport, storage and sample processing in the laboratory

- Secure screw cap with O-ring
- Tube and cap from polypropylene, autoclavable at 121°C. Important notes on autoclaving: see p. 201
- Knurls enable single-handed operation in special Sarstedt gripper racks for micro tubes (racks on p. 87)



Micro tubes 0.5 ml, Type A, with skirted base, neutral cap

Order No.	Description	Packaging pcs./case
72.730	Screw cap enclosed	5,000
72.730.005	Screw cap assembled, sterile	1,000
72.730.007	with writing space, screw cap enclosed	5,000
72.730.006	with writing space, screw cap assembled, sterile	1,000
72.730.003	without screw cap	5,000
72.730.009	with writing space, without screw cap	5,000
72.730.004	amber, without screw cap	5,000

Micro tubes 0.5 ml, Type B, without skirted base, neutral cap

Order No.	Description	Packaging pcs./case
72.733.001	Screw cap enclosed	5,000
72.733.010	without screw cap	5,000

Micro tubes 1.5 ml, Type C, with skirted base, neutral cap

Order No.	Description	Packaging pcs./case
72.703	without screw cap	5,000
72.703.004	amber, without screw cap	5,000

Micro tubes 1.5 ml, Type D, without skirted base, neutral cap

Order No.	Description	Packaging pcs./case
72.692	Screw cap enclosed	5,000
72.692.005	Screw cap assembled, sterile	1,000
72.607	without screw cap	5,000

Micro tubes Type E-G, without knurls, neutral cap

- Micro tubes without knurls - providing an especially large space for labelling

Order No.	Description	Type	Packaging pcs./case
72.785	0.5 ml, with skirted base, without screw cap	E	5,000
72.785.005	0.5 ml, with skirted base, screw cap assembled, sterile	E	1,000
72.687	1.5 ml, without skirted base, without screw cap	F	5,000
72.664	2.0 ml, with skirted base, without screw cap	G	5,000

Storage boxes and special racks for micro tubes on pp. 152-153 and pp. 162-164.

For transport, storage and sample processing in the laboratory

- Secure screw cap with O-ring
- Tube and cap from polypropylene, autoclavable at 121°C. Important notes on autoclaving: see p. 201
- Knurls enable single-handed operation in special Sarstedt gripper racks for micro tubes (racks on p. 87)



Micro tubes 2.0 ml, Types H & I, neutral cap

Order No.	Description	Type	Packaging pcs./case
72.693	Screw cap enclosed	H	5,000
72.693.005	Screw cap assembled, sterile	H	1,000
72.608	without screw cap	H	5,000
72.694	Screw cap enclosed	I	5,000
72.694.005	Screw cap assembled, sterile	I	1,000
72.694.007	with writing space and graduation*, screw cap enclosed	I	5,000
72.694.006	with writing space and graduation*, screw cap assembled, sterile	I	1,000
72.694.996	with writing space and graduation, colour mix in 10 different cap colours, assembled cap, sterile	I	1,000
72.609	without screw cap	I	5,000
72.609.001	with writing space and graduation*, without screw cap	I	5,000
72.609.003	amber, without screw cap	I	5,000

Micro tubes in special sterile double bag packaging, without cap

Order No.	Description	Type	Packaging pcs./case
72.730.711	0.5 ml with skirted base	A	500/double bag 2,500/case
72.607.772	1.5 ml without skirted base	D	
72.687.772	1.5 ml without skirted base, without knurls	F	
72.664.711	2.0 ml with skirted base, without knurls	G	
72.609.711	2.0 ml with skirted base	I	

Coloured screw caps for micro tubes Types A-I for custom coding, 10,000 pcs./case

Order No.	Colour	Order No.	Colour
65.716	neutral	65.716.006	orange
65.716.001	blue	65.716.007	black
65.716.002	yellow	65.716.008	violet
65.716.003	red	65.716.022	white
65.716.004	pink	65.716.009	brown
65.716.005	green	65.716.999	Colour mix, 10 colours

Colour coded screw caps in special sterile double bag packaging

Packaging: 500/double bag, 5,000/case

Order No.	Colour	Order No.	Colour
65.716.725	neutral	65.716.720	yellow
65.716.721	red	65.716.723	blue
65.716.726	green	65.716.727	orange
65.716.728	black	65.716.729	brown
65.716.755	violet	65.716.757	white

Membrane screw cap for micro tubes

Screw cap with pierceable cap membrane, ideal for automated dosing and direct analyser sampling.

The screw cap is compatible with all screw cap micro tubes types A to I.

Order No.	Description	Packaging
65.3716	Screw cap with pierceable membrane	2,000 pcs./case

* For technical reasons, the graduation can only be printed up to 1.25 ml.

For transport, storage and sample processing in the laboratory

- Attached loop screw cap prevents mix-ups, screw cap with O-ring
- Tube and cap from polypropylene, autoclavable at 121°C. Important notes on autoclaving: see p. 201
- Knurls enable single-handed operation in special Sarstedt gripper racks for micro tubes (racks on p. 87)



Micro tubes 0.5 ml, Type A, with skirted base, neutral loop cap attached

Order No.	Description	Packaging pcs./case
72.730.100	Screw cap non-assembled	5,000
72.730.107	with writing space, screw cap non-assembled	5,000
72.730.105	Screw cap assembled, sterile	1,000
72.730.106	with writing space, screw cap assembled, sterile	1,000

Micro tubes 1.5 ml, Type D, without skirted base, neutral loop cap attached

Order No.	Description	Packaging pcs./case
72.692.100	Screw cap non-assembled	5,000
72.692.105	Screw cap assembled, sterile	1,000

Micro tubes 2.0 ml, Type H, without skirted base, neutral loop cap attached

Order No.	Description	Packaging pcs./case
72.693.100	Screw cap non-assembled	5,000
72.693.105	Screw cap assembled, sterile	1,000

Micro tubes 2.0 ml, Type I, with skirted base, neutral loop cap attached

Order No.	Description	Packaging pcs./case
72.694.100	Screw cap non-assembled	5,000
72.694.107	with writing space and graduation*, screw cap non-assembled	5,000
72.694.105	Screw cap assembled, sterile	1,000
72.694.106	with writing space and graduation*, screw cap assembled, sterile	1,000

Screw cap with retaining loop, neutral

Order Number: 65.712, packaged 500 pcs./bag, 5,000 pcs./case

Colour coded inserts (only fit loop caps)

Packaging 500 pcs./bag, 5,000 pcs./case

Order No.	Colour	Order No.	Colour
65.713	neutral	65.713.006	blue
65.713.002	red	65.713.007	violet
65.713.004	yellow	65.713.009	white
65.713.005	green	65.713.010	black

Rack series 18/20/48 for screw cap micro tubes

Notched apertures in the racks enable single-handed operation

Order No.	Apertures	Dimensions
93.894	3 x 6 (for 18 tubes)	40 x 137 x 70 mm
93.848.100	2 x 10 (for 20 tubes)	40 x 257 x 62 mm
93.1428	4 x 12 (for 48 tubes)	40 x 257 x 90 mm

* For technical reasons, the graduation can only be printed up to 1.25 ml.

Low Binding Reaction Tubes

Reaction tubes must meet a range of requirements: They must be resistant to mechanical and thermal strain. Interaction with other analytes must be minimised or biological purity is of vital importance. Apart from standard reaction tubes, our range includes SafeSeal options for use under thermal stress or low binding tubes minimising protein or DNA binding to the plastic material. Certified purity is guaranteed by our quality standards PCR Performance Tested and Biosphere® plus.

Low Binding Reaction Tubes

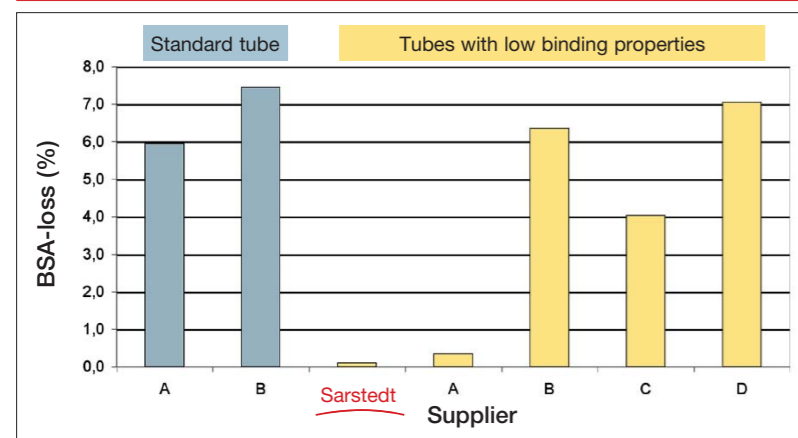
As the trend towards decreasing sample volumes continues, it becomes increasingly important to minimise potential interaction between the analyte and tube. In response to this demand, our new low binding micro tube is specially designed to meet the requirements of protein analytics while maximizing protein recovery rates.

Aside from low sample volumes, minimising protein loss is essential for low protein concentrations to enable further analysis.

- Minimal protein/DNA binding = maximum recovery rate = minimal protein/DNA loss
- Low DNA binding tubes: centrifugation to 30,000 x g* (2 ml to 25,000 x g*)
- Low protein binding tubes: centrifugation to 20,000 x g*

*Filled to nominal volume with double deionised water (low surface tension), 20°C, 90 min., fixed angle rotor.

Low protein binding – a comparative illustration of average BSA loss:

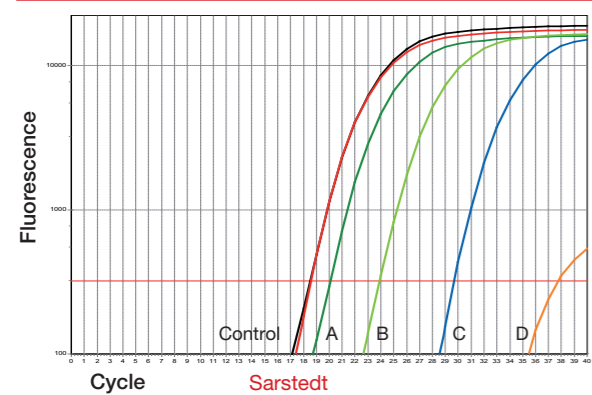


Test procedure:

10 test tubes each from several suppliers were filled with an aqueous BSA solution in a concentration of 10 µg/ml in water and stored at 4°C. After 24 hrs. incubation, the BSA solution was extracted and the concentration determined by means of a Bradford assay (Zor, T and Seliger / 1996, Anal. Biochem. 236, pp. 302 to 308).

The percentage loss calculation was based on the average value established for the 10 tubes tested.

Low DNA binding – a comparative illustration of DNA loss:



Test procedure:

10 test tubes each from several suppliers were filled with a 100 µl plasmid DNA solution in a concentration of 10⁴/µl and shaken at 37°C. After 3 hrs. incubation, the DNA content was determined by Real Time PCR.

The diagram shows one of these 10 test series as an example.

- Control
- Sarstedt
- Supplier A
- Supplier B
- Supplier C
- Supplier D



Order No.	Volume	Description	Packaging
72.704.600	0.5 ml	Low Protein Binding	50 pcs./bag
72.704.700		Low DNA Binding	300 pcs./box 1,200 pcs./case
72.706.600	1.5 ml	Low Protein Binding	50 pcs./bag 200 pcs./box 800 pcs./case
72.706.700		Low DNA Binding	
72.695.600**	2.0 ml	Low Protein Binding	50 pcs./bag 200 pcs./box 800 pcs./case
72.695.700		Low DNA Binding	

**Available on request.

SafeSeal Micro Tubes

SafeSeal Micro Tubes

- Retaining cams ensure a secure fit also under thermal strain
- Wide hinge for easy and precise closure
- Large writing space on lid
- Centrifugation to 30,000 x g (2.0 ml micro tubes: to 25,000 x g)*
- 3 purity standards for sophisticated requirements



SafeSeal micro tubes, 0.5 ml, PP, with wide hinge

Order No.	Length/Ø mm	Colour	Packaging	Pcs./case
72.704	30/7.8	neutral	500/bag	2,000
72.704.001	30/7.8	brown	500/bag	2,000
72.704.002	30/7.8	red	500/bag	2,000
72.704.004	30/7.8	yellow	500/bag	2,000
72.704.005	30/7.8	green	500/bag	2,000
72.704.006	30/7.8	blue	500/bag	2,000

• PCR Performance Tested

72.704.400	30/7.8	neutral	250/bag	2,000
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• Biosphere® quality (sterile) packaged in small quantities

72.704.200	30/7.8	neutral	50/bag	500
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SafeSeal micro tubes, 1.5 ml, PP, with wide hinge

Order No.	Length/Ø mm	Colour	Packaging	Pcs./case
72.706	39/10.8	neutral	250/bag	2,000
72.706.001	39/10.8	brown	250/bag	2,000
72.706.002	39/10.8	red	250/bag	2,000
72.706.004	39/10.8	yellow	250/bag	2,000
72.706.005	39/10.8	green	250/bag	2,000
72.706.006	39/10.8	blue	250/bag	2,000

• PCR Performance Tested

72.706.400	39/10.8	neutral	250/bag	2,000
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• Biosphere® quality (sterile) packaged in small quantities

72.706.200	39/10.8	neutral	50/bag	500
72.706.201	39/10.8	neutral	ind. wrapped	120



SafeSeal micro tubes, 2.0 ml, PP, with wide hinge

Order No.	Length/Ø mm	Colour	Packaging	Pcs./case
72.695.500	40/10.8	neutral	250/bag	2,000
72.695.001	40/10.8	brown	250/bag	2,000
72.695.002	40/10.8	red	250/bag	2,000
72.695.004	40/10.8	yellow	250/bag	2,000
72.695.005	40/10.8	green	250/bag	2,000
72.695.006	40/10.8	blue	250/bag	2,000
72.695.007	40/10.8	violet	250/bag	2,000

• PCR Performance Tested

72.695.400	40/10.8	neutral	250/bag	2,000
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• Biosphere® quality (sterile) packaged in small quantities

72.695.200	40/10.8	neutral	50/bag	500
72.695.201	40/10.8	neutral	ind. wrapped	120

* Filled to nominal volume with low surface tension water at 20°C, 90 min., in fixed angle rotor. Storage boxes and special racks for micro tubes on pp. 152-153 and pp. 162-164.



Micro tubes, 0.5 ml, PP, with attached PP cap

- With frosted writing space

Order No.	Length/Ø mm	Colour	Packaging	pcs./case
72.699	30/7.8	neutral	1,000/bag	5,000
72.699.001	30/7.8	red	500/bag	5,000
72.699.002	30/7.8	yellow	500/bag	5,000
72.699.003	30/7.8	blue	500/bag	5,000
72.699.004	30/7.8	green	500/bag	5,000
72.699.005	30/7.8	purple	500/bag	5,000

Micro tube, 0.5 ml with attached PP cap, with ventilation aperture in the cap

Order No.	Length/Ø mm	Colour	Packaging	pcs./case
72.698	30/7.8	neutral	1,000/bag	5,000



Micro tubes, 1.5 ml, PP, with attached PP cap

- With graduation and frosted writing space

Order No.	Length/Ø mm	Colour	Packaging	pcs./case
72.690.001	39/10.8	neutral	500/bag	5,000
72.690.004	39/10.8	brown	500/bag	5,000
72.690.007	39/10.8	purple	500/bag	5,000
72.690.475	39/10.8	blue	500/bag	5,000
72.690.476	39/10.8	green	500/bag	5,000
72.690.477	39/10.8	red	500/bag	5,000
72.690.478	39/10.8	yellow	500/bag	5,000

Micro tube, 1.5 ml, PP, with attached PP "EASY CAP"

- Loosely fitting closure, e.g. for applications without thermal load

Order No.	Length/Ø mm	Colour	Packaging	pcs./case
72.690.550	39/10.8	neutral	500/bag	5,000



Micro tubes, 2.0 ml, PP, with attached PP cap

- With graduation and frosted writing space

Order No.	Length/Ø mm	Colour	Packaging	pcs./case
72.691	40/10.8	neutral	500/bag	5,000
72.691.001	40/10.8	brown	500/bag	5,000
72.691.002	40/10.8	red	500/bag	5,000
72.691.004	40/10.8	yellow	500/bag	5,000
72.691.005	40/10.8	green	500/bag	5,000
72.691.006	40/10.8	blue	500/bag	5,000
72.691.007	40/10.8	purple	500/bag	5,000

Storage boxes and special racks for micro tubes on pp. 152-153 and pp. 162-164.



Micro tubes, 1.5 ml, PP, with attached soft LD-PE push cap

Order No.	Length/Ø mm	Cap Colour	Packaging	Pcs./case
72.688	39/10.8	neutral	500/bag	5,000
72.688.001	39/10.8	blue	500/bag	5,000
72.688.002	39/10.8	green	500/bag	5,000
72.688.003	39/10.8	red	500/bag	5,000
72.688.004	39/10.8	yellow	500/bag	5,000
72.688.005	39/10.8	violet	500/bag	5,000



Micro tubes, 2.0 ml, PP, with attached soft LD-PE push cap

Order No.	Length/Ø mm	Cap Colour	Packaging	Pcs./case
72.689	39/10.8	neutral	500/bag	5,000
72.689.001	39/10.8	blue	500/bag	5,000
72.689.002	39/10.8	green	500/bag	5,000
72.689.003	39/10.8	red	500/bag	5,000
72.689.004	39/10.8	yellow	500/bag	5,000
72.689.006	39/10.8	violet	500/bag	5,000



Micro tubes, PP, without cap

Order No.	Length/Ø mm	Base shape	Volume	Packaging bag/case
72.698.200	30/7.8	conical	0.5 ml	500/5,000
72.696	39/10.8	conical	1.5 ml	500/10,000
72.708	39/10.8	conical	2.0 ml	500/5,000
72.709	39/10.8	conical/skirted	2.0 ml	500/5,000

Caps for 1.5 ml and 2.0 ml micro tubes, LD-PE

Flat push cap	Tall push cap	Soft cap with loop
Order No.: 65.697 neutral	Order No.: 65.723 neutral	Order No.: 65.109 neutral
Packaging: 1,000 pcs./bag • 10,000 pcs./case		

Storage boxes and special racks for micro tubes on pp. 152-153 and pp. 162-164.

PP = polypropylene, LD-PE = Low Density polyethylene

Centrifuge MC 6

- Ideal for quick spin-downs, microfiltration and cell separation
- Fixed angle rotor for either 6 micro tubes (2 ml to 0.2 ml) or a strip rotor for 2 chains of 8 tubes (0.2 ml) or single tubes

Order No.	Description
90.186.100	Centrifuge MC 6, 230 V incl. rotor, strip rotor and adapter sets
90.186.102	Centrifuge MC 6, 230 V incl. 6-position rotor, strip rotor and adapter sets
92.186.110	Rotor MC 6 - 1.5 ml, 6-position (spare part)
92.186.111	Strip rotor MC 6 - 0.2 ml, 2 x 8-position (spare part)
92.186.112	Adapter MC 6 for 0.5/0.6 ml micro tubes, pack of 6 (spare part)
92.186.113	Adapter MC 6 for 0.2 ml micro tubes, pack of 6 (spare part)



Multiply® PCR Single Tubes

- Rapid temperature transfer due to thin-walled reaction space
- Contamination-free opening of attached lid due to integral anti-contamination shield at the lid front
- Frosted, flat lid with large writing area
- Designed for use in all thermocyclers in 0.2 and 0.5 ml block format
- Compatible with the RackSystem working station for pipetting and storage of 0.2 ml tubes (p. 98)



Multiply®-Pro 0.2 and 0.5 ml with integral anti-contamination shield at the lid front

- Biosphere® plus quality (sterile) packaged in small quantities

Order No.	Description	Packaging
72.735.100	0.5 ml neutral	100/bag 500/box 1,000/case
72.737	0.2 ml neutral	250/bag 1,000/box 2,000/case

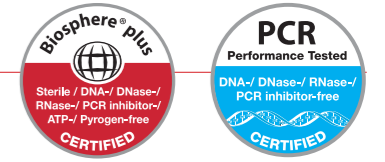
- PCR Performance Tested

Order No.	Description	Packaging
72.735.002	0.5 ml neutral	500 pcs./bag 2,000 pcs./case
72.735.992	0.5 ml Colour mix: red, orange, green, blue, violet, yellow	500 pcs./bag 3,000 pcs./case
72.737.002	0.2 ml neutral	500 pcs./bag 2,000 pcs./case
72.737.992	0.2 ml Colour mix: red, orange, green, blue, violet, yellow	500 pcs./bag 3,000 pcs./case



Multiply® PCR Strips with 4 and 8 reaction tubes

- Rapid temperature transfer due to thin-walled reaction space
- Contamination-free opening of attached lid due to integral anti-contamination shield at the lid front
- Designed for use in all thermocyclers in 0.2 and 0.5 ml block format
- Compatible with the RackSystem working station for pipetting and storage of 0.2 ml tubes (p. 89)



0.2 ml PCR strip of 4 tubes/Multiply®-µStripPro with attached lid

- Biosphere® plus quality (sterile) packaged in small quantities

Order No.	Description	Packaging
72.990	0.2 ml neutral	50 strips/bag 200 strips/box 400 strips/case

- PCR Performance Tested

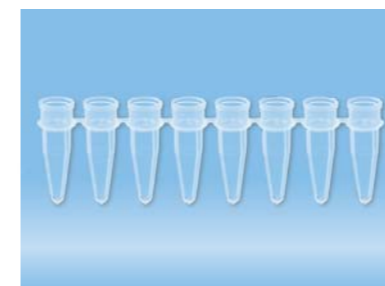
Order No.	Description	Packaging
72.990.002	0.2 ml neutral	120 strips/bag 480 strips/case
72.990.992	Colour mix: red, green, blue, violet	120 strips/bag 480 strips/case



0.2 ml PCR strip of 8 tubes/Multiply®-µStripPro with attached lid

- PCR Performance Tested

Order No.	Description	Packaging
72.991.002	0.2 ml neutral	120 strips/bag 480 strips/case
72.991.992	Colour mix: red, green, blue, violet	120 strips/bag 480 strips/case
72.991.103	0.2 ml neutral, Low Profile	120 strips/bag 480 strips/case



0.2 ml PCR strip of 8 tubes/Multiply®-µStrip without lid

- PCR Performance Tested

Order No.	Description	Packaging
72.985.002	0.2 ml neutral	120 strips/bag 480 strips/case
72.985.992	Colour mix: red, green, blue, violet	120 strips/bag 480 strips/case

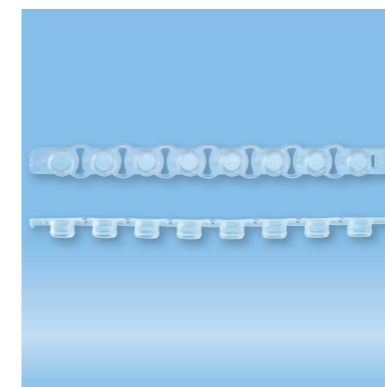
Multiply® lid strip, optically clear, suitable for real-time PCR

- Biosphere® plus quality (sterile)

Order No.	Description	Packaging
65.989	Strip of 8 lids for 72.985.002 and 72.985.992	120 strips/bag 480 strips/case

- PCR Performance Tested

Order No.	Description	Packaging
65.989.002	Strip of 8 lids for 72.985.002 and 72.985.992	120 strips/bag 480 strips/case





- 10-fold fluorescence level
- Improved sensitivity
- Enhanced reproducibility

Cost-effective miniaturisation of qPCR assay in white Multiply® PCR plates

Fluorescence-based applications like qPCR, particularly those involving small volumes, benefit from the significantly improved reflection characteristics of the white wells. Specimens of low DNA concentration, too, can be more easily detected.

Compared to transparent wells, a 10-fold fluorescence level can be measured with white wells.

Thanks to maximum signal reflection, C_t values are obtained earlier (see Fig. 1). In white plates sealed with qPCR compatible tapes, the reagent volume per well can be reduced from 25 μ l to 15 μ l without significant changes in sensitivity and stability (see Fig. 2), enabling a 40% decrease in qPCR reagent costs.

In addition, the white plates minimise adverse effects like “cross talk” that would increase well-to-well variability in transparent wells.

Fig. 1

Increased sensitivity due to maximum signal reflection

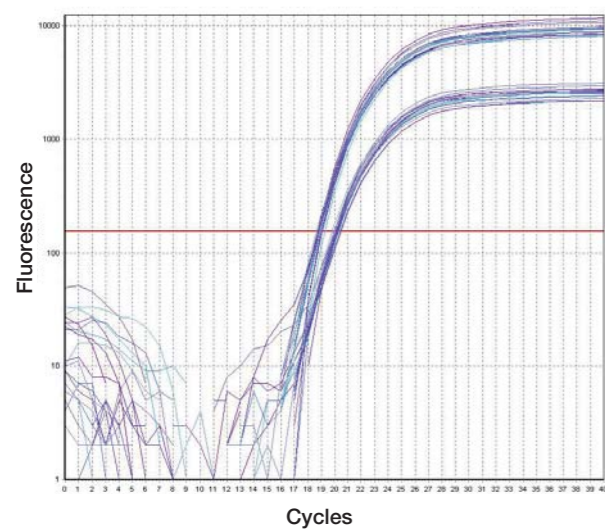
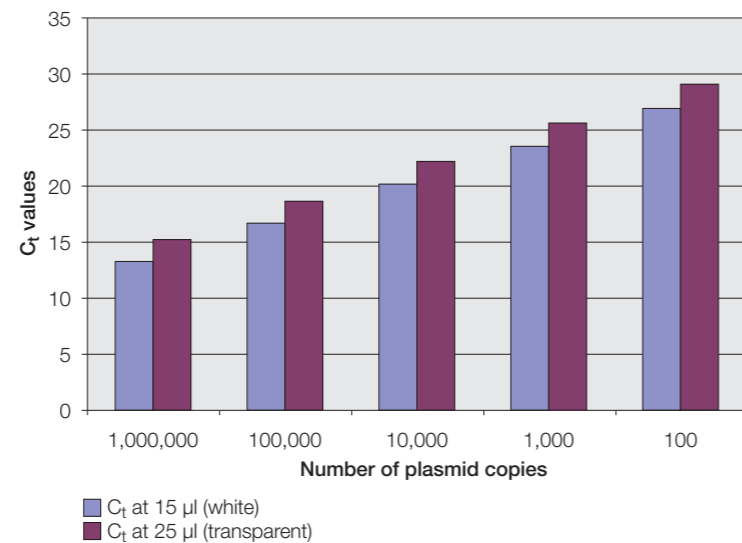


Fig. 2

C_t values for the detection of plasmid copies in white and transparent plates at reduced reaction volumes



White Multiply® PCR plates – optimised for qPCR

- Rapid temperature transfer due to thin-walled reaction space
- Sealable with heat-resistant, highly transparent foil (see p. 101) or flat lid strip 65.1998.400 (see p. 97)
- Black alphanumeric print for enhanced well identification
- Certified PCR Performance Tested (DNA-/DNase-/RNase-free and PCR inhibitor-free)

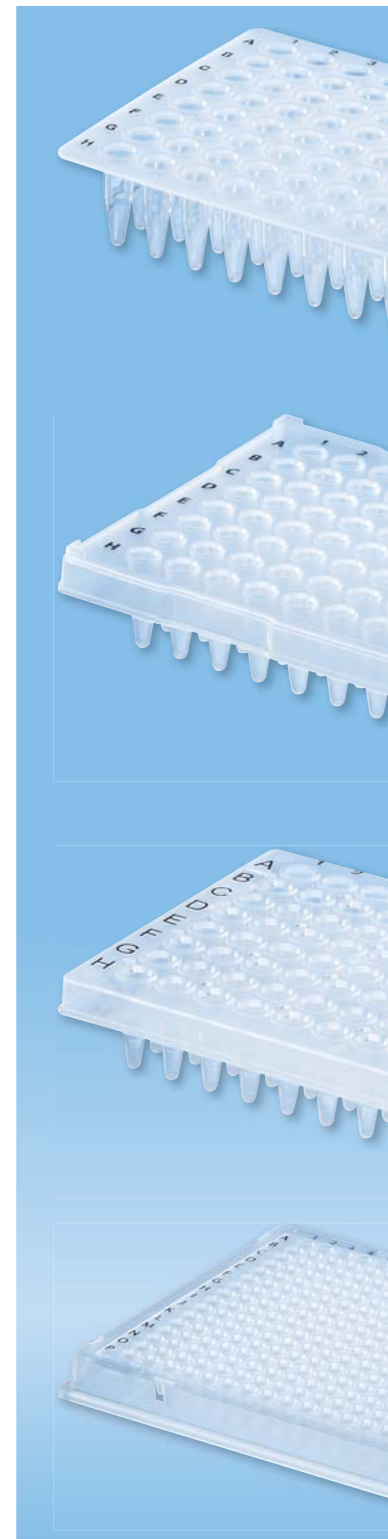
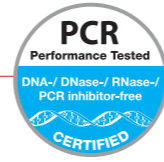


Order No.	Description	Special feature	Quality Grade	Colour	Packaging
72.1978.232	Optimised for qPCR	96 Well, without skirt		white	10 pcs./bag 50 pcs./box 200 pcs./case
72.1979.132	Optimised for qPCR	96 Well, with lateral half skirt and flat deck		white	5 pcs./bag 25 pcs./box 100 pcs./case
72.1980.232	Optimised for qPCR	96 Well, with lateral skirt, low profile for Fast PCR		white	10 pcs./bag 50 pcs./box 200 pcs./case
72.1981.232	Optimised for qPCR	ABI style, 96 Well, with lateral half skirt, low profile for Fast PCR		white	25 pcs./bag 100 pcs./case
72.1982.202	Optimised for qPCR	Lightcycler 480, 96 Well, with lateral half skirt		white	25 pcs./bag 100 pcs./case
72.1985.202	Optimised for qPCR	Lightcycler 480, 384 Well, with full lateral skirt		white	50 pcs./bag 100 pcs./case

Note: Compatibility Table for PCR plates – pp. 99-100.

Multiply® PCR plates made from polypropylene

- Rapid temperature transfer due to thin-walled reaction space
- Sealable with heat-resistant, highly transparent foil (see p. 101) or flat lid strip 65.1998.400 (see p. 97)
- Black alphanumeric print for enhanced well identification
- Certified PCR Performance Tested (DNA-/DNase-/RNase-free and PCR inhibitor-free)



96 Well Multiply® PCR plate, without lateral skirt

- Flat PCR plate fits most commonly used thermocyclers/DNA sequencers
- Raised well rims for optimum sealing with adhesive tape

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1978.202	96 Well/0.3 ml	neutral	5 pcs./bag 25 pcs./box 100 pcs./case	e.g. Applied Biosystems, Biometra, Bio-Rad, Eppendorf, Ericom, MJ Research, Stratagene, Techno, Thermo Hybaid, Transgenomic

96 Well Multiply® PCR plates with lateral half skirt

- Recommended for Applied Biosystems thermocyclers/DNA sequencers
- Frame enables barcoding and application in automated systems

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1979.202	96 Well/0.3 ml without barcode label	neutral	25 pcs./bag 100 pcs./case	e.g. ABI Applied Biosystems, Biometra, Hybaid, MJ Research, Eppendorf
72.1979.203	96 Well/0.3 ml with barcode label	neutral	25 pcs./bag 100 pcs./case	

96 Well Multiply® PCR plate with half skirt, with flat deck

- Recommended for Applied Biosystems (ABI) thermocyclers and DNA sequencers
- Flat deck for easy and safe sealing of wells with foils

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1979.102	96 Well/0.3 ml without barcode label	neutral	5 pcs./bag 25 pcs./box 100 pcs./case	e.g. ABI Applied Biosystems, Biometra, Hybaid, MJ Research, Eppendorf

384 Well Multiply® PCR plate with robust frame

- SBS compliant PCR plate, with robust frame for most commonly used thermocyclers/DNA sequencers
- Raised well rims for optimum sealing with adhesive tape

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1984.202	384 Well/40 µl	neutral	25 pcs./bag 50 pcs./case	e.g. ABI Prism 3100, 7700, GeneAmp 9700, Bio-Rad, MJ Research, Eppendorf

Note: Compatibility Table for PCR plates on pp. 99-100.

Multiply® PCR plates made from polypropylene

- Rapid temperature transfer due to thin-walled reaction space
- Sealable with heat-resistant, highly transparent foil (see p. 101) or flat lid strip 65.1998.400 (see page bottom)
- Black alphanumeric print for enhanced well identification
- Certified PCR Performance Tested (DNA-/DNase-/RNase-free and PCR inhibitor-free)



96 Well Multiply® PCR plate with lateral half skirt, optimised for ABI Fast PCR Systems (ABI Prism 9800 and 7500 Fast)

- "Low profile" design reduces dead volume and cycle times
- Ultra-clear thin-walled wells provide optimal signal recovery
- Suitable for most standard thermocyclers, e.g. from MJ Research

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1981.202	96 Well/0.2 ml	neutral	25 pcs./bag 100 pcs./case	e.g. ABI FAST PCR Systems, MJ Research

96 Well Multiply® PCR plate with lateral skirt for robotic systems and real-time thermocyclers

- SBS compliant, with "low profile" wells
- Frame enables barcoding and application in automated systems

Order No.	Description/ max. Volume	Colour	Packaging	Compatible Instruments
72.1980.202	96 Well/0.2 ml	neutral	10 pcs./bag 50 pcs./box 200 pcs./case	e.g. MegaBACE 500/1000 DNA Analysis System, iCycler, DNA Engine Opticon, MJ Research, Amersham Bioscience, Hybaid, Stratagene, Eppendorf, Bio-Rad, Techno

Multiply® PCR strip of 8 lids, optically clear, with flat lids, suitable for real-time PCR

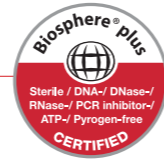
- PCR Performance Tested

Order No.	Packaging	Compatible with
65.1998.400	300 Lid strips/box 1.200 Lid strips/case	all white and neutral Multiply® PCR plates

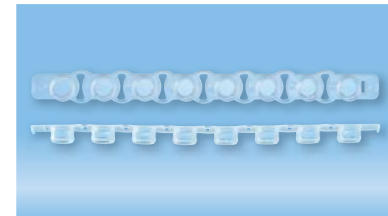
Note: Compatibility Table for PCR plates on pp. 99-100.

Multiply® PCR plates, pre-loaded with PCR tube strips of 8

- Rapid temperature transfer due to thin-walled reaction space
- Suitable for thermocyclers in 0.2 ml block format
- Biosphere® plus, individually wrapped, sterile, to prevent contamination
- Compatible with storage rack and RackSystem pipetting station



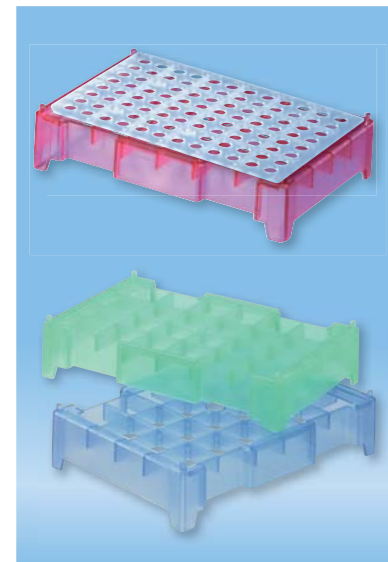
Order No.	Description	Packaging	Compatible Instruments
72.985	0.2 ml neutral Biosphere® plus quality, sterile	1/bag 20/case	e.g. Biometra, MJ Research, Eppendorf



Multiply® PCR strip of 8 lids, optically clear, suitable for real-time PCR

- Biosphere® plus quality (sterile)

Order No.	Packaging	Compatible with
65.989	12 lid strips/bag 240 lid strips/case	PCR plate 72.985



RackSystem storage and pipetting station for 0.2 ml Multiply® PCR tubes and pre-loaded PCR plates

- Flexible, two-piece system comprising a work tray and support base
- Easily inserted in the thermocycler - no need to remove tubes
- Convenient 96 well microtitre format to fit any processing system
- Stackable design provides space-saving specimen storage
- Autoclavable at 121°C (Important notes on autoclaving: see p. 201)

Order No.	Description	Description	Packaging
95.987.002	PCR work tray	neutral, for 96 tubes	5/bag
95.988	Support base for PCR work tray	neutral	5 pcs./case
95.988.001		red	5 pcs./case
95.988.002		blue	5 pcs./case
95.988.003		green	5 pcs./case
95.988.004		yellow	5 pcs./case

No. of wells	96 pre-assembled	96	96	96	96	384 full skirt
Half/full skirt	Without	Without	Half	Full	Half	Full
Profile	High	High	High	Low	Low	-
Order no. PCR plates	72.985	72.1978.202 72.1978.232	72.1979.102 72.1979.132 72.1979.202 72.1979.203	72.1980.202 72.1980.232	72.1981.202 72.1981.232	72.1984.202

Amersham Biosciences® / GE Healthcare®

Mega BACE 500/1000 DNA Analysis System				●		
Mega BACE 4000 DNA Analysis System						●

Analytik Jena® / Biometra®

FlexCycler® 96 Well		●				
qTOWER 2.0/2.2 SP	●	●		●		
SpeedCycler® 96 Well SP & SPR	●	●		●		
TAdvanced	●	●				
TOptical	●	●		●		
TRobot 96 Well	●	●		●		
TRobot 384 Well						●
TProfessional Family 96 Well (except TRIO)		●		●		
TProfessional Family 384 Well (except TRIO)						●

Applied Biosystems® / Life Technologies®

GeneAmp® 2700, 2720		●	●			
GeneAmp® 7500 / 5700		●	●			
GeneAmp® 9600	●	●	●			
GeneAmp® 9700	●	●	●			
GeneAmp® 9800 FAST Block					●	
PE 2700		●	●			
PE 9600	●	●	●			
PE 9700	●	●	●			
Prism® 2720		●	●			
Prism® 7000 / 7700		●	●			
Prism® 7300 / 7500			●			
Prism® 7500 Fast					●	
Prism® 7900HT			●			●
Prism® 7900 Fast					●	
Prism® 7900HT Fast					●	●
QuantStudio™			●			
StepOne Plus™					●	
Veriti® 96 Well / 384 Well			●			●
Veriti® Fast 96 Well			●		●	
ViiA7™			●			
310 Genetic Analyser		●	●		●*	
3100 / 3130 Genetic Analyser		●	●		●*	
3500 / 3500XL Genetic Analyser			●		●*	
3700 / 3730 / 3730XL Genetic Analyser		●	●		●*	

PeqLab®

peqSTAR 96		●	●	●		
peqSTAR 384						●

Thermo Fisher Scientific®

MultiBlock System		●		●		●
PCR Sprint		●		●		

Legend: ● = recommended □ = not recommended

* with compatible adapter from ABI

The compatibility table represents a guide for recommended usage of the products listed. We would like to emphasise that we do not routinely check the products for their compatibility to the equipment listed. As a result, these do not represent guaranteed product characteristics.

No. of wells	96 pre-assembled	96	96	96	96	384 full skirt	96 wells	384 wells
Half/full skirt	Without	Without	Half	Full	Half	Full	Full	Full
Profile	High	High	High	Low	Low	-	"Lightcycler"	"Lightcycler"
Order no. PCR plates	72.985	72.1978.202 72.1978.232	72.1979.102 72.1979.132 72.1979.202 72.1979.203	72.1980.202 72.1980.232	72.1981.202 72.1981.232	72.1984.202	72.1982.202	72.1985.202

BioRad® / MJ Research®

CFX96 Touch™ Real-Time PCR				●				
CFX384 Touch™ Real-Time PCR						●		
CFX Automation System II								
T100™ Thermal Cycler	●	●		●				
S1000™ Thermal Cycler		●	●	●		●		
C1000Touch™ Thermal Cycler		●	●	●		●		
iCycler iQ™ Thermal Cycler	●	●	●					
iQ4™ Thermal Cycler	●	●	●					
iQ5™ Thermal Cycler	●	●	●					
MyCycler™ Thermal Cycler	●	●	●					
Chromo4™		●		●				
Opticon™, Opticon2™				●				
BaseStation™				●				

Corbett Research® / Qiagen®

Palm Cycler 96 Well		●						
Palm Cycler 384 Well						●		

Eppendorf®

Mastercycler® nexus	●	●						
Mastercycler® ep realplex		●	●			●		
Mastercycler® gradient	●	●		●				
Mastercycler® ep gradient	●	●	●	●				
Mastercycler® pro	●	●		●				

Ericom®

Deltacycler			●	●				
SingleBlock			●	●				
TwinBlock			●	●				

MWG®

Primus 96 Well		●		●				
Primus 384 Well						●		
The Q-Lifecycler		●	●	●				

Roche®

Lightcycler® 96 System							●	
Lightcycler® 480 System							●	●

Stratagene® / Agilent®

Mx3000P™	●	●						
Mx3005P™	●	●	●	●				
Mx4000™	●	●	●					
Gradient Cycler		●		●				
Robocycler 384 Well						●		

Techne®

Cyclogene		●		●				
Flexigene		●	●	●				
Genius / Genius Quad		●	●	●				
OMN-E		●	●	●				
PCR Express	●	●	●			●		
Primus 96		●						
Px2/PxE		●	●			●		
Quantica			●	●				
TC412/TC512		●		●		●		
Touchgene / Touchgene Gradient		●	●	●	●			

Tailor-made tape materials are required for the hermetic sealing of polypropylene, polystyrene and polycarbonate micro test plates in order to prevent evaporation and protect the samples during the application, as well as for sample storage and shipping.

A variety of Sarstedt films are available that have been specially developed for the stringent requirements encountered in PCR, the storage of active ingredients, and high throughput screening. All tapes are produced under cleanroom conditions to prevent contamination with DNase/RNase and nucleic acids.

- Compatible with aqueous solutions and organic solvents, e.g. DMSO, acetonitrile and methanol.

Highly transparent adhesive tape for quantitative PCR

The 50 µm tape is coated with a smear-free, crystal clear adhesive that shows minimal adhesion at room temperature and is, therefore, exceptionally easy to handle and reposition. The strong adhesive effect is brought about during PCR as a result of the heat produced, minimising loss by evaporation.

- **Highly transparent tape** ideally suited for real-time PCR and other fluorescence-based applications
- **Secure and reliable sealing** thanks to the innovative adhesive
- **Does not stick** to skin or gloves during application



Order No.	Description	Packaging
95.1999	highly transparent, suited for qPCR, with pressure sensitive adhesive	100 Tapes/box

Transparent adhesive tape for PCR and sample storage

- Tape for end point PCR with strongly adhesive effect



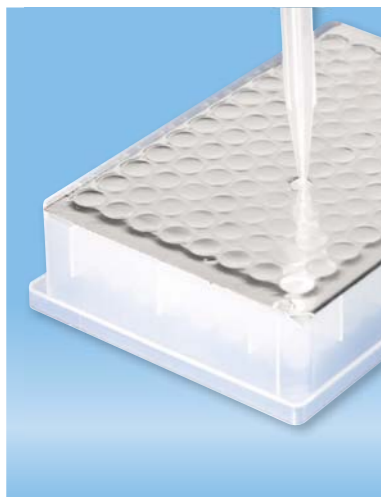
Order No.	Description	Packaging
95.1993	transparent	100 Tapes/box

Transparent adhesive tape for quantitative PCR and end point PCR

- The optically transparent foil is made from a 50 µm polyolefin film with perforated "end tabs" for easy removal



Order No.	Description	Packaging
95.1994	transparent	100 Tapes/box



Adhesive aluminium foil for PCR and sample storage

The heat-resistant, robust, pierceable aluminium foil stands out with efficient anti-evaporation protection and resistance to solvents. Perforated end tabs can be easily removed after attaching the tape.

- Aluminium tape can be pierced
- Ideally suited for storing sample material/active ingredients at temperatures as low as -70°C

Order No.	Description	Packaging
95.1995	Aluminium	100 Foils/box



Pierceable adhesive tape for DNA sequencers, and autosamplers

The 50 µm thin tape is coated with a strong adhesive and easy to pierce. The openings are free from adhesive to prevent samples, needles or pipette tips from sticking to the tape.

- **Easy sampling with tips or pipetting systems** as the clear tape is free of adhesive above each well
- **Temporary protection** against evaporation in 96 well plates
- **Resealable for long-term protection** with a second tape (e.g. 95.1993)
- **Cost-effective tape** for use in DNA sequencers, and autosamplers

Order No.	Description	Packaging
95.1992	96 fold perforation, transparent	100 Foils/box

Recommended tape options

Sarstedt PCR sealing tapes – Recommendations for use						
Order No.	Description	Application	Special features	Pierceable	Material	Functional temperature range
95.1992	96-fold perforated sealing tape	Processing/DNA-sequencer, HPLC, autosampling	easy to pierce, 96 perforated opening, w/o adhesive, temporary evaporation protection	yes	Polyester	-40°C to 110°C
95.1993	transparent PCR tape, strongly adhesive	PCR, sample storage	strongly adhesive, eliminates edges, resealable	no	Polyester	-40°C to 110°C
95.1994	transparent PCR and qPCR tape	PCR, real-time PCR	good optical transparency, high chemical resistance	no	Polyolefin	-70°C to 110°C
95.1995	adhesive aluminium foil	PCR, sample storage	pierceable, light protection for samples, high chemical resistance	yes	Aluminium	-70°C to 110°C
95.1999	adhesive, highly transparent qPCR tape	real-time PCR, fluorescence analysis	highly transparent, pressure-sensitive, innovative adhesive, minimal evaporation rates	no	Polyolefin	-70°C to 110°C

The accuracy of the pipetting process depends to a large extent on the coordination of pipette and pipette tip. As one of the leading manufacturers of pipette tips for decades, Sarstedt aims to provide its customers with reliable quality tips to fit the key pipette brands. The quality of a tip is defined by the properties of the material used (e.g. high resistance to chemicals), the surface properties (e.g. low retention), the design (e.g. graduation rings, reduced aerosol formation), and accuracy of fit with the relevant pipette.

Our quality guarantee: Conformity testing in accordance with the international test standard ISO 8655-2

The trend to ever smaller sample volumes leads to increasingly higher requirements on the consumables. To offer you the ultimate accuracy and precision even with small volumes, Sarstedt tips are regularly checked in combination with the pipettes of market leading manufacturers (e.g. Eppendorf®, Gilson®). Tips are subjected to comprehensive standard conformity tests in accordance with the international test standard ISO 8655-2 for piston pipettes. We guarantee that our pipette tips form a system with the piston pipettes supplied by the stated manufacturers listed in each case that is matched in terms of accuracy and precision and that does not exceed the error tolerances of ISO 8655.



Protection against carry-over and contamination with selected filter materials

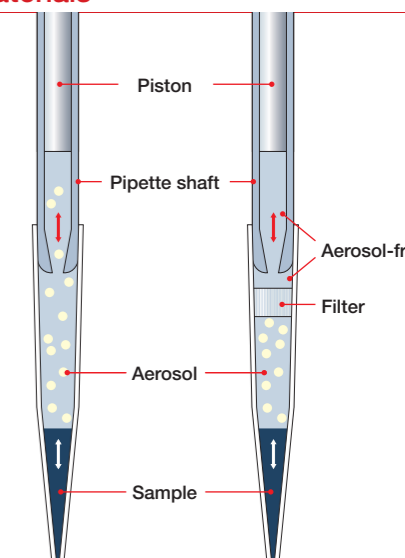
Even the most meticulous pipetting may generate aerosols during aspiration of the sample, which can make their way into the pipette shaft and contaminate the pipette.

With many applications (PCR, radioactive pipetting, etc.), contamination of the pipette cannot be tolerated. In order to prevent aerosol contamination along with the resulting consequences (falsified results, additional expenditure in time and cost), Sarstedt incorporates special porous elements in its range of filter tips.

The filter element integrated in the pipette tips consists of a porous plastic material featuring defined hydrophobic properties and no self-sealing additives.

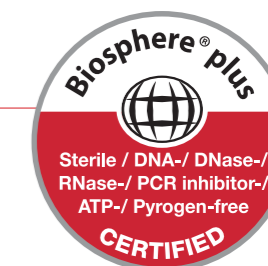
The superior efficiency of our filters is based on a complex mechanism of absorption, surface properties, thickness, strength and shape, which has been validated by two independent methods (PCR and P-32 marked ATP).*

* Refer to our "Application Report – Shielding Effect of Filter Inserts in Pipette Tips" for additional details.



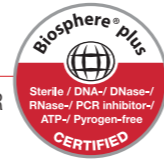
Added protection with Biosphere® plus purity quality

- Maximum biological purity thanks to our special manufacturing process: Free of DNA, DNase, RNase, PCR inhibitors, ATP and pyrogens/endotoxins
- Batch-specific certification is available upon request

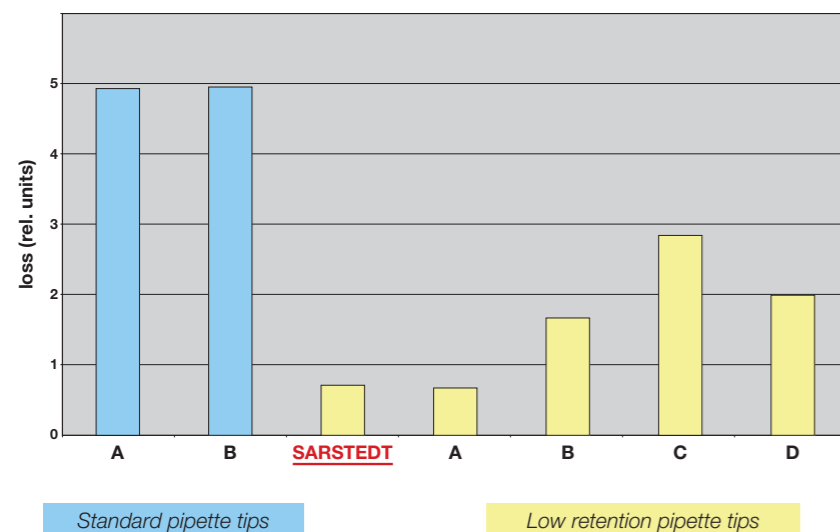


Improved sample recovery thanks to low retention surface

- Cost savings in valuable reagents, e.g. growth factors, assay kit reagents, restriction enzymes, polymerases or PCR master mixes
- Enhanced research results thanks to increased reproducibility of experiments
- Maximum pipetting accuracy with improved sample recovery
- Significantly enhanced pipetting of highly viscous liquids, e.g. glycerine, buffer solutions and detergents



Comparative presentation of average pipetting losses



200 µl pipette tips from different suppliers were used with an electronic pipette at constant pipetting speed to aspirate and dispense 100 µl of a dye-loaded test fluid (H₂O; 0.1% (w/v) Triton X-100; 0.25% (w/v) brilliant cresyl blue).

Residue in the pipette tips was washed out through repeated rinsing with 200 µl water in a cuvette and photometrically compared. The test was repeated ten times for each supplier, and the calculated mean values are shown in the diagram opposite.

Ordering information – Low retention pipette tips with filter in Biosphere® plus quality

Illustrations	Order No.	Volume	Description	Packaging
Type E	70.1130.217	2.5 µl		96/box, 480/inner box, 1,920/case
Type E	70.1130.215	10 µl		96/box, 480/inner box, 1,920/case
Type N	70.1114.215	20 µl		96/box, 480/inner box, 1,920/case
Type J	70.1116.215	20 µl		96/box, 480/inner box, 1,920/case
Type A	70.760.219	20 µl		96/box, 480/inner box, 1,920/case
Type A	70.760.217	100 µl		96/box, 480/inner box, 1,920/case
Type C	70.760.216	200 µl		96/box, 480/inner box, 1,920/case
Type L	70.765.215	300 µl		96/box, 480/inner box, 1,920/case
Type B	70.762.216	1,000 µl		100/box, 500/inner box, 1,000/case

Ordering information – Low retention pipette tips without filter

Illustrations	Order No.	Volume	Packaging
Type E	70.1130.105	10 µl	96/box, 1,920/case
Type N	70.1114.105	20 µl	96/box, 1,920/case
Type J	70.1116.105	20 µl	96/box, 1,920/case
Type A	70.760.107	200 µl	96/box, 1,920/case
Type L	70.765.105	300 µl	96/box, 1,920/case
Type B	70.762.105	1,000 µl	100/box, 1,000/case

Quality Tips with Filter

Filter tips (illustrations 1:1)	Tray Colour Code	Order No.	Max. Sample Volume/Colour	Quality Grade	Packaging
	Type E	70.1130.212	2.5 µl, neutral		96/box, 480/inner box, 1,920/case
	Type E	70.1130.210	10 µl, neutral		96/box, 480/inner box, 1,920/case
	Type E	70.1130.410			480/bag (loose), 4,800/case
	Type E long	70.1131.210	10 µl, neutral		96/box, 480/inner box, 1,920/case
	Type D	70.1115.210	10 µl, neutral		96/box, 480/inner box, 1,920/case
	Type D	70.1115.410			480/bag (loose), 4,800/case
	Type N	70.1114.210	20 µl, neutral		96/box, 480/inner box, 1,920/case
	Type N	70.1114.410			480/bag (loose), 4,800/case
	Type J	70.1116.210	20 µl, neutral		96/box, 480/inner box, 1,920/case
	Type A	70.760.213	20 µl, neutral		96/box, 480/inner box, 1,920/case
	Type A	70.760.413			480/bag (loose), 4,800/case
	Type A	70.760.212	100 µl, neutral		96/box, 480/inner box, 1,920/case
	Type A	70.760.412			480/bag (loose), 4,800/case
	Type O extra long 1:2	70.1189.215	200 µl, neutral		96/box, 960/case
	Type C	70.760.211	200 µl, neutral		96/box, 480/inner box, 1,920/case
	Type C	70.760.411			480/bag (loose), 4,800/case
	Type L	70.765.210	300 µl, neutral		96/box, 480/inner box, 1,920/case
	Type B	70.762.211	1,000 µl, neutral		100/box, 500/inner box, 1,000/case
	Type B	70.762.411			200/bag (loose), 2,000/case
	Type M	70.1186.210	1,250 µl, neutral		96/box, 768/case
	Type M 1:2	70.1186.410			384/bag (loose), 3,840/case

Quality Tips without Filter

Filter tips (illustrations 1:1)	Tray Colour Code	Order No.	Max. Sample Volume/Colour	Quality Grade	Packaging	
	Type E	70.1130	10 µl, neutral		1,000/bag, 10,000/case	
	Type E	70.1130.100			96/box, 1,920/case	
	Type E	70.1130.200			96/box, 480/inner case, 1,920/case	
	Type E	70.1130.600			96/Tray, 576/StackPack, 2,304/case	
	Type E	70.1130.460			96/Tray, 576/StackPack, 2,304/case	
	Type E long	70.1131	10 µl, neutral		500/bag, 10,000/case	
	Type E long	70.1131.100			96/box, 1,920/case	
	Type D	70.1115	10 µl, neutral		1,000/bag, 10,000/case	
	Type D	70.1115.100			96/box, 1,920/case	
	Type D	70.1115.200			96/box, 480/inner case, 1,920/case	
	Type N	70.1114	20 µl, neutral		1,000/bag, 10,000/case	
	Type N	70.1114.100			96/box, 1,920/case	
	Type N	70.1114.200			96/box, 480/inner case, 1,920/case	
	Type J	70.1116	20 µl, neutral		1,000/bag, 10,000/case	
	Type J	70.1116.100			96/box, 1,920/case	
	Type J	70.1116.200			96/box, 480/inner case, 1,920/case	
	Type A	70.760.002	200 µl, neutral		500/bag, 10,000/case	
	Type A	70.760.012	200 µl, yellow		500/bag, 10,000/case	
	Type A	70.760.102	200 µl, neutral		96/box, 1,920/case	
	Type A	70.760.202	200 µl, neutral		96/box, 480/inner case, 1,920/case	
	Type A	70.760.502	200 µl, neutral		96/Tray, 480/StackPack, 1,920/case	
	Type A	70.760.452	200 µl, neutral		96/Tray, 480/StackPack, 1,920/case	
	Type O extra long 1:2	70.1189.105	200 µl, neutral		96/box, 960/case	
	Gelloader 1:2	70.1190.100	200 µl, neutral		96/box, 960/case	
	Type C	70.760.001	250 µl, neutral		500/bag, 10,000/case	
	Type C	70.760.201			96/box, 480/inner case, 1,920/case	
	Type C	70.760.501			96/Tray, 480/StackPack, 1,920/case	
	Type C	70.760.451				96/Tray, 480/StackPack, 1,920/case
	Type L	70.765	300 µl, neutral		500/bag, 5,000/case	
	Type L	70.765.100			96/box, 1,920/case	
	Type L	70.765.200			96/box, 480/inner case, 1,920/case	
	Type B	70.762	1,000 µl, neutral		250/bag, 5,000/case	
	Type B	70.762.010			1,000 µl, blue	250/bag, 5,000/case
	Type B	70.762.100			100/box, 1,000/case	
	Type B	70.762.200			100/box, 500/inner case, 1,000/case	
	Type M	70.1186	1,250 µl, neutral		384/bag, 3,840/case	
	Type M	70.1186.100			96/box, 3,840/case	
	Type M	70.1186.200			96/box, 768/case	
	Type M 1:2	70.1183.001	5 ml		250/bag, 2,500/case	
	Type M 1:2	70.1183.101			50/box, 500/case	
	Type M 1:2	70.1183.002	5 ml		250/bag, 2,500/case	
	Type M 1:2	70.1183.102			50/box, 500/case	
	Type M 1:2	70.1187.001	10 ml		200/bag, 2,000/case	
	Type M 1:2	70.1187.101			25/box, 250/case	

Type H: Tips for Ortho BioVue System → 360 µl 250/bag, 5,000/case

Order No.: 70.763

Compatibility Table - Pipette Tips

Biosphere® Pipette Tips with Filter
(illustrations 50%)

2.5 µl		70.1130.212 70.1130.217
10 µl		70.1130.210 70.1130.215 70.1130.410
10 µl		70.1131.210
10 µl		70.1115.210 70.1115.410
20 µl		70.1114.210 70.1114.215 70.1114.410
20 µl		70.1116.210 70.1116.215
20 µl		70.760.213 70.760.219 70.760.413
100 µl		70.760.212 70.760.217 70.760.412
200 µl		70.1189.215
200 µl		70.760.211 70.760.216 70.760.411
300 µl		70.765.210 70.765.215
1,000 µl		70.762.211 70.762.216 70.762.411
1,250 µl		70.1186.210 70.1186.410

Biohit® Pipettes		mLine® Mechanical		Proline® Mechanical						eLine® Electronic									
		0.5-10 µl	0.5-10 µl MC	0.1-2.5 µl	0.5-10 µl	5-50 µl	5-50 µl MC	20-200 µl	50-250 µl MC	50-300 µl MC	100-1,000 µl	100-5,000 µl	0.2-10 µl	10-300 µl	50-1,000 µl	50-1,200 µl MC	100-5,000 µl	0.1-1 µl	
2.5	2.5	●	●	●	●	●							●						×
10	10	●	●		●								●						×
10	10	×	×	×	×								×						×
10	10												×						×
20	20	●																	
20	20	●	●	●	●	●							●						×
20	20		×	×	×	20	20	×	×	×			×						
100	100		×	100	●	●	100	×	×				×						
200	200	●	●	●	●	●							●						
200	200		×	×	×	×	200	200					×						
300	300		×	●	●	●							●						
1,000	1,000			●							●		●						×
1,250	1,250			●							●								×

Brand® Pipettes		Transferpette® Digital						Transferpette® S						Transferpette® Electronic								
		0.5-10 µl	2-20 µl	5-50 µl	10-100 µl	20-200 µl	30-300 µl MC	0.1-1 µl	0.5-10 µl	2-20 µl	10-100 µl	20-200 µl	30-300 µl MC	100-1,000 µl	1-10 ml	0.5-10 µl	0.5-10 µl MC	2-20 µl	1-20 µl MC	20-200 µl	100-1,000 µl	
2.5	2.5	●	●					×	●	●					●	●	●	●	●	●	●	●
10	10	●	●					×	●	●					●	●	●	●	●	●	●	●
10	10	×	×					×	×	×					×	×	×	×	×	×	×	×
10	10	●	●					×	●	●					●	●	●	●	●	●	●	●
20	20	●	●					×	●	●					●	●	●	●	●	●	●	●
20	20		●	●	20	×	×		●	●	20	20	×		●	●	●	●	●	●	●	●
100	100	×	×	×	×	×		×	×	100	×				●	●	●	●	●	●	●	●
200	200	×	×	×	×	×		×	×	×	×				●	●	●	●	●	●	●	●
300	300	×	×	×	●	●		×	×	×	×				●	●	●	●	●	●	●	●
1,000	1,000						×							●								●
1,250	1,250						×							●								●

Socorex® Manual / Electronic Pipettes		Calibra® Manual Micro 822				C. M. Multi 852		Acura® Manual Micro 825				Acura® Electro Micro 925		A. 835/ 905e		Acura® Multi 855/955e		
		0.2-2 µl	1-10 µl	2-20 µl	10-100 µl	20-200 µl	1-10 µl	10-100 µl	20-200 µl	10-100 µl	5-50 µl	10-100 µl	10-200 µl	100-1,000 µl	0.5-5 ml	0.5-10 µl MC	5-50 µl MC	20-200 µl MC
2.5	2.5	●	●				●	●			●	●				●		
10	10	●	●				●	●			●	●				●		
10	10	×	×				×	×			×	×				×		
10	10	●	●				×	×			●	●				●		
20	20	×	×				×	×			●	●				●		
20	20		●	●	10	20	●	●	20	×	●	●	20	×		●	●	×
100	100	×	×	×	×	100	×	×	×	100	×	×	100		●	●	100	●
200	200		×	×	×	×	×	×	×	×	×	×	×		●	●	×	×
300	300	×	×	×	×	×	×	×	×	×	×	×	×		●	●	×	×
1,000	1,000													●				●
1,250	1,250													●				●

Quality Pipette Tips without Filter (illustrations 50%)

10 µl		70.1130 70.1130.100 70.1130.105 70.1130.200 70.1130.600
10 µl		70.1131 70.1131.100
20 µl		70.1114 70.1114.100 70.1114.105 70.1114.200
20 µl		70.1115 70.1115.100 70.1115.200
20 µl		70.1116 70.1116.100 70.1116.105 70.1116.200
200 µl		70.760.002 70.760.102 70.760.107 70.760.202 70.760.502
200 µl		70.1189.105
250 µl		70.760.001 70.760.201 70.760.501
300 µl		70.765 70.765.100 70.765.105 70.765.200
1,000 µl		70.762 70.762.100 70.762.105 70.762.200
1,250 µl		70.1186 70.1186.100 70.1186.200
5 ml		70.1183.001 70.1183.101
5 ml		70.1183.002 70.1183.102
10 ml		70.1187.001 70.1187.101

Biohit® Pipettes		mLine® Mechanical		Proline® Mechanical						eLine® Electronic									
		0.5-10 µl	0.5-10 µl MC	0.1-2.5 µl	0.5-10 µl	5-50 µl	5-50 µl MC	20-200 µl	50-250 µl MC	50-300 µl MC	100-1,000 µl	100-5,000 µl	0.2-10 µl	10-300 µl	50-1,000 µl	50-1,200 µl MC	100-5,000 µl	0.1-1 µl	
10	10	●	●	●	●								●						●
10	10	×	×	×	×								×						×
20	20	●																	
20	20												×						×
20	20	●	●	●	●	●							●						×
200	200		×	×	×	●	●	×	×	×			×						
200	200	●	●	●	●	●							●						
250	250		×	●	●	●	●	250					×						
300	300		×	●	●	●	●	×	×	×	●		●						
1,000	1,000			●							●		●						×
1,250	1,250			●							●		●						×
5	5			×							×		×						×
5	5			●							●		●						●
10	10																		×

Brand® Pipettes		Transferpette® Digital						Transferpette® S						Transferpette® Electronic								
		0.5-10 µl	2-20 µl	5-50 µl	10-100 µl	20-200 µl	30-300 µl MC	0.1-1 µl	0.5-10 µl	2-20 µl	10-100 µl	20-200 µl	30-300 µl MC	100-1,000 µl	1-10 ml	0.5-10 µl	0.5-10 µl MC	2-20 µl	1-20 µl MC	20-200 µl	100-1,000 µl	
10	10	●	●					×	●	●					●	●	●	●	●	●	●	●
10	10	×	×					×	×	×					×	×	×	×	×	×	×	×
20	20	●	●					×	●	●					●	●	●	●	●	●	●	●
20	20	●	●					×	●	●					●	●	●	●	●	●	●	●
200	200		●	●	×	×			●	●	×				●	●	●	●	●	●	●	●
250	250	●	●	●	×	×			●	●	×				●	●	●	●	●	●	●	●
300	300	×	×	×	●	●			×	×	×				●	●	●	●	●	●	●	●
1,000	1,000						●							●								●
1,250	1,250						●							●								●

Socorex® Manual / Electronic Pipettes		Calibra® Manual Micro 822				C. M. Multi 852		Acura® Manual Micro 825				Acura® Electro Micro 925		A. 835/ 905e		Acura® Multi 855/955e		
		0.2-2 µl	1-10 µl	2-20 µl	10-100 µl	20-200 µl	1-10 µl	10-100 µl	20-200 µl	10-100 µl	5-50 µl	10-100 µl	10-200 µl	100-1,000 µl	0.5-5 ml	0.5-10 µl MC	5-50 µl MC	20-200 µl MC
10	10	●	●				●	●			●	●				●		
10	10	×	×				×	×			×	×				×		
20	20	●	●				×	×			●	●				●		
20	20	×	×				×	×			●	●				●		
200	200		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
250	250	×	×	×	×	×	×	×	×	×	×	×	×		●	●	×	×
300	300	×	×	×	×	×	×	×	×	×	×	×	×		●	●	×	×
1,000	1,000													●				●
1,250	1,250													●				●
5	5																	×
5	5																	●
10	10																	×

● = max. pipetting volume
 10 = limited pipetting volume
 × = not recommended
 □ = not checked
 MC = Multi-channel pipette

Pipette suppliers occasionally rework or carry out technical modifications to the pipette cones of their pipettors so that the information provided in the Compatibility Table constitutes a recommendation only. In case of doubt, free sample tips are available on request to test the optimum fitting and ejection behaviour of our tips when used on your pipettes.



Gel loader pipette tip

- Fine, extra-long capillary
- Easy filling of Agarose or SDS gels
- Compatible with all standard 200 µl pipettes

Order No.	Volume	Packaging
70.1190.100	200 µl	96/box 960/case

The Tip SystemBox: Central Pipetting Station

Simple and practical

Flexible and cost-effective

Empty 96-tip refill trays and bulk tips
Suitable for manually racking bulk tips for autoclaving and convenient handling.*

Economic and environmentally friendly

Tip StackPack
Efficient handling of 96-tip trays, reduced packaging and storage space in the Tip SystemBox



Tip SystemBox

The autoclavable (important notes on autoclaving: see p.201) Tip SystemBox is the central workstation for all 96-tip Sarstedt trays.

Complete with hinged lid and anti-slip base, the Tip SystemBox readily accommodates refill trays from Tip StackPack or empty trays for racking.

Empty, colour-coded refill trays are available separately.

Order No.	Description	Packaging pcs./case
95.1298.001	Tip SystemBox (without pipette tips), empty box	6

Empty reload tray for use in the Tip SystemBox

Users purchasing tips from our range loose in bags can load tips into empty trays (grey, yellow, orange) in the Tip SystemBox.

- Place empty trays into the Tip SystemBox and load with tips
- Autoclave tips in the Tip SystemBox, if required

Order No.	Tray Colour Code	Tip Type*/Volume	Packaging pcs./case
95.1760.011		A, C / 200 µl	25
95.1760.022		D, J, N / 20 µl	25
95.1760.033		E long / 10 µl	25
95.1760.034		E / 10 µl	25
95.1760.044		L / 300 µl	20

* pipette tips on pp. 106-107

Tip StackPack and refill trays



No need to load tips yourself - the Tip StackPack reload system

Flexible, efficient and easy to handle

Tips are preloaded in trays of 96 tips each, which are stacked on top of each other, reducing packaging waste and storage space by more than 50%.

- Cost-effective and eco-friendly
- For high throughput, tips can be used directly from the stack. Safety labels applied on both sides can be easily perforated to access the next layer of tips.
- No adjustment aid required for insertion of a layer of 96 tips of the Tip StackPack into the Tip SystemBox, e.g. for autoclaving individual 96-tip trays.

Order No.	Description	Volume	Colour code	Packaging
70.1130.460		10 µl		576/StackPack 2,304/case
70.1130.600		10 µl		576/StackPack 2,304/case
70.760.452		200 µl		480/StackPack 1,920/case
70.760.502		200 µl		480/StackPack 1,920/case
70.760.451		250 µl		480/StackPack 1,920/case
70.760.501		250 µl		480/StackPack 1,920/case



Empty boxes to load with non-sterile bulk tips 1,000 - 1,250 µl tips

Order No.	Type	Empty Box	Packaging pcs./case
95.1762	B, H for 1,000 µl tip (Order No. 70.762)	Base section, tray, lid	10
95.1763	M for 1,250 µl tip (Order No. 70.1186)	Base section, tray, lid	8

The quality solution concept for automated liquid handling

- Each production batch is tested for functionality and precision on Biomek robotic instruments to ensure a consistently superior product quality
- All tips are certified DNase- and human DNA-free
- Sterile tips are also tested to be non-pyrogenic/endotoxin-free
- The coloured boxes enable easy identification of tips and volumes

Pipette tips for Biomek 1000 · 2000

Product	Volume	Tray colour code	Tip with Filter, sterile	Tip without Filter, non-sterile	Tip without Filter, sterile	Packaging
	20 µl		70.1140.211	----	----	96/rack 4,800/case
	20 µl		----	70.1140.101	70.1140.201	
	175 µl		70.1142.211	----	----	96/rack 4,800/case
	250 µl		----	70.1142.101	70.1142.201	

Pipette tips for Biomek FX^(P)/NX^(P) · 3000 · 4000

Product	Volume	Tray colour code	Tip with Filter, sterile	Tip without Filter, non-sterile	Tip without Filter, sterile	Packaging
	20 µl		70.1140.212	----	----	96/rack 4,800/case
	20 µl		----	70.1140.102	70.1140.202	
	35 µl		70.1141.212	----	----	96/rack 4,800/case
	50 µl		----	70.1141.102	70.1141.202	
	175 µl		70.1142.212	----	----	96/rack 4,800/case
	250 µl		----	70.1142.102	70.1142.202	

Important notes on autoclaving:

Products made from PP can be autoclaved up to 121°C without significantly impairing their mechanical properties. Users are to test for themselves if autoclaving may have any effect on other characteristic product features so as to influence the individual application concerned.



- Versatile application when transferring liquid in laboratories
- No risk of injury or infection from broken glass
- Single-use, no carry over or cross contamination
- Practical graduation for sample distribution
- Can be heat-sealed for sample storage and transport
- Polyethylene is a pure hydrocarbon compound, environmentally neutral, ensuring non-toxic disposal

Transfer pipettes from LD-PE

Order No.	Type	Length mm	Bulb Volume	Drop Size	Graduation	Packaging pcs./case
86.1174	A	152	6.0 ml	40-55 µl	–	1,600
86.1171	B	155	3.5 ml	35-55 µl	0.5 - 3.0 ml 3:0.50 (steps of 0.5 ml)	2,000
86.1172	C	156	3.5 ml	30-45 µl	0.25 - 1.0 ml 1:0.25 (steps of 0.25 ml)	2,000
86.1173	D	155	3.5 ml	30-45 µl	–	2,000
86.1175	E	146	6.0 ml	20-30 µl	–	1,600
86.1176	F	154	2.0 ml	35-45 µl	–	3,000
86.1170	G	115	1.0 ml	45-55 µl	0.1 - 0.3 ml 1:0.1 (steps of 0.1 ml)	2,000
86.1180	H	104	1.0 ml	17-22 µl	–	3,000
86.1179	I	87	1.0 ml	30-45 µl	–	3,000



Transfer pipettes from LD-PE, individually wrapped and sterile

Order No.	Type	Length mm	Bulb Volume	Drop Size	Graduation	Packaging pcs./case
86.1171.001	B	155	3.5 ml	35-55 µl	0.5 - 3.0 ml 3:0.50 (steps of 0.5 ml)	840
86.1172.001	C	156	3.5 ml	30-45 µl	0.25 - 1.0 ml 1:0.25 (steps of 0.25 ml)	840
86.1175.001	E	146	6.0 ml	20-30 µl	–	840

Transfer pipettes from LD-PE, 10 per bag, sterile

Order No.	Type	Length mm	Bulb Volume	Drop Size	Graduation	Packaging pcs./case
86.1171.010	B	155	3.5 ml	35-55 µl	0.5 - 3.0 ml 3:0.50 (steps of 0.5 ml)	1,200
86.1172.010	C	156	3.5 ml	30-45 µl	0.25 - 1.0 ml 1:0.25 (steps of 0.25 ml)	1,200
86.1175.010	E	146	6.0 ml	20-30 µl	–	1,000

LD-PE = Low Density polyethylene

Different sizes of sterile wrapped transfer pipettes are available on request.

Maximum purity for optimal safety in preanalytics

The new Forensic Swabs from Sarstedt are suited for the collection of both reference samples and evidence of DNA traces at crime scenes. Apart from Forensic Swabs with polystyrene stem, our range also includes a wooden stem option. The Forensic-Swab L has an extended handle for the hygienic collection of reference samples. The Forensic-Swab XL with extended stem is ideal for the collection of evidence in sexual assault cases. A pointed swab is available to collect evidence samples under finger nails.

Forensic Swab

- DNA-free
- EtO sterilised
- Self-drying within the tube
- Individually wrapped, sterile, or with tamper-proof closure



Free of DNA

The Forensic Swab is produced under the most stringent hygienic purity conditions. The completely assembled swab is then individually wrapped and the final product subjected to a special EtO sterilisation procedure developed for forensic applications.

With a test procedure based on a **detection limit of 0.05 ng DNA/µl extracted** volume, absence of DNA is now guaranteed. A 73 bp amplicon also enables the detection of partly degraded DNA (target gene: human cytochrome oxidase).

Drying behaviour

The ventilation membrane in the tube base enables self-drying of the swab within the tube. Drying of the swab in the open, i.e. outside the tube as in standard systems, is unnecessary, thereby excluding the risk of mix-up and contamination. A dry swab prevents bacteria and mildew growth, which make analysis impossible and destroy the sample.

Order No.	Description	Ø/Length mm	Stem Material/Length mm	Swab Material	Packaging pcs./case
80.629	Forensic Swab	15/102	Polystyrene/90	Viscose	1 piece/paper-plastic • 100/box • 500/case
80.629.001	Forensic Swab	15/102	Wood/95	Cotton	1 piece/paper-plastic • 100/box • 500/case
80.629.101	Forensic swab, pointed	15/102	Wood/95	Cotton	1 piece/paper-plastic • 100/box • 500/case
80.630	Forensic Swab L	12/105	Polystyrene/85	Viscose	1 piece/tamper-proof closure • 50/box • 500/case
80.634	Forensic Swab XL	12/150	Polystyrene/125	Viscose	1 piece/tamper-proof closure • 50/box • 500/case



Neutral transport swabs, sterile

- For use on intact skin and in natural body openings
- Ideal for transportation
- Long and short stem versions available
- Loosely packed in PE bags, sterile

Order No.	Ø/Length mm	Stem Material/Length mm	Swab Material	Packaging
80.625	16.5/101	Polystyrene/90	Viscose	500/bag 500/case
80.628	17/130	Wood/120	Cotton	100/bag 500/case
80.1301	12/155	Polystyrene/130	Viscose	100/bag 1,000/case
80.1303	12/155	Alu/130	Viscose	100/bag 1,000/case

Transport swab with transport medium

- Transport tube and swab individually wrapped and sterile in practical easy-peel pack
- Transport medium in accordance with DIN 58942, Part 4 TP-AL
- Maximum protection for even the most fastidious organisms during prolonged transport
- Suitable for aerobic and anaerobic organism
- Aluminium wire or plastic stem versions available

Transport swabs with Amies transport medium, sterile

Order No.	Ø/Length mm	Stem Material/Length mm	Swab Material	Packaging
80.1361	12/155	Polystyrene/145	Viscose	50/bag 500/case
80.1363	12/155	Alu/145	Viscose	50/bag 500/case

Transport swabs with Amies transport medium and charcoal, sterile

Order No.	Ø/Length mm	Stem Material/Length mm	Swab Material	Packaging
80.1362	12/155	Polystyrene/145	Viscose	50/bag 500/case
80.1366	12/155	Alu/145	Viscose	50/bag 500/case

Petri dishes for bacteriology

- Clear polystyrene, heat-resistant to approx. 80°C, good stackability
- Perfect for use in automated plate filling systems

Order No.	Ø/Height mm	Ventilation Cams	Packaging 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 2 compartments

Order No.	Ø/Height mm	Ventilation Cams	Packaging bag/case
82.1195	92/16	with	20/480

Petri dishes, coloured, with ventilation cams

Order No.	Ø/Height mm	Colour	Packaging bag/case
82.1473.020	92/16	red 	20/480
82.1473.040	92/16	yellow 	20/480
82.1473.060	92/16	blue 	20/480
82.1473.080	92/16	green 	20/480

Petri dish, square

Order Number	L x W x H mm	Ventilation Cams	Packaging bag/case
82.9923.422	100 x 100 x 20 gamma-sterile	without	4/160

DishRack for Petri dishes 92/16 on p. 119.



DishRack 50 from polycarbonate for up to 52 Petri dishes Ø 92

Order No.	Colour	Height mm	Packaging pcs./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

Replacement elastic silicone strips, **Order Number 93.1647.050**

DishRack 80 from polycarbonate for up to 88 Petri dishes Ø 92

Order No.	Colour	Height mm	Packaging pcs./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


Replacement elastic silicone strips, **Order Number 93.1647.050**.

While the DishRacks are basically autoclavable, repeated autoclaving (at least 3 times) may cause tension cracks at the riveted joints. These cracks do not have any adverse effect on rack stability.



Gamma-sterile inoculation loops, inoculation needles and inoculation spreader from polystyrene

- Time-saving for high work loads
- Easy to use
- Safe – no pathogenic aerosol and cross contamination
- Sterile

Order No.	Description	Colour	Packaging
86.1562.010	10 µl loop	blue 	10/peel pack 1,000/case
86.1562.050	10 µl loop	blue 	48/peel pack 1,920/case
86.1567.010	1 µl loop	white 	10/peel pack 1,000/case
86.1567.050	1 µl loop	white 	48/peel pack 1,920/case
86.1568.010	needle	orange 	10/peel pack 1,000/case
86.1568.050	needle	orange 	50/peel pack 2,000/case
86.1569.001	inoculation spreader	blue 	1/bag 500/case
86.1569.005	inoculation spreader	blue 	4/peel pack 500/case

Petri Dish Organisation and Transfer System

POS 720 and PTS represent important milestones in automation in microbiological laboratories with average to high sample throughput.

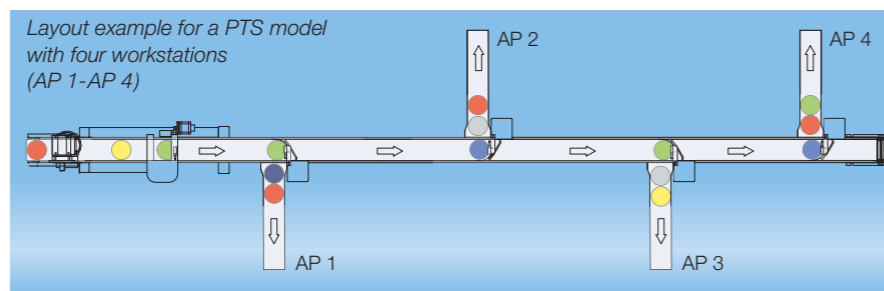
In a fully automatic process, up to 700 Petri dishes per hour are labelled, stacked in sets, and transported to individual workstations.

Labelling and reading errors are reduced and processing procedures are made transparent, improving quality and competitiveness.

- Individual requests for dish sets from the workstation
- POS 720
 - Selects agar dishes from stock
 - Labelling and printing function
 - Compiles plate sets to stacks
- PTS
 - Transports plate stacks to working stations

Petri Dish Transfer System PTS

The Petri Dish Transfer System PTS transports the dish stacks pre-sorted by the POS 720 to the individual workstations. All sample preparation processes required for analysis can be carried out at integral workstations. There is no need for repeated manual handling of the basic material leading to more efficiency.



Gas samplers are used for volume corrected sampling of gaseous material for emission and immission measurements, for tracing workplace pollutants, and for examining process gases. Monitoring and documenting air quality is increasingly important in many working areas of hospitals as well as in the pharmaceutical, cosmetics and food industry.

Gas Sampler

Order No.	Description	Packaging pcs.
90.170.300	GS 312, gas sampler, incl. mains adapter GN 100-240 V/12 V	1
90.170.310	GS 212, gas sampler, without mains adapter	1
90.170.185	Mains adapter GN 100-240 V/12 V	1
90.170.350	GS 301, gas sampler, incl. mains adapter GN 100-240 V/12 V without changer	1
92.170.352	Sampler changer, type B/G for GS 301, for tube 7 x 125 mm	1
92.170.353	Sampler changer, type N for GS 301, for tube 6 x 70 mm	1
92.170.354	Sampler changer, type ATD for GS 301, for tube 6 x 89 mm	1
92.170.356	Sampler changer, type W for GS 301	1
90.170.180	GB 12, 12 V battery pack, power supply 230 V	1

Wash bottle and accessories on request



Germ Sampler

Order No.	Description	Packaging pcs.
90.170.370	GS 100, germ sampler, 230 V	1
92.170.375	Header GS 100	1
92.170.390	Transport case GS 100	1

Laboratory Products

Laboratory Products

Sarstedt quality seal for cell and tissue culture products

Today, cell and tissue cultures are not only used in fundamental research, but increasingly also in applied biotechnology and in clinical and pharmaceutical research. Products of the highest possible purity and quality are required for toxicity tests, quality controls of biochemical processes, industrial production systems (e.g. production of monoclonal antibodies) and many more applications. Compliance with strict purity standards is essential for reliability and consistency for *in-vitro* applications. For more than 25 years Sarstedt has produced a wide range of certified cell culture consumables to meet these requirements.



Come Grow With Us

Since 1990, Sarstedt has offered high-quality cell culture products, produced in clean room conditions by trained personnel using protective clothing and automated production processes.

In accordance with our basic principle that products which come into contact with cells must not have a disruptive influence on the cells, these products are produced under the strictest clean room conditions and are labelled with the "Come Grow With Us" quality logo. The cell culture products meet the following requirements:

- **Sterile**
In accordance with DIN EN ISO 11137 – "Sterilisation of medical devices – Validation and routine control of sterilisation by radiation"
- **Non-pyrogenic/endotoxin-free**
Based on the LAL test as per the FDA guideline for medical devices, detection limit < 0.06 EU/ml
- **Non-cytotoxic**
In accordance with DIN EN ISO 10993 – "Biological Evaluation of Medical Devices – Part 5 Test on *in-vitro* cytotoxicity"



Come Grow With Us Cryo (see p. 138)

During "vital preservation" in CryoPure tubes, cell and tissue samples must not be subjected to additional contamination risks from interfering substances. Upon successfully meeting stringent testing criteria, Sarstedt CryoPure tubes are certified as follows:

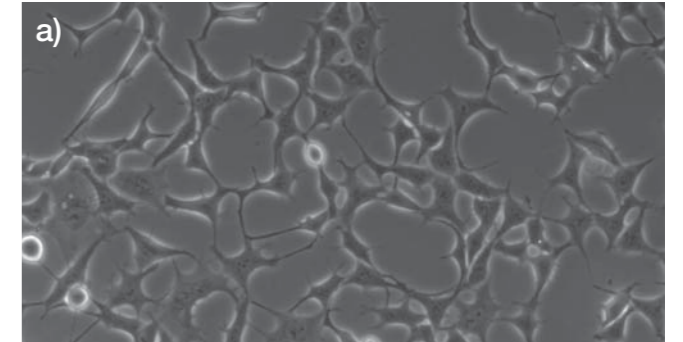
- **Sterile**
In accordance with DIN EN ISO 11137 – "Sterilisation of medical devices – Validation and routine control of sterilisation by radiation"
- **Non-pyrogenic/endotoxin-free**
Based on the LAL test as per the FDA guideline for medical devices, detection limit < 0.06 EU/ml
- **Non-cytotoxic**
In accordance with DIN EN ISO 10993 – "Biological Evaluation of Medical Devices – Part 5 Test on *in-vitro* cytotoxicity"
- **Non-mutagenic**
The evidence for estimating freedom from mutagens was carried out according to the Ames Test II
- **IVD** **CE**

Sarstedt growth surfaces and colour coding

A basic requirement for the successful cultivation of cells *in-vitro* is to simulate the *in-vivo* environment of the relevant cell type as accurately as possible. For cell culture cells, the surface condition of the culture vessel is particularly important, because many cell types can only survive, proliferate and differentiate following successful adhesion. In order to meet the requirements for as many different cell types as possible, Sarstedt offers flasks, dishes and plates with three different growth surfaces. The products are labelled as follows according to the Sarstedt colour coding system in order to allow for clear identification of the vessels, even after removal from the packaging:

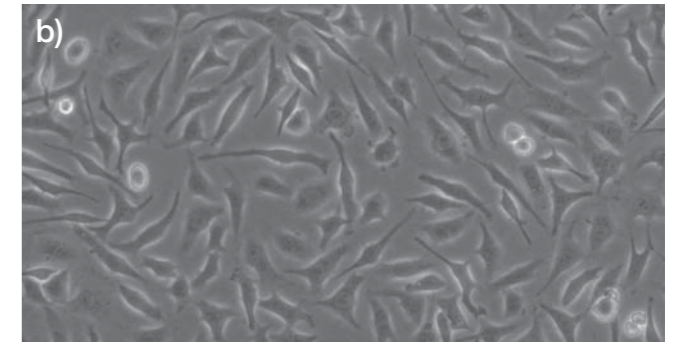
Sarstedt standard surface for adherent cells

Hydrophilic groups are introduced into the surface via a special treatment of the polystyrene surface. This allows for the formation of cell surface proteins and therefore the adhesion of the cells to the plastic surface. The hydrophilic standard growth surface, which is coded red, therefore provides an optimum culture substrate for many adherent cells.



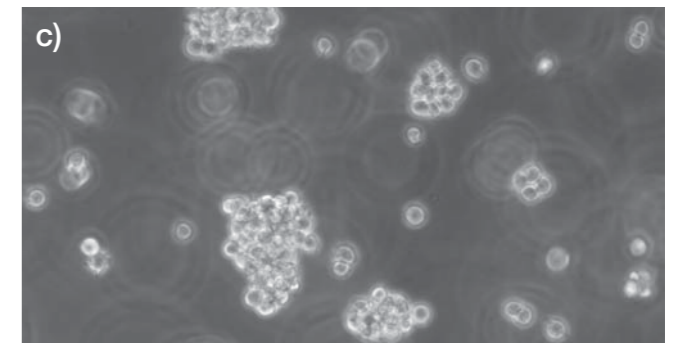
Sarstedt Cell+ surface for sophisticated adherent cells

Primary cells, sensitive cell culture lines and cells which are cultivated under serum-reduced/serum-free conditions have particularly high requirements for the surface of the cell culture vessel. The yellow-coded Cell+ growth surface was developed specifically for these cells. Additional polar groups are introduced into the hydrophilic surface via special treatment of the plastic surface. This leads to improved imitation of the *in-vivo* environment and therefore to the adhesion of sophisticated cells. Due to its properties, the Cell+ surface can make the use of coated culture vessels redundant in many cases.



Sarstedt suspension culture surfaces

Culture vessels with the green, hydrophobic growth surface are ideally suited for suspension cells (usually cells of lymphoid origin, hybridoma cells etc.) which are not adherently cultivated in solution. The hydrophobic surface minimises cell losses during sub-cultivation due to unwanted microadhesion.



100 µm

The cultivation of various cell types on Sarstedt growth surfaces clearly shows the vitality of the various cell types*. a) HEK293 cells cultivated on the standard TC surface. b) HUVEC cells (primary endothelial cells) cultivated on the Cell+ surface. c) Jurkat cells cultivated on the suspension culture surface. The photos were taken after 48 h (a, b) or after 24 h (c). The measuring bar corresponds to 100 µm.

* A list of successfully cultivated cells for the various growth surfaces is available upon request.

Tissue culture flasks




For cell culture, Sarstedt offers flasks with a growth surface of 25 cm², 75 cm² and 175 cm². All tissue culture flasks are made of high-quality, transparent polystyrene, which is processed into a flat growth surface ideally suited for microscopic observation. All tissue culture flasks are tested and certified according to the "Come Grow With Us" quality seal (see p. 122).



Product characteristics of the redesigned Sarstedt tissue culture flasks

The new, optimised flask geometry has the following characteristics:

- Accessibility of all corners with serological pipettes and cell scrapers. **1**
- Large labelling fields on both sides of the neck and both printed white and engraved graduation marks facilitate use of the product. **2**
- High stability against overturning reduces the contamination risk. In addition, the stacking edge applied to the flasks allows for secure positioning of flasks placed on top of each other.
- The optimised, canted flask neck and the anti-drip rim allow for easy tilting of the medium, without the risk of contamination from medium spilling over. **3**
- Lot no. and expiration date are printed on each flask which allows for easy traceability after removal from the packaging. **4**
- All Sarstedt tissue culture flasks are offered with three different growth surfaces and can be clearly identified by the coloured lids:

-  red = adherent cells
-  yellow = sensitive, adherent cells
-  green = suspension cells



Quick release cap

The Quick-Release cap is particularly user-friendly, because only a 1/3 turn is needed for closing or opening.

When handling cell culture flasks it is quite common to position the Quick-Release cap loosely onto the neck. In order to prevent inadvertent rotation of the smooth-running thread a "stop" has been integrated into the Quick-Release cap. This evident "stop" is overcome when screwing the cap onto the flask. The ribbed Quick-Release cap is available in two designs:

- The **two-position screw cap** allows for the gas-tight sealing of the flasks when in the closed position, while in the ventilation position cells can be cultivated with even gas exchange (arrows point up and down). A recognisable click confirms that the cap has been secured against falling off during incubation. A gap in the ribbing and arrows on the cap allow for simple haptic and visual checking of the closure position when working and in the incubator. There is no need for lengthy manual checking of stacked flasks in the incubator to ensure the caps are in the right position.



- The **vent cap** has a filter with a pore size of 0.2 µm, which ensures constant, sterile gas exchange. Due to the hydrophobic filter properties, the risk of contamination is minimised at the same time.

Tissue culture flasks

The tissue culture flasks are packed in a bag with a re-sealable mini-grip, which is closed with a tamper-evident seal until it is opened for the first time.



Order No.	Colour code	Growth surface [cm ²]	Cap	Recommended working volume [ml]	Max. Volume [ml]	Packaging bag/case
83.3910		25	non-vented	7	12.5	10/300
83.3910.002		25	vented	7	12.5	10/300
83.3911		75	non-vented	21	55	5/100
83.3911.002		75	vented	21	55	5/100
83.3912		175	non-vented	50	125	5/40
83.3912.002		175	vented	50	125	5/40
83.3910.300		25	non-vented	7	12.5	10/300
83.3910.302		25	vented	7	12.5	10/300
83.3911.300		75	non-vented	21	55	5/100
83.3911.302		75	vented	21	55	5/100
83.3912.300		175	non-vented	50	125	5/40
83.3912.302		175	vented	50	125	5/40
83.3910.500		25	non-vented	7	12.5	10/300
83.3910.502		25	vented	7	12.5	10/300
83.3911.500		75	non-vented	21	55	5/100
83.3911.502		75	vented	21	55	5/100
83.3912.500		175	non-vented	50	125	5/40
83.3912.502		175	vented	50	125	5/40

Accessories

Order No.	Colour code	Cap	Description	Packaging bag/case
83.3990.025		non-vented	for T 25	25/100 • ind. wrapped, sterile
83.3990.075		non-vented	for T 75	25/100 • ind. wrapped, sterile
83.3990.175		non-vented	for T 175	25/100 • ind. wrapped, sterile



Tissue culture dishes

For the cultivation of cells in tissue culture dishes, Sarstedt offers 35 mm, 60 mm, 100 mm and 150 mm dishes, which have been tested and certified according to the "Come Grow With Us" quality seal (see p. 122). The dishes are produced from high-quality, transparent polystyrene, meaning that a planar growth surface of excellent transparency is produced which allows for visual inspection of cell growth.



Product characteristics of the redesigned Sarstedt tissue culture dishes

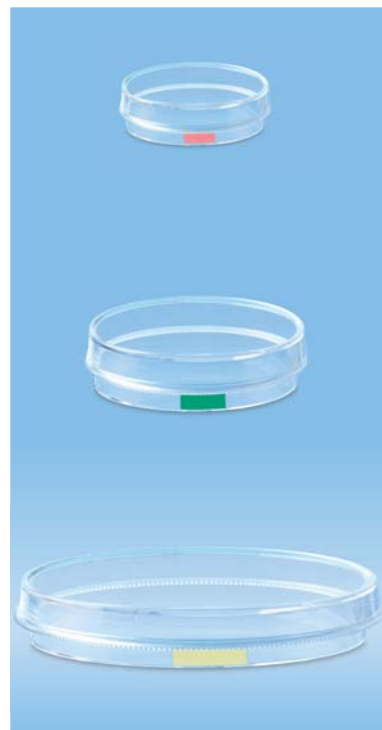
The new, optimised tissue culture dishes have the following characteristics:

- The new **SUREGrip** is a raised, notched ring around the dish base that allows for secure and convenient handling of the two parts of the dish, even when stacked. **1**
- Reduced contamination risk due to the handling of both dish and lid.
- Clearly visible and tangible arrows on the lid and dish allow for correct positioning of the two parts towards each other. **2**
- The continual gas exchange and the secure fit of the lid are ensured by ventilation cams on the underside of the lid.
- Distinct stacking rings on the lid and base allow for secure stacking of several dishes.
- For cloning experiments, Sarstedt offers 35 mm and 60 mm dishes with grid. **3**
- For better traceability, even after removal from the packaging, each dish is labelled with the colour code as well as the lot no. and expiration date. **4**
- All tissue culture dishes are available with three different growth surfaces:

- red = adherent cells
- yellow = sensitive, adherent cells
- green = suspension cells



The tissue culture dishes are packed in a bag with a re-sealable mini-grip, which is closed with a tamper-evident seal until it is opened for the first time.



Order No.	Colour code	Ø/Height [mm]	Growth surface [cm ²]	Grid	Recommended working volume [ml]	Packaging bag/case
83.3900		35/10	8	without	3	10/500
83.3900.002		35/10	8	with	3	10/500
83.3901		60/15	21	without	5	10/500
83.3901.002		60/15	21	with	5	10/500
83.3902		100/20	58	without	13	10/300
83.3903		150/20	152	without	36	5/100
83.3900.300		35/10	8	without	3	10/500
83.3901.300		60/15	21	without	5	10/500
83.3902.300		100/20	58	without	13	10/300
83.3903.300		150/20	152	without	36	5/100
83.3900.500		35/10	8	without	3	10/500
83.3901.500		60/15	21	without	5	10/500
83.3902.500		100/20	58	without	13	10/300

Cell scrapers

For easy and complete recovery of adherent cells

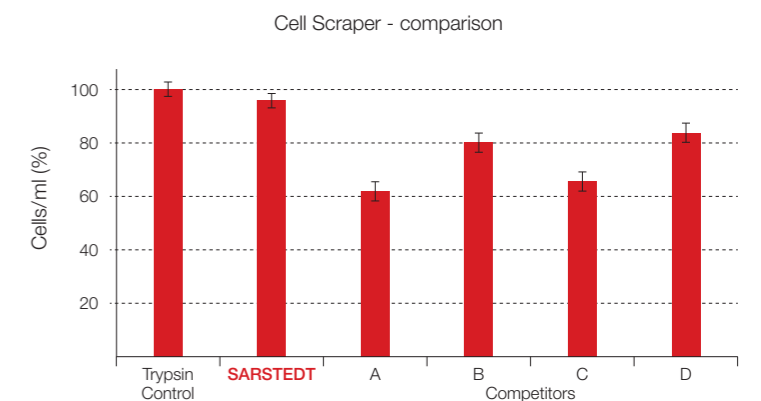


Sarstedt cell scrapers are used for easy and gentle removal of an intact cell monolayer from tissue culture flasks, dishes, plates and tubes. The smooth, flexible blade minimises the occurrence of cell damage and therefore represents a suitable and quick alternative to enzymatic detachment of the cell monolayer.

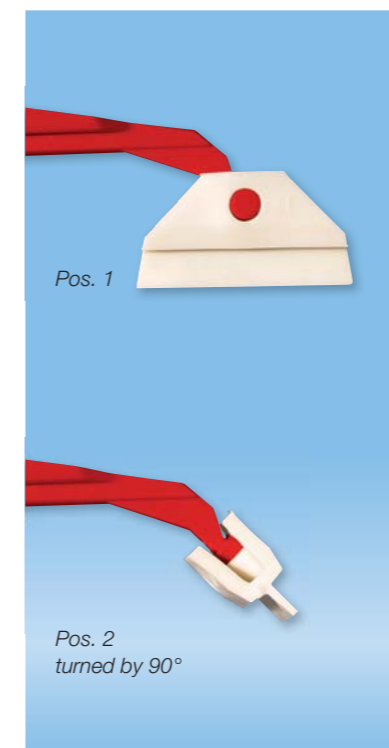
- The blades of the Sarstedt cell scrapers are made of a highly flexible, rubber-like, non-toxic material.
- Individual sterile packaging.
- The particularly thin blade and the polypropylene grip are available in various sizes in order to permit easy use even in culture vessels which are difficult to access.
- Depending on the desired use, the blade can be brought into the scraper or lifter position in order to remove the cells from the surface.

Comparison of the Sarstedt cell scrapers with four competitor cell scrapers:

The graph shows that, in comparison with the trypsin control, the highest cell number per ml can be detached when using the Sarstedt cell scraper (96%). With the competitor products (A, B, C and D), the cell yields were between 62% and 84% in comparison with the trypsin control. The quality of the cell scrapers was compared by cultivating cells under the same conditions and harvesting them using the same technique. The cell vitality, on the other hand, was around 95% for all cell scrapers.



Ordering information - Cell scraper



Order No.	Description	Blade length [cm]	Total scraper length [cm]	Range of application	Packaging blister/box
83.1832	Cell scraper with two-position blade	1.35	16.0	<ul style="list-style-type: none"> • Tissue culture flasks: T-25 • 24-well, 12-well, 6-well plates • Tissue culture dishes, tissue culture tubes 	1/100
83.1830	Cell scraper with two-position blade	1.7	25.0	<ul style="list-style-type: none"> • Tissue culture flasks: T-75 • Tissue culture dishes: 35 x 10 / 60 x 15 • 6-well plates, 12-well plates 	1/100
83.1831	Cell scraper	3.1	39.4	<ul style="list-style-type: none"> • Tissue culture flasks: T-175 • Roller bottles • Tissue culture dishes: 100 x 20 / 150 x 20 • 6-well plates 	1/100

For multiple cultivation on an average to small scale, Sarstedt offers tissue culture plates with 6, 12, 24, 48 and 96 wells. The plates are produced from high-quality, transparent polystyrene and are characterised by flat wells and a high uniformity of the entire plate. The highly transparent base is suitable for microscopic measurements from below. All tissue culture plates are tested and certified according to the "Come Grow With Us" quality seal (see p. 122).



Product characteristics of the redesigned Sarstedt tissue culture plates

The external dimensions of the new Sarstedt tissue culture plates correspond to the ANSI/SLAS (formerly SBS) standard and can be used for analyses in holding devices with these dimensions. Further characteristics of the plates are as follows:

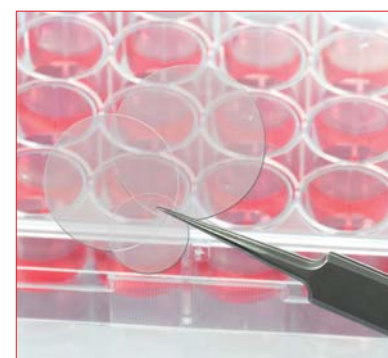
- For better traceability, even after removal from the packaging, each plate is labelled using the colour code as well as the lot no and expiration date. **1**
- In order to ensure quick identification when filling the wells, the wells are alphanumerically labelled on the edge **2** and in the areas between the wells **3**.
- Free-standing wells reduce the risk of contamination when using a pipette. **2** & **3**
- Non-slip side grids in the base make it easier to securely grab the entire plate. The transparent side walls of the base enable visual inspection of the medium. **4**
- Both air vents and condensation rings are integrated into the lid, and these combine to ensure constant gas exchange and simultaneously minimise evaporation.
- All tissue culture plates are available with three different growth surfaces:

- red = adherent cells
- yellow = sensitive, adherent cells
- green = suspension cells

- All Sarstedt tissue culture plates are individually wrapped, sterile. In addition, the tissue culture plates with standard Sarstedt growth surface (red, flat base) are available 5 pcs. per bag.



Highly transparent coverslips for cell cultivation



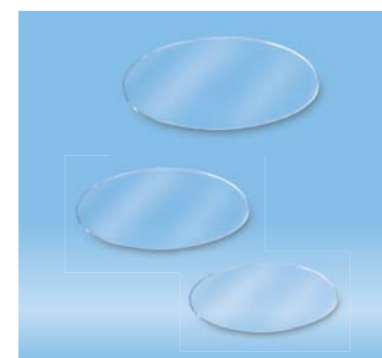
Whenever adherent cells need to be cultivated in sterile conditions, fixed, dyed and subsequently placed under a microscope on a small surface, Sarstedt coverslips are the ideal solution. The two-side surface treatment and the good optical quality of the modified plastic material allow for simple and effective handling.

- Highly transparent plastic coverslips
- Available in 13, 22 and 25 mm Ø
- Thickness: 0.2 mm
- Surface treatment on both sides (red standard surface)
- Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic



Order No.	Colour code	Number of wells	Base shape	Growth surface per well [cm ²]	Working volume [ml]	Packaging blister/case
83.3920		6	□	8.87	4	1/50
83.3920.005		6	□	8.87	4	5/100
83.3921		12	□	3.65	2	1/50
83.3921.005		12	□	3.65	2	5/100
83.3922		24	□	1.82	1	1/50
83.3922.005		24	□	1.82	1	5/100
83.3923		48	□	0.64	0.5	1/50
83.3923.005		48	□	0.64	0.5	5/100
83.3924		96	□	0.29	0.2	1/50
83.3924.005		96	□	0.29	0.2	5/100
83.3925		96	U	-	max. 0.31	1/50
83.3926		96	V	-	max. 0.29	1/50
83.3920.300		6	□	8.87	4	1/50
83.3921.300		12	□	3.65	2	1/50
83.3922.300		24	□	1.82	1	1/50
83.3923.300		48	□	0.64	0.5	1/50
83.3924.300		96	□	0.29	0.2	1/50
83.3920.500		6	□	8.87	4	1/50
83.3921.500		12	□	3.65	2	1/50
83.3922.500		24	□	1.82	1	1/50
83.3923.500		48	□	0.64	0.5	1/50
83.3924.500		96	□	0.29	0.2	1/50
83.3925.500		96	U	-	max. 0.31	1/50
83.3926.500		96	V	-	max. 0.29	1/50

The sterile coverslips can be used in various products for cell cultivation:



Order No.	Description	Colour code	Ø [mm]	35x10 dish	6-well plate	12-well plate	24-well plate	Packaging pcs./case
83.1840	Coverslips		25	✓	✓	✗	✗	200
83.1840.001	Coverslips		22	✓	✓	✗	✗	200
83.1840.002	Coverslips		13	✓	✓	✓	✓	200

The miniPERM® is an easy-to-handle bioreactor which was developed for the cultivation of eukaryotic cells (mammalian, insect and plant cells) in high density and therefore for biomass production and for the production of cell products. The sub-division of the bioreactor into production and nutrient modules and the rotating cultivation allow for the production of highly concentrated cell products in small volumes. Therefore, depending on the cell line, cell densities of more than 10⁷ cells/ml and product concentrations of several mg/ml can be achieved. This means that the miniPERM® bioreactor is a cost-effective and time-saving alternative to using conventional roller bottles and fermentation systems.

Advantages of the miniPERM® bioreactor at a glance:

- High cell densities
- High product concentrations
- Multiple harvests
- Easy to use

The miniPERM® bioreactor is suitable for a number of applications*, such as

- Cultivation of hybridoma cells for obtaining antibodies.
- Cultivation of transfected cells for obtaining recombinant proteins or for virus production.
- Biomass production

Thanks to these characteristics, the miniPERM® bioreactor has already been used for many diverse applications.

*References:

Belin, V., Rousselle, P., Production of a recombinantly expressed laminin fragment by HEK293-EBNA cells cultured in suspension in a dialysis-based bioreactor, *Protein Expression & Purification*, 48: 43–48 (2006)
 Konstantinov, S. et al., Three-Dimensional Bioreactor Cultures: A Useful Dynamic Model for the Study of Cellular Interactions, *Ann. N. Y. Acad. Sci.* 1030: 103–115 (2004)
 Further references and user reports are available upon request.



miniPERM® production modules for suspension cells

- miniPERM® classic, with 35 ml cell culture volume, is the ideal production unit for research laboratories.
- miniPERM® HDC50, with 50 ml culture volume, is suitable for the production of larger protein and biomass amounts.

miniPERM® production modules for adherent cells

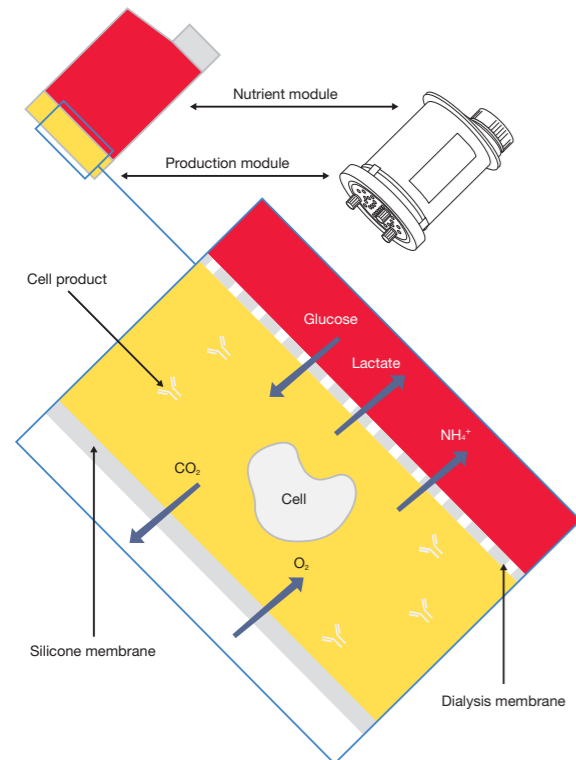
- miniPERM® SM is suitable for the cultivation of adherent cells via two stationary matrices in the production module (240 cm² cultivation area).

Order No.	Description	Packaging unit/case
94.6001.059*	miniPERM® classic Bioreactor, sterile	12
94.6077.009	miniPERM® classic Test Kit**, sterile	1
94.6001.055*	miniPERM® classic Production module, sterile	12
94.6077.121*	miniPERM® HDC 50 Bioreactor, sterile	12
94.6077.122	miniPERM® HDC 50 Test Kit**, sterile	1
94.6077.017*	miniPERM® HDC 50 Production module, sterile	12
94.6077.618*	miniPERM® SM Bioreactor, sterile	12
94.6077.609	miniPERM® SM Test Kit**, sterile	1
94.6077.616*	miniPERM® SM Production module, sterile	12

* Non-pyrogenic/endotoxin-free, non-cytotoxic

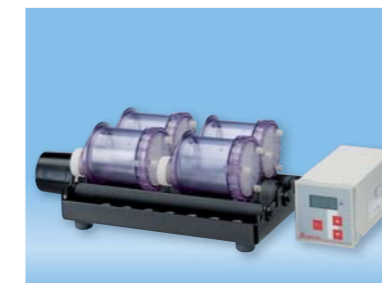
**4 bioreactors + start-up support kit (94.6001.094)

Order No.	Description	Packaging unit/case
94.6001.153	Nutrient module for miniPERM®, autoclavable.	4
94.6001.054	Stands for miniPERM®	4
94.6001.036	Screw caps for production module, sterile	6
94.6077.037	Screw cap for nutrient module, sterile	16
74.4312	IN plugs, septum port, sterile	100
94.6077.135	Luer syringe needles 25G x 5/8" (0.5 x 16 mm), sterile	100
94.6077.136	Single use 2 ml Luer Syringe sterile	100
94.6077.137	Single use 50 ml Luer Lock Syringe, sterile	60
94.6077.138	Filling tube 5", Luer, sterile	100
94.6077.320	antiFOAM®, sterile, 100 ml	1
94.6077.041	cellPROTECT®, sterile, 100 ml	1
94.6001.094	Start-up support kit	1
	• Single use 50 ml Luer Lock Syringe, sterile	8
	• Single use 2 ml Luer Syringe, sterile	20
	• Filling tube 5", Luer, sterile	8
	• Luer syringe needle, 25G x 5/8", sterile	20
	• Septum port, sterile	6
	• Stand for miniPERM®	1
	• cellPROTECT®, 1 ml, sterile	1
	• antiFOAM®, 5 ml, sterile	1



The principle

The miniPERM® bioreactor is subdivided into a production module and a nutrient module (two-compartment system) by a dialysis membrane. The dialysis membrane has a cut off size of 12.5 kDa so that neither cells nor secreted cell products can diffuse into the nutrient module. At the same time, the exchange of nutrients and cell metabolites takes place via the dialysis membrane. The gas exchange is effected via a thin, gas-permeable silicone membrane on the outer side of the production module.



Universal Turning Device

Order No.	Description	Packaging unit/case
94.6001.061	Universal turning device 115/230 V	1

lumox® - Advantages at a glance

- Low autofluorescence and high light transmission in comparison with conventional polystyrene or glass bases
- Ideal for microscopic and automated analyses of living or immunofluorescence-stained cells
- The gas-permeable lumox® film base enables optimal gas exchange due to minimal diffusion paths
- Very good cell adhesion due to treated surface



Laboratory Products



lumox® dish - The gas-permeable cell culture dish

- A lumox® dish consists of a frame and lid made of clear polystyrene, and the transparent, gas-permeable lumox® film base (25 µm)
- Two different growth surfaces:
 - red = for adherent cells
 - green = for suspension cells
- lumox® dish sizes: 35 mm and 50 mm
- Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic

Order No.	Description	Surface	Ø/height [mm]	Working volume [ml]	Packaging inner box/case
94.6077.305	lumox® dish 50	green	50/12	5-10	50/200
94.6077.410	lumox® dish 50	red	50/12	5-10	50/200
94.6077.333	lumox® dish 35	green	35/6	2.5	50/250
94.6077.331	lumox® dish 35	red	35/6	2.5	50/250

lumox® multiwell - The multi-well plate with low autofluorescence

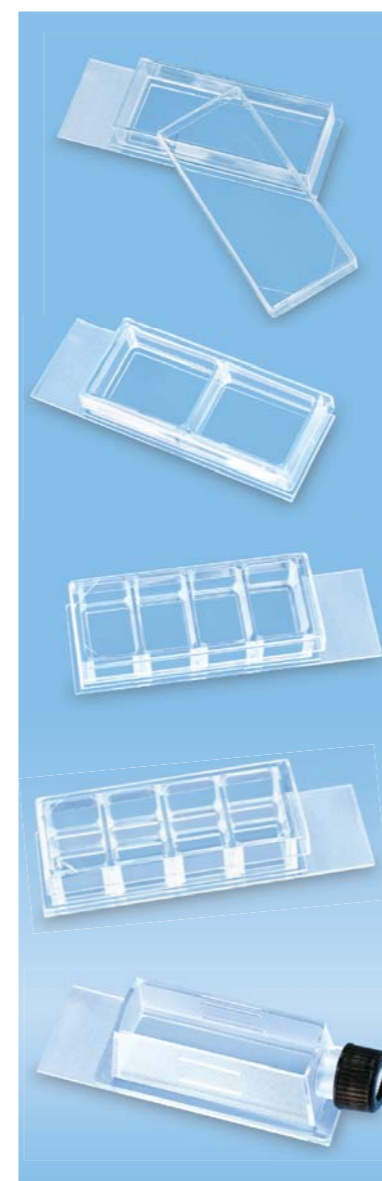
- The plates consist of a transparent lid, a black polystyrene frame and the 50 µm gas-permeable lumox® film base.
- Growth surface:
 - red = for adherent cells
- Well formats: 24 Well, 96 Well and 384 Well
- Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic

Order No.	Description	Surface	Growth surface per well [mm²]	Working volume per well [µl]	Packaging pcs./case
94.6000.014	lumox® multiwell, 24-well	red	190	500 - 1,500	4
94.6110.024	lumox® multiwell, 24-well	red	190	500 - 1,500	20
94.6000.024	lumox® multiwell, 96-well	red	34	25 - 340	4
94.6120.096	lumox® multiwell, 96-well	red	34	25 - 340	20
94.6000.034	lumox® multiwell, 384-well	red	11	10 - 130	4
94.6130.384	lumox® multiwell, 384-well	red	11	10 - 130	20

x-well Cell culture chambers

The x-well cell culture system is available in various slide material options and therefore provides the optimum surface for a multitude of microscopic cell culture analyses. Chamber slides made from PCA, glass, coverglass or lumox® film form one- and multiple-chamber vessels with different growth surfaces in combination with a polystyrene frame. The variety of the x-well cell culture chambers allows for efficient and quick conduction of parallel test series.

- Cultivation and microscopic analyses
- Immunofluorescence analyses
- Proliferation of primary cells and cell lines
- Transfection experiments
- Histological staining
- Cytotoxicity assays



x-well PCA • Detachable

The slide of the x-well PCA cell culture chambers is made of a plastic from the polyolefin family and has the advantage of a lower autofluorescence and higher chemical resistance in comparison with polystyrene.

- Very low autofluorescence
- Slide in standard format with writing area
- Slide can be detached without leaving any adhesive residues
- Optimal magnification up to 400-fold (40x objective)

x-well glass • Detachable

The standard format glass specimen slide combines ideal growth conditions for cells with outstanding optical properties. The high chemical resistance also permits the use of most fixatives and dyes.

- Very low autofluorescence
- Slide in the standard format with writing area
- Slide can be detached with a click without leaving behind any adhesive residues
- Optimal magnification up to 400-fold (40x objective)

x-well Coverglass

The x-well coverglass cell culture chambers have a base thickness of 170 µm and are therefore particularly well suited for high-resolution microscopy. The high chemical resistance enables using a wide range of staining reagents.

- Very low autofluorescence
- Slide in the short format without writing space
- Slide not detachable
- Optimal magnification up to 1,000-fold (100x objective)

x-well lumox® • Detachable

The growth surface of the lumox® x-well specimen slide is made of gas-permeable lumox® film. Due to the outstanding optical properties of the film base, lumox® products are excellent for use in microscopy and are ideally suited for fluorescence-based cell analyses.

- Ultra-thin lumox® film (50 µm)
- Very low autofluorescence
- High transparency
- Slide can be detached without leaving any adhesive residues
- Optimal 400-fold magnification (40x lens)

Format	PCA	Glass	Coverglass	lumox®	Growth surface [cm²]	Volume [ml]	Packaging blister/box
1-well	94.6140.102	94.6170.102	94.6190.102	94.6150.101	9	4	6/96
2-well	94.6140.202	94.6170.202	94.6190.202	94.6150.201	4.4	2	6/96
4-well	94.6140.402	94.6170.402	94.6190.402	94.6150.401	1.9	1	6/96
8-well	94.6140.802	94.6170.802	94.6190.802	94.6150.801	0.8	0.5	6/96
Flask	94.6140.002	94.6170.002	94.6190.002	-	9	4	6/96



flexiPERM® - Tissue culture inserts

- Subdivision of slides and tissue culture dishes (Ø 50 mm) into smaller cultivation areas
- Made from silicone
- Reusable and autoclavable
- Highly adhesive to all flat surfaces (glass, foil, plastic)
- Heat- and cold-resistant
- Non-pyrogenic/endotoxin-free and non-cytotoxic

Order No.	Description	Number of Cultivation Units	Growth Area per Cultivation Unit cm²	Fig.	Packaging
94.6011.436	micro 12	12	0.3	1	5
94.6032.039	slide	8	0.9	2	5
94.6034.067	disc	4	1.8	3	5
94.6077.434	conA	1	1.1	4	5
94.6077.435	conB	1	3.1	5	5

quadriPERM® - Tissue culture dish for parallel analyses

- Parallel cell cultivation in up to 4 compartments under identical conditions
- Made from high-grade polystyrene
- Sterilised by gamma irradiation
- Cell cultivation directly in the tissue culture dish (suspension cells) or on coated/non-coated slides (adherent cells)
- Suitable for standard (DIN) slides
- Compatible with flexiPERM® slide and micro 12
- Easy to use for cell cultivation, fixation and staining
- Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic



Order No.	Description	Cultivation area [cm²]	Max. Volume per Cultivation Unit	Packaging bag/case
94.6077.307	quadriPERM®	24.9	abt. 10 ml	12/48
94.6077.308	quadriPERM®	24.9	abt. 10 ml	12/192

Sterile vacuum filtration units and sterile bottle top filters

Time- and cost-saving solutions thanks to:

- **Polyether sulfone (PES) membrane filter:**
"High-flow" membrane for high throughput rates and low protein binding
- **Filtropur V50 and BT 50**
with 0.1 µm PES membrane for efficient prevention/removal of mycoplasmas from solutions
- **Ergonomically shaped receiver bottles**
250 ml – 1 liter with extra volume and improved stability
- **Easy product identification**
Filter material, pore size and lot number printed on the filter housing
- **Ideal for cold sterilisation of, e.g.**
- tissue culture media
- protein solutions
- **Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic**



Filtration units*

Order No.	Description	Filtration Volume	Ø Membrane	Membrane/ Pore Size	Packaging bag/case
83.1822	Filtropur V 25 vacuum filter	250 ml	60 mm	PES/0.45 µm	1/12
83.1822.001	Filtropur V 25 vacuum filter	250 ml	60 mm	PES/0.22 µm	1/12
83.1823	Filtropur V 50 vacuum filter	500 ml	90 mm	PES/0.45 µm	1/12
83.1823.001	Filtropur V 50 vacuum filter	500 ml	90 mm	PES/0.22 µm	1/12
83.1823.004	Filtropur V 50 vacuum filter	500 ml	90 mm	PES/0.1 µm	1/12
83.1824	Filtropur V 100 vacuum filter	1,000 ml	90 mm	PES/0.45 µm	1/12
83.1824.001	Filtropur V 100 vacuum filter	1,000 ml	90 mm	PES/0.22 µm	1/12

*A sterile screw cap for the collection vessel is included with each filtration unit.



Bottle top filters for storage vessels with 45 mm thread diameter**

Order No.	Description	Filtration Volume	Ø Membrane	Membrane/ Pore Size	Packaging bag/case
83.1822.100	Bottle top Filtropur BT 25	250 ml	60 mm	PES/0.45 µm	1/12
83.1822.101	Bottle top Filtropur BT 25	250 ml	60 mm	PES/0.22 µm	1/12
83.1823.100	Bottle top Filtropur BT 50	500 ml	90 mm	PES/0.45 µm	1/12
83.1823.101	Bottle top Filtropur BT 50	500 ml	90 mm	PES/0.22 µm	1/12
83.1823.104	Bottle top Filtropur BT 50	500 ml	90 mm	PES/0.1 µm	1/12

**Special pre-filters (83.1825 for BT 25, 83.1825.001 for BT 50) are available for solutions difficult to filter.



Receiver Bottles

Order No.	Description	Filtration Volume	Version	Packaging bag/case
83.1822.003	for Filtropur BT 25 and BT 50	250 ml	Screw cap assembled	1/12
83.1823.003		500 ml	Screw cap assembled	1/12
83.1824.003		1,000 ml	Screw cap assembled	1/12



Sterile Filtropur S syringe pressure filtration systems for filtration of aqueous solutions (media, additives, buffers, etc.)

- PES membrane for low protein binding and high throughput rates
- Individually wrapped, sterile, non-pyrogenic/endotoxin-free and non-cytotoxic
- Pre-filter free from binding agents and cellulose acetate membrane free from wetting agents to ensure bio-compatibility



Filtropur S 0.45, yellow housing, for particle removal from solutions

Order No.	Inlet/Outlet Connection	Filtration Surface	Membrane Pore Size	Packaging bag/case
83.1826	Inlet Luer-lock, female Outlet Luer-lock, male	5.3 cm ²	PES membrane 0.45 µm	1/50

Filtropur S 0.2, dark blue/neutral housing, for sterile filtration

Order No.	Inlet/Outlet Connection	Filtration Surface	Membrane Pore Size	Packaging bag/case
83.1826.001	Inlet Luer-lock, female Outlet Luer-lock, male	5.3 cm ²	PES membrane 0.2 µm	1/50

Filtropur S plus 0.2, blue/opaque housing with integral glass-fibre prefilter, for sterile filtration of viscous solutions (e.g. serum)

Order No.	Inlet/Outlet Connection	Filtration Surface	Membrane Pore Size	Packaging bag/case
83.1826.102	Inlet Luer-lock, female Outlet Luer-lock, male	5.3 cm ²	CA/GF membrane 0.2 µm	1/50

Filtropur L pressure filtration system with integral prefilter for sterile filtration of media, sera, buffers and other aqueous solutions

- Filtration range 100 ml to 10 L
- Individually wrapped, sterile



Filtropur L 0.2 S with integral glass-fibre prefilter for use in connection with pressure pumps (e.g. membrane pumps) or peristaltic pumps (e.g. tube pumps)

Order No.	Inlet	Membrane Pore Size	Packaging bag/case
83.1827	Tube connector (6-12mm stepped connector)	CA/GF membrane 0.2 µm	1/50

Filtropur L 0.2 LS with integral glass-fibre prefilter for use in connection with pressure pumps (e.g. membrane pumps) or peristaltic pumps (e.g. tube pumps)

Order No.	Inlet	Membrane Pore Size	Packaging bag/case
83.1827.001	Luer-Lock	CA/GF membrane 0.2 µm	1/50

Membrane pump with tube set, stainless steel sinker, tube adapter for Filtropur L 0.2 LS

Order No.	Set	Packaging pcs./case
83.1850	2.5 m silicone tube 5 multi-function adapter 1 stainless steel sinker	1



TC tubes, sterile, TC quality, clear polystyrene

The pretreated polystyrene TC tubes with red screw cap are especially suitable for:

- Culturing small cell populations
- Culturing suspension or monolayer cultures
- Storage or transport of cell material
- The screw cap enables an open or closed growth environment for cell cultures

Order No.	Volume ml	Length/Ø mm	Description	Packaging
83.9923.945	15	125/16	round base	5/bag 1,000/case
83.9923.943	12	99/16	round base	
83.9923.929	10	97/16	conical, skirted base	



Centrifuge tubes, with conical base, attached red screw cap, with graduation and writing space

- Exceptionally clear PP enables perfect viewing of the sample material
- Sterile, non-pyrogenic/endotoxin-free and non-cytotoxic

Order No.	Volume ml	Length/Ø mm	Description	Packaging
62.559.001	50	115/28	with skirted base	25/bag 300/case
62.547.004	50	114/28	without skirted base	25/Styrofoam rack 200/case
62.547.254	50	114/28	without skirted base	25/bag 250/case
62.554.002	15	120/17	without skirted base	50/Styrofoam rack 500/case
62.554.502	15	120/17	without skirted base	50/bag 500/case



Tube with attached two-position ventilation cap

Position 1: cap lightly pushed down → vented
Position 2: cap firmly pushed down → closed

Order No.	Volume ml	Length/Ø mm	Description	Packaging bag/case
55.526.006 PP	5	75/12	without print	25/1,000 sterile
55.476.013 PS			with printed graduation	
62.526.028 PP	5	75/12	with printed graduation	ind. wrapped, sterile 500/case
62.476.028 PS			without print	
62.515.006 PP	13	100/16	with printed graduation	25/500 sterile
62.515.028 PP	13	100/16	with printed graduation	ind. wrapped, sterile 500/case

PS = polystyrene, transparent, PP = polypropylene

CryoPure - Certified Quality



CryoPure tubes are subjected to extensive testing to ensure that potential contaminants which could harm cell materials and cellular components during "vital preservation" are not present.

Upon successfully meeting stringent testing criteria, CryoPure tubes are certified as follows:

- ✓ Sterile
- ✓ Non-pyrogenic/endotoxin-free
- ✓ Non-cytotoxic
- ✓ Non-mutagenic
- ✓ IVD CE



Efficient and reliable

- Available in a volume range of 1.2 ml to 5.0 ml, Sarstedt CryoPure tubes are made from a high-grade material (USP class VI).
- All tubes are engineered with an externally threaded screw cap to minimise contamination
- For more compact storage (10 x 10 formatted compartments), a 2.0 ml CryoPure tube with an internally threaded cap and silicone O-ring is available.
- QuickSeal locking mechanism ensures safe, ergonomic opening and closing of both screw cap types with a single turn.
- 6 Cap colours and 6 additional cap insert colours provide up to 36 different colour-coding options.
- All CryoPure tubes are available with a scratch-resistant data matrix code (2D barcode) upon request. Please contact our Customer Service for more information.



CryoRack 40/Work rack

- Accommodates 40 tubes (4 rows of 10 grooves)
- Interlocking connection with tube bases provides easy single-handed operation
- Alphanumeric colour-coding for easy sample identification
- Anti-slip rubber pads
- Autoclavable, 121°C, 20 min.

CryoRack 40
Order No. 93.856.040 (1/bag, 10/case)

Cryo boxes for low temperature range storage

- High-quality durable polycarbonate storage boxes for a deep-freeze temperature range to -196°C
- Numerical coding at each aperture enables quick sample identification

Compatible tube designs	1.2 - 2.0 ml			3.5 - 5.0 ml	
	Format	5 x 5	9 x 9	10 x 10	9 x 9
Storage capacity	25	81	100	81	
Box size (WxDxH) in mm	75 x 75 x 52	132 x 132 x 53	132 x 132 x 53	132 x 132 x 95	
Ideal for tubes with	Internal and external thread		Internal thread	Internal and external thread	
Packaging	Colour	Order No.			
5/bag 20/case	red	93.872.225	93.873.281	93.874.210	93.875.281
	yellow	93.872.425	93.873.481	93.874.410	93.875.481
	blue	93.872.625	93.873.681	93.874.610	93.875.681



CryoPure 1.2 ml tubes with external thread

Order No.	Screw Cap	Nominal Volume	Packaging
72.377	white	1.0 ml	50/bag 500/box 2,000/case
72.377.002	red	1.0 ml	
72.377.004	yellow	1.0 ml	
72.377.005	green	1.0 ml	
72.377.007	violet	1.0 ml	
72.377.992	Colour mix	1.0 ml	

CryoPure 2.0 ml tubes with external thread

Order No.	Screw Cap	Nominal Volume	Packaging
72.379	white	1.8 ml	50/bag 500/box 2,000/case
72.379.002	red	1.8 ml	
72.379.004	yellow	1.8 ml	
72.379.005	green	1.8 ml	
72.379.006	blue	1.8 ml	
72.379.007	violet	1.8 ml	
72.379.992	Colour mix	1.8 ml	

CryoPure 5.0 ml tubes with external thread

Order No.	Screw Cap	Nominal Volume	Packaging
72.383	white	4.5 ml	25/bag 250/box 1,000/case
72.383.002	red	4.5 ml	
72.383.004	yellow	4.5 ml	
72.383.005	green	4.5 ml	
72.383.007	violet	4.5 ml	
72.383.992	Colour mix	4.5 ml	

CryoPure 2.0 ml tubes with internal thread and silicone O-ring

Order No.	Screw Cap	Nominal Volume	Packaging
72.380	white	1.6 ml	50/bag 500/box 2,000/case
72.380.002	red	1.6 ml	
72.380.004	yellow	1.6 ml	
72.380.005	green	1.6 ml	
72.380.006	blue	1.6 ml	
72.380.007	violet	1.6 ml	
72.380.992	Colour mix	1.6 ml	

Colour-coded inserts for CryoPure tubes


Order No.	Colour	Packaging
65.386	white	100/bag · 3,000/case
65.386.002	red	
65.386.004	yellow	
65.386.005	green	
65.386.006	blue	
65.386.007	violet	
65.386.992	Colour mix	

Note: Safety Instructions and User Guide on p. 202.

Serological pipettes from clear polystyrene

- Non-pyrogenic/endotoxin-free, non-cytotoxic, individually wrapped, sterile
- Easy identification by international colour code on the pipette and the paper/plastic peel packaging
- Larger pipetting volume due to negative graduation
- Variable mode of handling due to reverse graduation
- Optimised mouthpieces for universal fit in most common pipettors
- Easy to open, static-free packaging

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

Order No.	Total Volume/ Graduation	Description	Colour code		Packaging pcs./case
86.1251.001	1 ml / 1/100 ml	plugged, ind. wrapped, sterile	Yellow	✓	1/1,000
86.1251.025	1 ml / 1/100 ml	plugged, sterile, 25 pcs.	Yellow		25/1,000
86.1252.001	2 ml / 1/100 ml	plugged, ind. wrapped, sterile	Green	✓	1/1,000
86.1252.025	2 ml / 1/100 ml	plugged, sterile, 25 pcs.	Green		25/1,000
86.1253.001	5 ml / 1/10 ml	plugged, ind. wrapped, sterile	Blue	✓	1/500
86.1253.025	5 ml / 1/10 ml	plugged, sterile, 25 pcs.	Blue		25/500
86.1254.001	10 ml / 1/10 ml	plugged, ind. wrapped, sterile	Orange	✓	1/500
86.1254.025	10 ml / 1/10 ml	plugged, sterile, 25 pcs.	Orange		25/500
86.1685.001	25 ml / 2/10 ml	plugged, ind. wrapped, sterile	Red	✓	1/200
86.1685.020	25 ml / 2/10 ml	plugged, sterile, 20 pcs.	Red		20/200
86.1689.001	50 ml / 1/2 ml	plugged, ind. wrapped, sterile	Purple	✓	1/100

Aspiration pipette, polystyrene

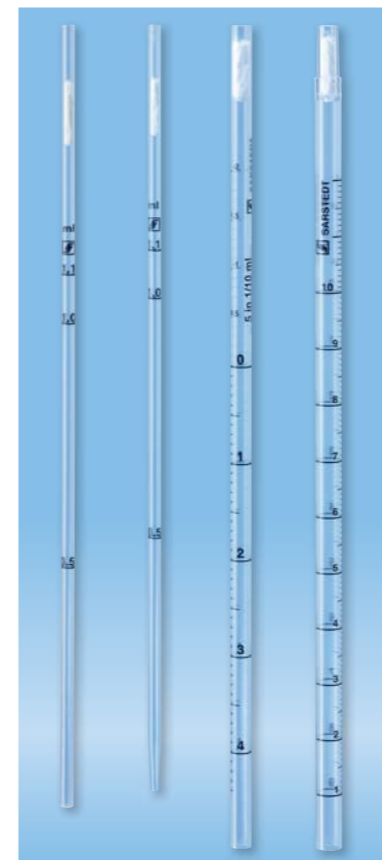
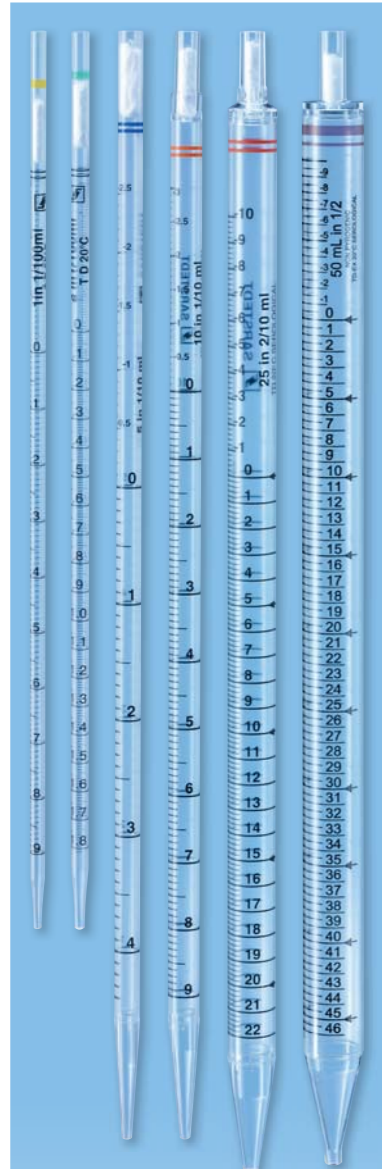
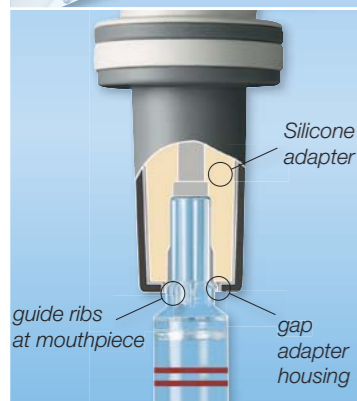
- For aspirating media with a vacuum pump
- Individually wrapped in paper/plastic peel packaging
- Certified non-pyrogenic/endotoxin-free
- Without graduation, without cotton plug

Order No.	Total Volume/ Graduation	Description	Packaging pcs./case
86.1252.011	2 ml/ without graduation	without plug, without print, ind. wrapped, sterile	1,000

25 ml Serological pipette in optimised design

Due to the weight of 25 ml pipettes, they are apt to have considerable range of movement in pipetting aid adapters. This undesirable motion makes the pipettes inconvenient to handle, impedes precise sampling and may even cause leaks at the pipette/adaptor connection.

- Small guide ribs at the mouthpiece provide an improved fit in the adapter housing of any pipette aid to minimise undesirable "swaying" motion of filled pipettes
- Minimises the risk of dripping by a secure grip of the pipette as soon as the small guide ribs on the mouthpiece come into contact with the adapter housing (see illustration)



Dilution pipette 1.1 ml with and without tip

To produce dilutions for bacteriological tests, e.g. in food labs, plugged and sterile.

Order No.	Total Volume/ Graduation	Description	Packaging bag/case
86.1686.225	1.1 ml / 0.5 - 1.0 - 1.1	without tip	25/bag 1,000/case
86.1686.025	1.1 ml / 0.5 - 1.0 - 1.1	with tip	25/bag 1,000/case

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

Order No.	Total Volume/ Graduation	Description	Packaging pcs./case
86.1687.010	5 ml / 1/10 ml	plugged, sterile 10/bag	500
86.1688.010	10 ml / 1/10 ml	plugged, sterile 10/bag	500

Automatic-Sarpette®

- Ergonomic design
- Lightweight
- Environmentally friendly nickel metal hydride battery
- Two independent aspiration/dispensing speeds and free dispensing
- Integral hydrophobic membrane filter functions as fluid barrier

Order Number: 90.189.100

with recharger and stand

M-Sarpette®

- Operates without wires or batteries
- Distinctly lighter in weight than automatic pipettors
- Special valve system enables safe and precise pipetting
- Integral hydrophobic filter functions as fluid barrier
- Compatible with pipettes of 1 to 100 ml volume

Order No.: 90.1427

Spare parts for Automatic- and M-Sarpette®

Order No.	Description	Packaging pcs./case
92.189.121	Membrane filter 0,2 µm	5
92.1417.001	Membrane filter 0,45 µm	5
92.1417.002	Silicone adapter	1

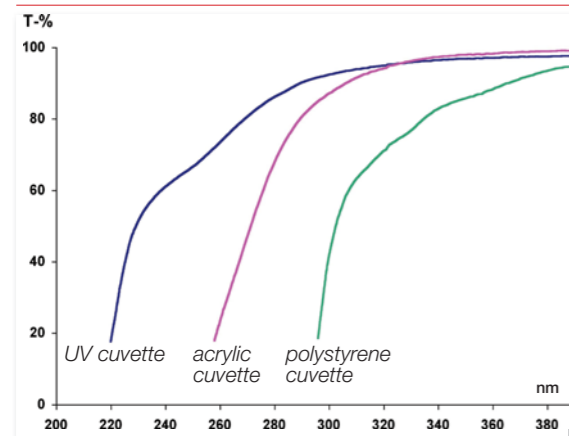


Since the seventies, Sarstedt has been renowned as a supplier of high-quality plastic disposable cuvettes made from polystyrene (PS) and acrylic (PMMA). With a view to serving the UV range down to 220 nm which is gaining in importance, our product range also includes a UV transparent disposable cuvette (see p. 143).

Due to its optical characteristics, **polystyrene** is ideal for use in the visual range and the UV transparent range down to **330 nm**. At 334 nm, for instance, polystyrene has a spectral transmission ratio of about 70 to 80 %.

Acrylic cuvettes, on the other hand, stand out for their enhanced light transmission in the UV range and can be used down to approximately **300 nm**. Their spectral transmission ratio at 334 nm, for example, is approx. 97%.

Transmission is wave length dependent



Wave length (nm)	Transmission (T) in %		
	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: measured with distilled water against air, optical path length 10 mm.



Semi-micro cuvette 10 x 4 mm, 2-side optical pathway 10 mm

Order No.	Length mm	Material	Packaging	Packaging pcs./case
67.742	45	Polystyrene	100/rack by mold cavity number	2,000
67.746	45	Polystyrene	loose in bags of 500	2,000
67.740	45	Acrylic	100/rack by mold cavity number	2,000

Cuvette 10 x 10 mm, 2-side optical pathway 10 mm

Order No.	Length mm	Material	Packaging	Packaging pcs./case
67.741	45	Polystyrene	100/rack by mold cavity number	2,000
67.745	45	Polystyrene	loose in bags of 500	2,000
67.738	45	Acrylic	100/rack by mold cavity number	2,000

Cuvette for fluorescence measurements, 4-side optical pathway 10 mm

Order No.	Length mm	Material	Packaging	Packaging pcs./case
67.754	45	Polystyrene	100/rack by mold cavity number	2,000
67.755	45	Acrylic	100/rack by mold cavity number	2,000

PS = polystyrene, PMMA = polymethylmethacrylate

The plastic material of the UV cuvette enables measurements in the UV range from wavelengths of 220 nm. Contamination caused by the repeated rinsing processes required for quartz cuvettes can be avoided by using the UV-transparent disposable cuvette. In addition to non-certified UV cuvettes, our range includes certified options individually sealed with a cap and packed in a Styrofoam container to protect from scratches.

Typical applications and product features

- Photometric analysis of nucleic acids at 260 nm and proteins at 280 nm
- Minimal UV absorption for DNA, RNA and protein quantification
- Minimum sample volume: 50 µl
- Compatible with photometers of 8.5 mm and 15 mm light centre height (LCH): Eppendorf Biophotometer, ThermoSpectronic, Perkin Elmer, Bio-Rad, Analytica Jena etc.
- DNA-/RNase- and protein-free certified UV cuvettes, individually sealed with caps for safe storage and minimised risk of contamination are optionally available



UV micro cuvettes

Order No.	Length mm	LCH	Packaging
67.758	45	8.5 mm	100 pcs./Styrofoam rack, 400/case
67.758.001	45	8.5 mm	100 pcs./Styrofoam rack (ind. sealed with lid) 400/box, certified DNA-/RNase-/protein-free
67.759	45	15 mm	100 pcs. /Styrofoam rack, 400/case
67.759.001	45	15 mm	100 pcs./Styrofoam rack (ind. sealed with lid) 400/box, certified DNA-/RNase-/protein-free

Cuvette 10 x 10 mm with round opening, 2-side Optical Pathway, 10 mm

Order No.	Length mm	Material	Packaging	Packaging pcs./case
67.743	96	Polystyrene	100/rack by mold cavity number	1,000
67.749	55	Polystyrene	100/rack by mold cavity number	2,000

Push caps for cuvettes with round opening

Order No.	compatible with cuvettes	Packaging pcs./case
65.803	Order No.: 67.743	5,000
65.793	Order No.: 67.749	5,000



Round cuvette for LKB-Analyser, PP

Order No.	Length mm	Material	Packaging	Packaging pcs./case
68.752	51/12	Polypropylene	loose in bags of 1,000 pcs. each	5,000

PP = polypropylene

Micro test plates from high-quality clear polystyrene

- Conform to ANSI/SLAS (formerly SBS) standard and compatible with all common dispensers, readers and washers
- Wells with alphanumeric identification
- LOT number and shelf life on each plate

Order No.	Description	Well Shape	Lid	max. Volume (ml)	Packaging
82.1581	Micro test plate		-	0.39	25/bag 100/case
82.1581.001	Micro test plate, sterile		✓	0.39	1/blister 50/case
82.1582	Micro test plate		-	0.31	25/bag 100/case
82.1582.001	Micro test plate, sterile		✓	0.31	1/blister 50/case
82.1583	Micro test plate		-	0.29	25/bag 100/case
82.1583.001	Micro test plate, sterile		✓	0.29	1/blister 50/case

ELISA plates from high-quality clear polystyrene

- Micro test plates for immunoanalytics with medium binding or high binding surface
- Wells with alphanumeric identification
- Non-pyrogenic/endotoxin-free and non-cytotoxic
- Surface properties, LOT number and shelf life on each plate

Order No.	Description	Well Shape	Lid	max. Volume (ml)	Packaging
82.1581.100	ELISA plate	Medium Binding		0.39	25/bag 50/case
82.1581.200	ELISA plate	High Binding		0.39	25/bag 50/case
82.1582.100	ELISA plate	Medium Binding		0.31	25/bag 50/case
82.1582.200	ELISA plate	High Binding		0.31	25/bag 50/case
82.1583.100	ELISA plate	Medium Binding		0.29	25/bag 50/case
82.1583.200	ELISA plate	High Binding		0.29	25/bag 50/case

Accessories for ELISA and micro test plates

Order No.	Description	Packaging
82.1584	Lid from polystyrene	25/bag 100/case

Terasaki micro test plate

- 60-well plate for analysis with minimal sample volumes

Order No.	Description	Surface	Well Shape	max. Volume	Lid	Packaging
83.9923.972	Terasaki plate, sterile	TC		10 µl	✓	10/bag 650/case

MegaBlock® 96 Well 0.5 / 1.2 / 2.2 ml

- Each well 100% leakproof tested
- Ideally suited for long-term sample storage
- Solvent resistant to DMSO (only polypropylene block)
- Square or round wells with round bottoms and alphanumeric coordinates
- Free from human DNA, RNase/DNase, endotoxins



Order No.	Description	Volume/Description	Packaging pcs./case
82.1969.002	round wells	0.5 ml PP (autoclavable)*	56 pcs./case
82.1970.002	round wells	1.2 ml PS, transparent	32 pcs./case
82.1971.002	round wells	1.2 ml PP (autoclavable)*	32 pcs./case
82.1972.002	square wells	2.2 ml PP (autoclavable)*	32 pcs./case

Mat covers for MegaBlock®

95.1990.002		Mat cover for 1.2 ml MegaBlock®, pierceable	10 pcs./bag 50 pcs./box 250 pcs./case
95.1991.002		Mat cover for 2.2 ml MegaBlock®	10 pcs./bag 50 pcs./box 250 pcs./case

Adhesive Sealing Tapes for genomic, HTS, compound storage

- Reliable sealing for polypropylene, polystyrene and polycarbonate plates
- High temperature tolerances to 110°C
- Optically transparent
- Ideally suited for safe compound storage
- Effective sealing of highly hygroscopic solutions
- Excellent resistance against organic solutions



Order No.	Description	Temperature Range	Packaging
95.1992	transparent/Polyester	-20°C to 110°C	100 tapes/box
95.1993	transparent/Polyester	-40°C to 110°C	100 tapes/box
95.1994	transparent/Polyolefin	-70°C to 110°C	100 tapes/box
95.1995	non-transparent/Aluminium	-70°C to 110°C	100 tapes/box

Tape for standard applications (ELISA plates, sample storage)

82.1586	transparent/Acetate	-40°C to 100°C	100 tapes/box
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PS = polystyrene, transparent, PP = polypropylene

* Important notes on autoclaving: see p. 201.

Laboratory Products



Vial 0.5 ml, for Radio-Immuno-Assay (RIA)

- Effective centrifugation in standard centrifuges with micro test plate inserts
- Firm adherence of sediment during second antibody separation
- Suitable for alternative separation techniques, for example the magnetic separation of iron oxide coupled antibodies
- The shape is compatible with most common Gamma counters
- Minimal waste volume – economical disposal

Order No.	Vial/Accessories	Packaging pcs./case
73.1055	Special vial for RIA, highly transparent polypropylene	10,000
65.1375	Push cap for 73.1055 vial, suitable for Roche Microcups	10,000



Disposable sample cup for immunoassay analysers ES 600 and ES 300, disposable cup for serum samples, from clear polystyrene

Order No.	Volume ml	Length/Ø mm	Packaging pcs./case
73.663	2.0	40/12	5,000

Order No.	Description	Packaging
65.108	Push cap for 73.663	10,000



Mini vial with safety cap, HD-PE

Order No.	Description	Length/Ø mm	Packaging pcs./case
73.680	with enclosed screw cap	56/15	2,000



20 ml Scintillation vial, HD-PE

Order No.	Description	Length/Ø mm	Packaging pcs./case
73.662.500	with enclosed screw cap	58/27	500

HD-PE = polyethylene High Density



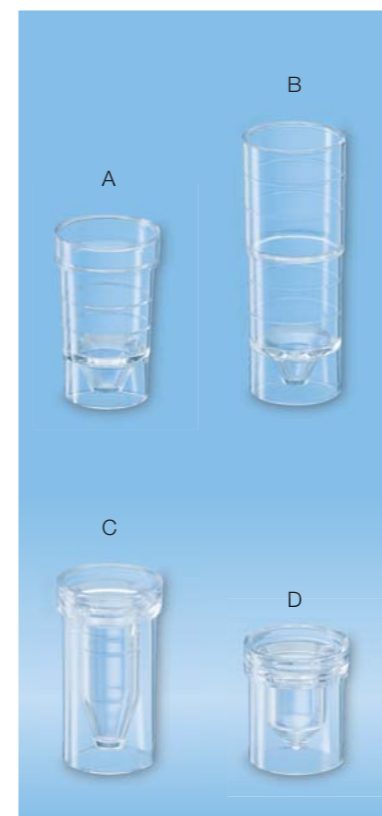
Conical tube for Pharmacia/LKB Gamma Counter

- With conical base for optimal sediment recovery
- Transparent polypropylene
- Suitable for all rack and instrument types, old and new

Compatible with the following Pharmacia/LKB instruments:

1270 – Rackgamma (rack type 1270-132)	1277 – Gammamaster (rack type 1277-150)
1271 – Riagamma (rack type 1270-132)	1260 – Multigamma (no racks)
1272 – Clinigamma (rack type 1270-142)	1261 – Multigamma (no racks)
1275 – Minigamma (rack type 1270-132)	1282 – Compugamma (rack type 1282-131)

Order No.	Material	Volume ml	Length/Ø mm	Packaging pcs./case	Compatible Caps*
57.477.500	PP	4.5	75/12	4,000	65.809 65.719



Autoanalyser cups

Order No.	Material	Volume ml	Colour	Type	Packaging pcs./case
73.641	PS	1.5	neutral	A	5,000
73.646	PS	3.5	neutral	B	5,000
73.644	PS	0.5	neutral	C	5,000
73.640	PS	0.3	neutral	D	5,000



Cap for autoanalyser cups

Order No.	Material	Description	Colour	Packaging pcs./case
65.649	LD-PE	closed cap	neutral	10,000

PS = polystyrene, transparent, PP = polypropylene
LD-PE = Low density polyethylene

* Caps are shown on page 79.



Sample cup for Hitachi analysers

Order No.	Material	Volume ml	Length/Ø mm	Colour	Packaging pcs./case	Compatible Cap
73.666	PS	2.0	38/17	neutral	5,000	65.718

Sample cup for Abbott analyser AXSYM

Order No.	Material	Volume ml	Length/Ø mm	Colour	Packaging pcs./case	Compatible Cap
73.667	PS	2.5	53/12	neutral	2,500	---



Sample cup for Coulter Counter with enclosed cap

Order No.	Material	Length/Ø mm	Colour	Packaging pcs./case
73.650.500	PS	60/34	neutral	500



Sample cups for Cobas systems Bio, Mira, Fara and Integra*

Order No.	Material	Volume ml	Length/Ø mm	Colour	Packaging pcs./case	Compatible Cap
73.910	PP	0.6	34/8.2	blue	5,000	looped
73.910.001	PP	0.6	34/8.2	red	5,000	looped
73.910.002	PP	0.6	34/8.2	green	5,000	looped
73.910.003	PP	0.6	34/8.2	yellow	5,000	looped
73.910.004	PP	0.6	34/8.2	white	5,000	looped
73.911*	PP	0.6	34/8.2	blue	5,000	looped with aperture

* cap with hole to accommodate Integra probe



Cuvettes and steel balls for Amelung KC coagulometer (macro)

Order No.	Description	Packaging pcs./case
73.834	2 bags each with 1,000 cuvettes and 2 dispenser bottles with 1,000 steel balls each	2,000

PS = polystyrene, transparent, PP = polypropylene



250 ml container, PS, white

Order No.	Length mm	Aperture Ø mm	Packaging pcs./case
75.560	100	73	500



125 ml container, PP, neutral

Order No.	Length mm	Aperture Ø mm	Packaging pcs./case
75.565	85	62	500



125 ml container, PP, highly transparent

Order No.	Length mm	Aperture Ø mm	Packaging pcs./case
75.1355	67	66	1,000
75.1355.100	67	66	100/bag 1,000/case



Snap-on lids for 125 ml container, PE, red

Order No.	Description	pcs./bag	Packaging pcs./case
76.1477	with spout	1,000	1,000
76.1477.100	with spout	100	1,000
76.1414	without spout	1,000	1,000
76.1414.100	without spout	100	1,000

100 ml container, PS, white

Order No.	Length mm	Aperture Ø mm	Packaging pcs./case
75.570	49	70	1,000

Snap-on lid for 100 ml container, PS

Order Number: 76.571 Packaging: 1,000/case



30 ml medicine cups with graduation, PP

Order No.	Length/Aperture-Ø mm	Colour	Packaging
75.1337.500	41/37	neutral	3,750/case (75 per bag)
75.1337.502	41/37	red	
75.1337.504	41/37	yellow	
75.1337.505	41/37	green	
75.1337.506	41/37	blue	

Snap-on lid for 30 ml medicine cup, PE, white

Order Number: 76.1340.500 3,750/case
 Order Number: 76.1340.560 75/bag, 3,750/case
 PE = polyethylene, PP = polypropylene, PS = polystyrene



100 ml container, neutral polypropylene, screw cap from neutral HD-PE

Order No.	Length/Ø mm	Description	Packaging bag/case
75.563	72/62	Separate container without cap	50/500
76.564	14/76	Separate cap	50/500
75.562.105	73/62	Container with cap, assembled, sterile, with safety label	5/200
75.562.005	73/62	Container with cap, assembled	5/200
75.562.300	72/62	Container with enclosed cap	50/250

Safety label ensures sterility prior to use and provides a convenient writing space.
100 ml container, brown, see p. 53



Container with assembled screw cap from HD-PE/PP

Order No.	Material	Volume ml	Length/Ø mm	Description	Packaging pcs./case
75.9922.744	PP	70	55/44	Yellow cap, HD-PE	500
75.9922.745	PP	70	55/44	Yellow cap, HD-PE, with label	500
75.9922.721	PP	70	55/44	Yellow cap, HD-PE, with label, sterile, ind. wrapped	200
75.9922.421	PP	120	105/44	Neutral cap, HD-PE, graduation up to 120 ml	250
75.9922.420	PP	120	105/44	Yellow cap, HD-PE, sterile, graduation up to 120 ml	250
75.9922.532	PP	250	78/70	Neutral cap, HD-PE, graduation up to 200 ml	240
75.9922.518	PP	250	78/70	Yellow cap, HD-PE, with safety label, sterile, graduation up to 200 ml	240
75.9922.534	PP	250	78/70	Yellow cap, HD-PE, sterile, graduation up to 200 ml	240
75.9922.812	PP	500	150/70	Neutral cap, HD-PE, graduation up to 420 ml	120
75.9922.818	PP	500	150/70	Yellow cap, HD-PE, with safety label, sterile, graduation up to 420 ml	120
75.9922.813	PP	500	150/70	Yellow cap, HD-PE, sterile, graduation up to 420 ml	120

40, 60 and 120 ml disposable containers with screw cap

- Containers (highly-transparent) and cap from PP, autoclavable* at 121°C (important notes on autoclaving: see p. 201)

Order No.	Volume ml	Length/Ø mm	Description	Packaging pcs./case
62.555 with graduation	40	85/28.5	enclosed cap	450
62.555.001 with graduation	40	85/28.5	assembled cap, sterile	450
60.596	60	126/28.5	enclosed cap	250
60.596.001	60	126/28.5	assembled cap, sterile	250
60.597	120	114/42	enclosed cap	250
60.597.001	120	114/42	assembled cap, sterile	100

PP = polypropylene

* Caps must not be screwed on tightly during autoclaving.



Stirring rods

- Numerous applications, e.g. for mixing of samples and solutions, for detaching blood clots from tube walls
- The short rod is particularly suitable for mixing in cuvettes

Order No.	Material	Length mm	Packaging pcs./case
81.970	PP	120	10,000
81.971	HD-PE	64	10,000

Dispenser box for long stirring rod

Each case contains one convenient dispenser box to accommodate 500 stirring rods



Permanent Lumocolour felt pen

For plastic tubes and cups

- Clean and smear-proof
- Water-proof
- Fast drying

Order No.	Colour	Packaging
95.953	blue	10 pens to a cardboard box (same colour only)
95.954	black	
95.955	green	
95.956	red	



Weigh trays

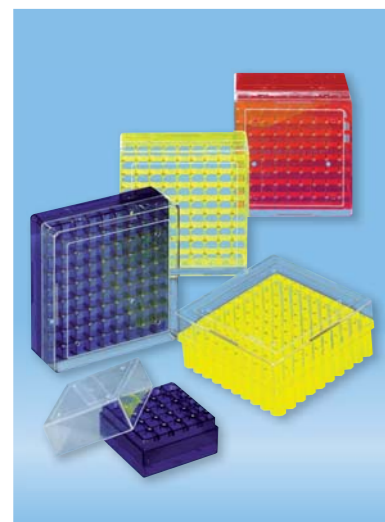
- Square, light weigh trays for easy weighing
- Suitable for liquid, solid or substances in powder form
- Rounded corners for easy emptying

Order No.	Material	Dimensions mm	Volume ml	Packaging pcs./case
71.9923.211	PVC	35 x 35	5	2,000
71.9923.212	PVC	72 x 72	70	2,000
71.9923.210	PS	128 x 128	250	1,000

PP = polypropylene, PS = polystyrene, HD-PE = High Density polyethylene

Cryo boxes for low temperature range storage to -196°C

- High-quality durable polycarbonate storage boxes for a deep-freeze temperature range to -196°C
- Numerical coding at each aperture enables quick sample identification
- Compartmentalised boxes (5 x 5, 9 x 9, 10 x 10) offer flexible storage options
- Full range of box options tailored to accommodate standard 1.2/2.0/3.5 and 5.0 ml cryo tubes
- Autoclavable, 121°C, 20 min.



Compatible cryo tube designs	1.2 - 2.0 ml			3.5 - 5.0 ml
Format	5 x 5	9 x 9	10 x 10	9 x 9
Storage capacity	25	81	100	81
Box size (W x D x H) mm	75 x 75 x 52	132 x 132 x 53	132 x 132 x 53	132 x 132 x 95
Ideal for tubes with	Internal and external thread		Internal thread	Internal and external thread

Packaging	Colour	Order No.			
5/bag 20/case	red	93.872.225	93.873.281	93.874.210	93.875.281
	yellow	93.872.425	93.873.481	93.874.410	93.875.481
	blue	93.872.625	93.873.681	93.874.610	93.875.681

PP storage boxes for sample storage to -90°C

- High-quality polypropylene storage boxes
- Numerical coding in the box enables quick sample identification
- Range of box options for tubes of 12 mm max. Ø
- Autoclavable, 121°C, 20 min.



Accommodates tubes of max. 45 x 12 mm		
Lid shape	Slip-on lid	Hinged lid
Format/storage capacity	9 x 9/81	10 x 10/100
Box size (W x D x H) mm	130 x 130 x 45	150 x 140 x 55

Colour	Order No.	
neutral	93.876	93.877
pink	93.876.281	93.877.210
orange	93.876.381	93.877.310
yellow	93.876.481	93.877.410
green	93.876.581	93.877.510
blue	93.876.681	93.877.610

Packaging	
5/bag, 20/case	5/bag, 20/case

Storage boxes for 15 and 50 ml tubes

- High-quality propylene storage boxes with lid
- Numerical coding in the box enables quick sample identification
- Autoclavable, 121°C, 20 min.
- Size: L x W x H: 144 x 144 x 127 mm

Order No.	Description	Colour	Format/Capacity	Packaging
93.880	For 15 ml tubes		6 x 6/36	2 pcs./bag
93.881	For 50 ml tubes		4 x 4/16	12 pcs./case

Space-saving sample storage boxes

Suitable for Sarstedt micro tubes, PCR tubes and centrifuge tubes

- Space-saving and organised sample storage
- Safe and light-protected storage



Storage boxes from moisture-resistant cardboard material (to -80°C) with lid and compartmentalised insert

- Tested down to -80°C

Order No.	Capacity	Format	Dimensions mm	max. Ø Tubes	Tube Length mm
95.64.997	100	10 x 10	135 x 135 x 45 for 1.5 and 2 ml tubes	12 mm	36 - 45
95.64.981	81	9 x 9	135 x 135 x 45 for 1.5 and 2 ml tubes	13 mm	36 - 45
95.64.982*	81	9 x 9	135 x 135 x 56 (tall version)	13 mm	35 - 56
95.64.924	144	12 x 12	135 x 135 x 28 for 0.2 ml tubes	9.5 mm	19 - 26
95.64.923	100	10 x 10	135 x 135 x 34 for 0.5 ml tubes	12 mm	29 - 34
95.64.922	49	7 x 7	152 x 152 x 130 for 15 ml tubes	20 mm	88.5 - 129
95.64.916	16	4 x 4	148 x 148 x 118 for 50 ml tubes	34 mm	89 - 115

Minimum quantity: 10 pieces

* Order No. 95.064.982 is suitable for taller containers, e.g. tube 66 x 11.5 mm, order No. 60.549 (page 72).

Styrofoam containers with lid

Order No.	Dimensions mm	max. tube Ø	Capacity/Format
95.64.253	85 x 100 x 65	10.8 mm	20 / 5 x 4
95.64.249	100 x 340 x 65	10.8 mm	100 / 5 x 20

Minimum quantity: 10 pieces

Styrofoam containers without lid

Order No.	Dimensions mm	max. Ø Tubes	Capacity/Format
95.1439	390 x 80 x 50	11,5 mm	100 / 5 x 20
95.64.250	416 x 107 x 50	16,5 mm	100 / 5 x 20
95.64.251	127 x 205 x 46	17 mm	50 / 5 x 10
95.64.213	338 x 88 x 50	13 mm	100 / 5 x 20

Minimum quantity: 10 pieces

Miscellaneous Storage Box

- From shock-resistant white plastic material (polystyrene)
- Adjustable divider



Order No.	Dimensions mm	Minimum Quantity
95.66.259	260 x 170 x 80	1

Transport case for diagnostic specimens via courier

The Transport case system for courier services enables the safe transport of diagnostic specimens of Class UN3373. The system fully conforms to the P 650 packaging regulations of ADR and has been tested and approved/passed by the Federal Institute for Material Research and Testing (BAM) in Berlin, Germany.

- Options with wide aperture or plastic bag closed with closure clip
- Superabsorber pack requires minimal space and offers ample liquid absorption
- Outer packaging with highly effective insulating foam

Order No.	Description	Packaging pcs./case
95.1715	Transport case T 15, secondary container: wide aperture container incl. superabsorber pack	1
95.1717	Transport case B 17, secondary container: plastic bag with clip, incl. superabsorber pack	1
95.1717.011	Transport case B 13, low height option for 1 layer of block racks, otherwise identical to B 17	1
95.1717.003	Transport case B 19, without lateral rim for block rack with handle, otherwise identical to B 17	1
95.1712	Superabsorber pack, volume abt. 1.2 l	100
95.1713	Bag 270 x 270 x 600 x 0.1 mm	25
95.1714	Clip, 220 mm	25
95.1725	Accumulator bag, insulating bag for cool storage packs	12

Transport case for in-house sample transport

For easy and safe in-house sample transport in hospitals or laboratories

- Hardshell case made from durable ABS
- Available in different versions designed to accommodate either 50 or 100 S-Monovettes, tubes, transport swabs
- Large case with detachable insert for easy handling and disinfection

Order No.	Description	Dimensions
95.1720	Transport case for in-house sample transport, lid and base in light grey, detachable insert for 2 block racks	320 x 230 x 190 mm
95.1720.011	Transport case for in-house sample transport, transparent lid, base in light grey, accommodates 1 block rack	270 x 170 x 215 mm

Mailing boxes for the safe transport of diagnostic specimens

- Meets P650 IATA/ADR packaging regulations for Biological Substances, Category B
- Suited for variable use with all Sarstedt mailing containers and bottles on pp. 157-159
- Integral restraint or attached foam bag for optimal fixation or cushioning of secondary containers
- Customised print on request (minimum quantity: 15,000 pcs.)

Order No.	Size	Description	Packaging
95.900	198 x 107 x 38 mm	Suited for 1 to 4 mailing containers up to Ø 30 mm	50 pcs./case (not assembled)
95.901	198 x 107 x 50 mm	Suited for 1 to 4 mailing containers up to Ø 44 mm	50 pcs./case (not assembled)
95.902	220 x 170 x 40 mm	Suited for 1 to 10 mailing containers up to Ø 30 mm; attached foam bag	50 pcs./case (not assembled)
84.1412.033	145 x 98.5 mm	Self-adhesive label with print "Freigestellte Medizinische Probe"/ "Exempt Human Specimen"	1,000 pcs./case

Universal mailing and transport box

- Approved mailing and transport system in accordance with packaging regulations P650 IATA/ADR for Biological Substances, Category B
- Suitable as an outer packaging for cool transport containers (see p. 160)

Order No.	Size	Description	Packaging
95.903	192 x 146 x 77 mm	Depending on the container size, suited for containers up to Ø 44 mm	50 pcs./case (not assembled)
95.1710	185 x 230 mm	Foam bag	200 pcs./case

PE mailing envelopes

- Made from blue, tear-resistant PE sheets
- Self-adhesive labels with individual custom print, minimum quantity: 10,000 pcs.
- Detachable labels for multiple applications
- Available in two sizes

Order No.	Size	Description	Packaging pcs./case
95.1410	310 x 180 mm	2 rows, 3 perforations	1,000
95.1411	310 x 123 mm	1 row, 3 perforations	1,000
84.1412.033	145 x 98.5 mm	Adress label with print "Freigestellte Medizinische Probe"/"Exempt Human Specimen"	1,000

Self-adhesive labels 145 x 98.5 mm with custom print are available on request.

PE mailing envelope

- Made from robust polyethylene sheets
- Convenient separation of samples and request forms
- Sized for DIN A4 request forms
- Especially suitable for transportation of samples via pneumatic tube systems

2 compartments for sample tubes; the compartments are closed by adhesive tape that is reversible and suitable for multiple use.

Order No.	Size	Packaging pcs./case
86.974	440 x 320 x 0.2 mm	300

Mailing containers for safe postage and transportation of diagnostic specimens

Sarstedt mailing containers are safe for blood, urine, swab and faeces sample tubes. A tight screw cap ensures secure and easy opening and closing. The square design allows the products to be stacked easily without wasting space. Container and cap from neutral HD-PE.

Containers are also available with absorbent liner.

One side of each container can be printed to customer requirements. Minimum order quantity: 10,000.

Mailing container 114 x 28 mm with screw cap

- Suitable for all S-Monovettes and tubes up to Ø 25 mm

Order No.	Inner Length mm	Aperture Ø mm	Description	Packaging pcs./case
78.572	114	28	without absorbent liner	250
78.573	114	28	with absorbent liner	250

Mailing container 176 x 28 mm with screw cap

- Suitable for all S-Monovettes and tubes up to Ø 25 mm and swabs

Order No.	Inner Length mm	Aperture Ø mm	Description	Packaging pcs./case
78.574	176	28	without absorbent liner	250
78.574.500	176	28	with absorbent liner	250

Inner length: Maximum length of sample container
Aperture Ø: Maximum diameter of sample container
HD-PE = High Density polyethylene



The secure and practical mailing container for diagnostic specimens

The mailing containers are suited for the transport of diagnostic samples. Leakproof at a pressure difference of 0.95 bar they are optimal for use as secondary containers in compliance with the P650/ADR Packaging Instructions. The mailing container and screw cap are made from environmentally neutral polypropylene and are autoclavable up to 121°C (important notes on autoclaving on p. 201). Customer-specific, non-abrasive print is available on request (minimum quantity: 10,000 pcs.). The mailing containers are supplied with and without absorbent liner. Absorbent liners are also available separately.

As provided in the P650 Packaging Instructions, the space between the primary receptacle and the secondary container must always contain absorbent material.

The Ø 30 mm containers fit all common letter boxes with a 35 mm slot.

Important:

Containers and screw caps must be ordered separately! The 114 x Ø 44 mm container is suitable for mailing common culture medium carriers (e.g. Uricult system). The 126 x Ø 30 mm container with special cap, Order No. 65.731, is suited for mailing Port-a-Cul tubes.



Mailing container 126 x Ø 30 mm

Order No.	Description	Packaging pcs./case
78.896	without absorbent liner	250
78.898	with absorbent liner	250

Standard screw cap for mailing container 126 x Ø 30 mm

Order No.	Colour	Packaging pcs./case
65.679	neutral	250
65.679.001	brown	250
65.679.002	red	250
65.679.004	yellow	250

Special screw cap for container 126 x Ø 30 mm for Port-A-Cul tube

Order No.	Colour	Packaging pcs./case
65.731	neutral	250

Mailing container 85 x Ø 30 mm

Order No.	Description	Packaging pcs./case
78.890	without absorbent liner	500
78.892	with absorbent liner	500

Screw cap for mailing container 85 x Ø 30 mm

Order No.	Colour	Packaging pcs./case
65.676	neutral	500
65.676.001	brown	500

Separate absorbent liner

Order No.	For Container	Packaging pcs./case
78.670	126 x Ø 30 mm	4,000
78.684	85 x Ø 30 mm	2,000



Mailing container 114 x Ø 44 mm

Order No.	Description	Packaging pcs./case
78.895	without absorbent liner	250
78.897	with absorbent liner	250

Screw cap for mailing container 114 x Ø 44 mm

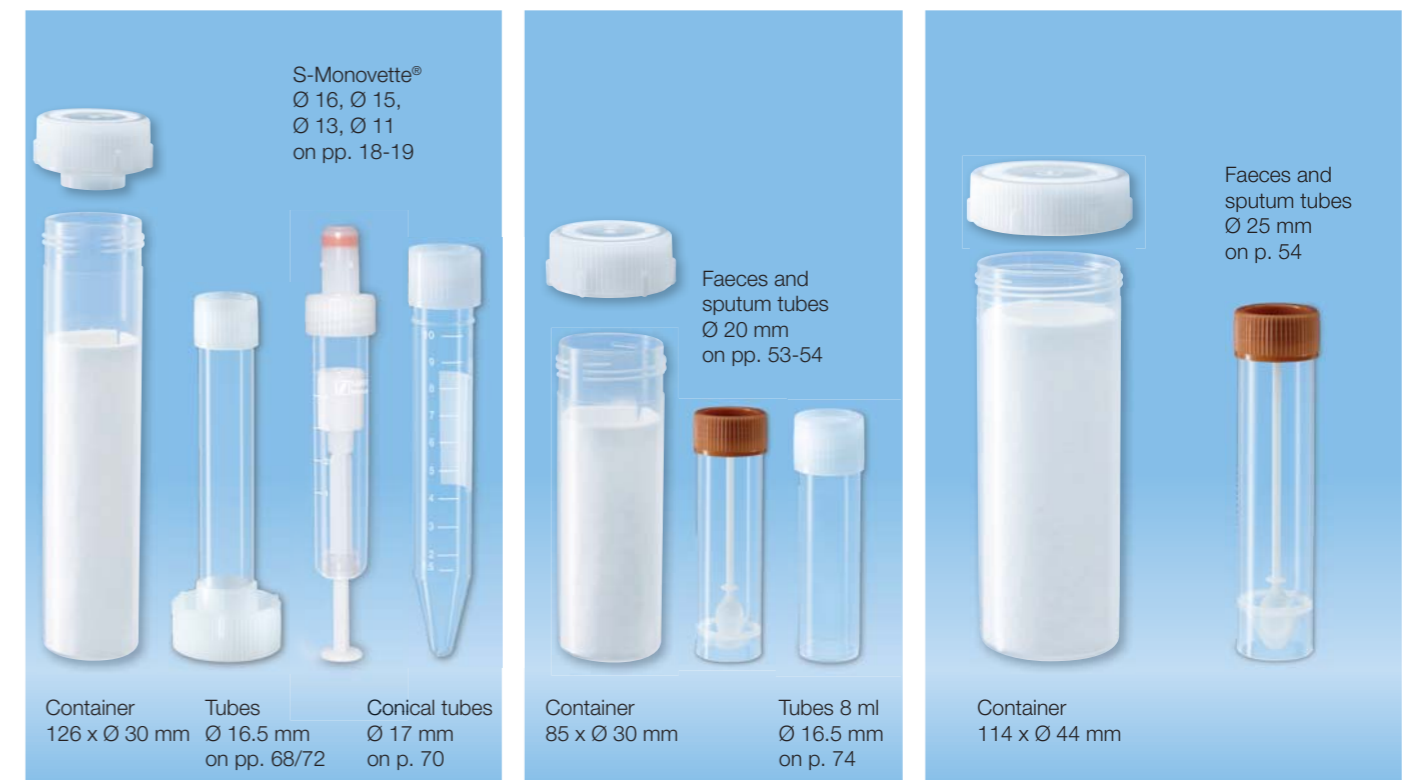
Order No.	Colour	Packaging pcs./case
65.678	neutral	250

Separate absorbent liner

Order No.	For Container size	Packaging pcs./case
78.669	114 x Ø 44 mm	1,000

Mailing containers - Examples of compatible sample tubes

- For sample tubes Ø 16.5 and Ø 25 mm the screw cap can also be used as a support base



Suitable boxes and mailing envelopes on pp. 155-156.



Cool transport container for frozen specimens

The mailing packaging enables the safe cool transportation of medical and biological specimens.

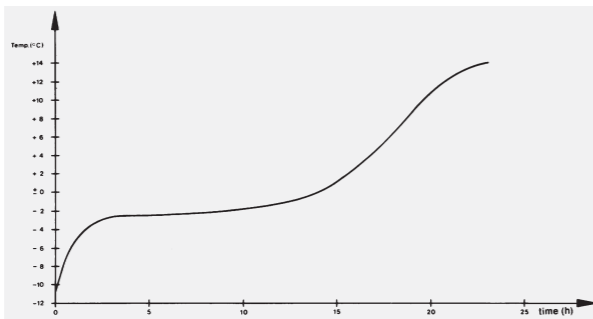
Each mailing container can accommodate two sample tubes of 10 ml volume. It is ideally suited for the 9 ml S-Monovette® or any tube of 16.5 mm diameter and an overall length of max. 107 mm.

The mailing container is filled with a coolant and should be frozen in a horizontal position at least at -12°C before mailing. The temperature in the sample tube is illustrated by the thawing graph shown below.

A Styrofoam casing protects against heat and possible transit damage.

A private label can be printed onto the container on request (100 pcs. min. order quantity).

The cool transport container is not suitable for samples that are not allowed to freeze, as a non-frozen sample would freeze when placed inside the deep-frozen cool transport container.



Thawing graph example

Sample: tube filled with 10 ml water, deep-frozen
Measuring: temperature probe in sample
Freezing temperature: -12°C
Ambient temperature when thawing: 18°C – 21°C

Complete set, consisting of a transport container complete with coolant, Styrofoam casing and rubber band

Order No.	Packaging pcs./case
95.1123	6

Replacement Styrofoam casing with rubber band

Order No.	Packaging pcs./case
95.1011	42

Mailing box for cool transport container

- Approved packaging design for transport in compliance with P650/ADR Packaging Instruction

Order No.	Packaging pcs./case
95.903	50 (not assembled)

Absorbent liner for cool transport container

Order No.	Packaging pcs./case
78.671	2,500

Mailing vessel, PP, for slides

Manufactured from polypropylene, the mailing vessel is suitable for the safe transportation or storage of 2 glass microscope slides (or 4 if placed against each other). The lid features a shielded ventilation hole. Containers are also available without ventilation hole.

Order No.	Description	Packaging pcs./case
86.972	with ventilation	500
86.972.150	without ventilation	500

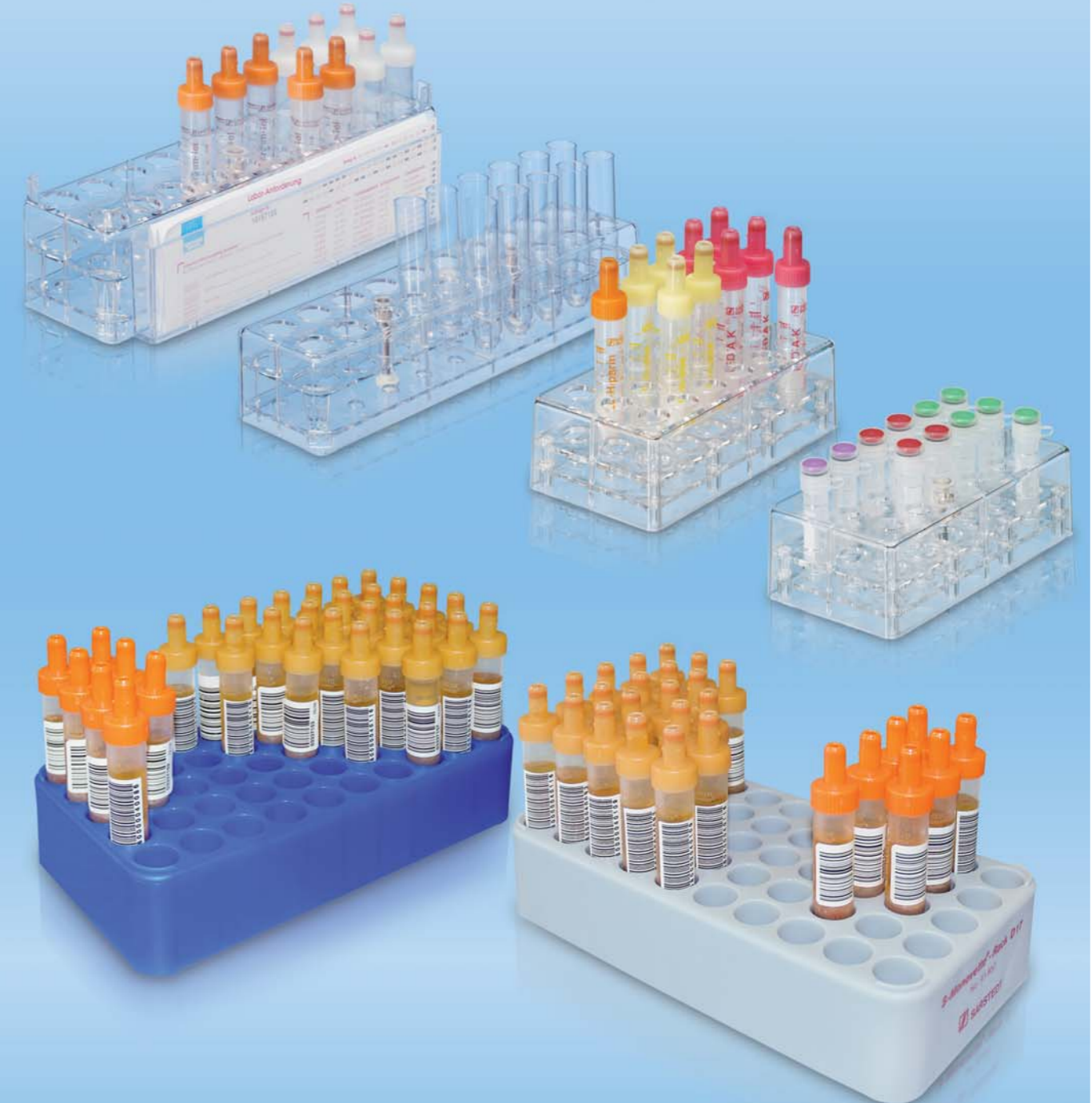
Cool and warm transport container

- In-house transport
- Approved packaging design for transport in compliance with P 650 Packaging Instruction

Order No.	Description	Dimension	Packaging
95.997	Cool transport container for blood gas capillaries and S-Monovettes	50 x 50 x 140 mm	1/case • 6/box

Quality racks for all tube options

Our versatile rack range includes more than 60 different options offering solutions for any application. Whether for S-Monovettes, tubes with a wide range of different diameters, micro tubes or reaction cups, the Sarstedt rack range provides multipurpose solutions to suit all requirements. The high-grade, resistant rack material is durable and can be autoclaved. Special features facilitate laboratory work, e.g. notched apertures enable single-handed opening and closing of Sarstedt micro tubes.



Racks "Series 18"

3 rows, with 6 apertures per row



- From impact-resistant material
- Autoclavable up to 121°C

Dimensions

height — 40 mm
length — 137 mm
width — 70 mm

Diameter of aperture (see table below)

upper aperture (casing) — d1
central aperture (central plate) — d2
lower aperture (base plate) — d3

Order No.	Diameter of Aperture mm			Suitable for
	d1	d2	d3	
93.850.001	17.2	17.2	8	Tubes, square cuvettes, all S-Monovette® diameters
93.850	15.8	15.8	8	Tubes, S-Monovettes of 15 mm Ø and 13 mm Ø
93.827.013	13.5	13.5	8	Tubes and S-Monovettes of 13 mm Ø
93.827	12.8	12.8	8	Tubes and S-Monovettes of 11 mm Ø
93.870	11.5	12.8	4.8	2 ml micro tubes, Microvette®
93.826	11.5	7	–	Standard micro tubes, e.g. 72.690.001, 72.696
93.894	10.5	12.8	4.8	Micro tubes with screw cap – notched aperture enables single-handed operation

Racks "Series 20"

2 rows, with 10 apertures per row



- From impact-resistant material
- Autoclavable up to 121°C

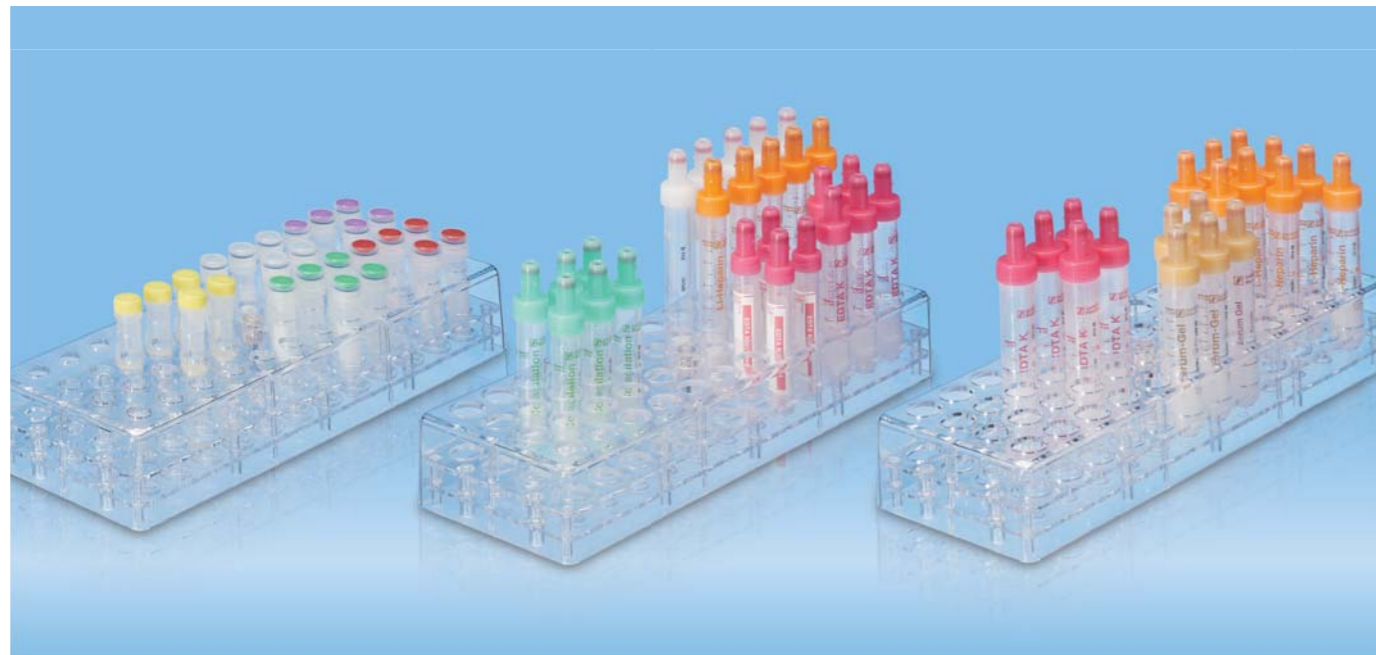
Diameter of aperture (see table below)

upper aperture (casing) — d1
central aperture (central plate) — d2
lower aperture (base plate) — d3

Order No.	Diameter of Aperture mm			External Dimensions mm H x L x W	Suitable for
	d1	d2	d3		
93.841.100	26	26	10	60 x 327 x 72	Tubes
93.893.100	21.5	26	10	60 x 327 x 72	Tubes (100 x 21.5 Ø)
93.844.100	17.2	17.2	8.5	55 x 257 x 62	Tubes, all S-Monovette® diameters
93.1097.100*	17.2	17.2	8.5	55 x 257 x 74	Tubes, all S-Monovette® diameters
93.846.100	13.5	13.2	8.5	40 x 257 x 62	Tubes, S-Monovettes of 13 mm Ø and 11 mm Ø
93.849.100	11	11	4.8	40 x 257 x 62	Standard micro tubes, e.g. 72.690.001, 72.696, 72.695.500, 72.708, Microvette®
93.848.100	10.5	11	4.8	40 x 257 x 62	Micro tubes with screw cap – notched aperture enables single-handed operation
93.1102.001	Rack cover from brown, translucent material			72 x 256 x 62	Compatible with rack no. 93.1097.100 The cover protects open tubes from contamination

* Rack with side pocket

4 rows, with 12 apertures



- From impact-resistant material
- Autoclavable up to 121°C

Dimensions

height — 40 mm
length — 257 mm
width — 90 mm

Diameter of aperture (see table below)

upper aperture (casing) — d1
central aperture (central plate) — d2
lower aperture (base plate) — d3

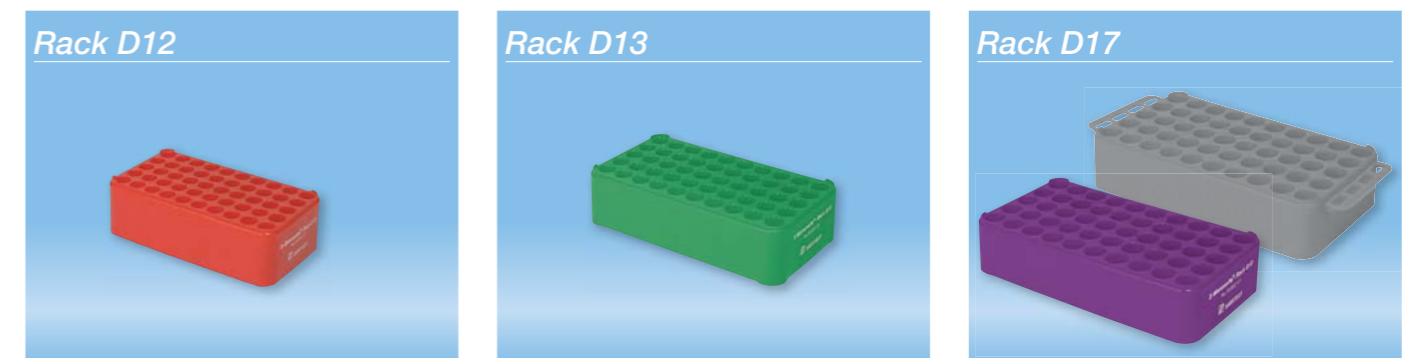
Order No.	Diameter of Aperture mm			Suitable for
	d1	d2	d3	
93.1431.001	17.2	17.2	8	Tubes, square cuvettes, all S-Monovette® diameters
93.1431	15.6	15.6	8	Tubes, S-Monovettes of 15 mm Ø and 13 mm Ø
93.838.013	13.5	13.5	8	Tubes and S-Monovettes of 13 mm Ø
93.838	12.2	12.2	8	Tubes and S-Monovettes of 11 mm Ø
93.868	11	11.5	4.8	2 ml micro tubes, Microvette®
93.837	11	7	–	Standard micro tubes, e.g. 72.690.001, 72.696
93.1428	10.5	11.5	4.8	Micro tubes with screw cap – notched aperture enables single-handed operation
93.48.011	8	4.5	–	Micro tubes of 8 mm Ø, e.g. 72.699, 72.735

The universal PP block rack for use in any laboratory

- 50 place - 5 rows of 10 apertures each
- Available in three sizes, suitable for all S-Monovette® diameters and for tubes from Ø 8 to Ø 17 mm
- Various colours enable universal use and help to organise your laboratory
- Especially suitable for space-saving sample storage
- Autoclavable up to 121°C
- Marking of each aperture as well as printing possible upon customer request
- The D17 rack is also available with handles



Rack with 50 apertures



Rack D12

Suitable for S-Monovette® up to Ø 11.0 mm and tubes up to Ø 12.0 mm.
Dimensions: (length x width x height)
152 x 80 x 45 mm

Order No.	Colour	Packaging pcs./case
93.854	grey	20
93.854.121	red	20
93.854.122	yellow	20
93.854.123	green	20
93.854.124	blue	20
93.854.125	orange	20

Rack D13

Suitable for S-Monovette® and tubes from Ø 8 mm up to Ø 13 mm.
Dimensions: (length x width x height)
180 x 96 x 45 mm

Order No.	Colour	Packaging pcs./case
93.853	grey	16
93.853.131	red	16
93.853.132	yellow	16
93.853.133	green	16
93.853.134	blue	16
93.853.135	orange	16

Other colours are available on request. Custom printing of the front/long side is possible with a minimum order quantity of 200 pieces (front side print is not possible for D17 with handles).

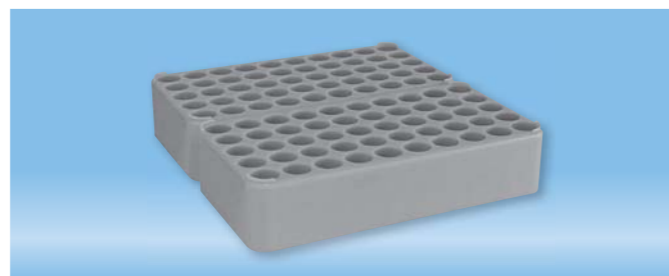
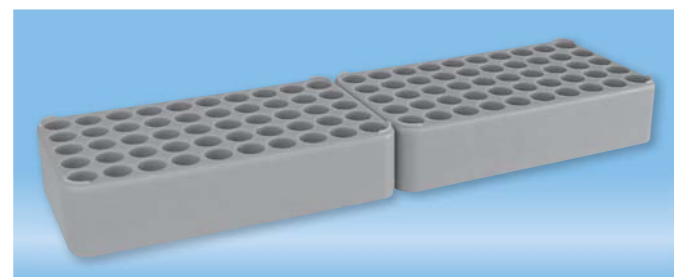
Rack D17 with and without handles

Suitable for S-Monovette® up to Ø 16 mm and tubes up to Ø 17 mm
 Dimensions: (length x width x height) without handles: 209 x 109 x 45 mm - with handles: 246 x 109 x 45 mm

Order No.	Colour	Handles	Packaging pcs./case	Order No.	Colour	Handles	Packaging pcs./case
93.852	grey	without	20	93.852.174	blue	without	20
93.851		with	12	93.851.174		with	12
93.852.171	red	without	20	93.852.175	orange	without	20
93.851.171		with	12	93.851.175		with	12
93.852.172	yellow	without	20	93.852.168	brown	without	20
93.851.172		with	12	93.852.169		violet	without
93.852.173	green	without	20	93.852.170	white	without	20
93.851.173		with	12				

Double block racks with 100 apertures

Two racks are connected to each other. Especially advantageous for efficient sample backup storage.
 Racks identified by the corresponding order numbers are available in grey only.
 Other colours are available upon request. Customised print (min. order quantity: 100 pcs.).



Double block racks connected at front ends

Order No.	Rack Type	Packaging pcs./case
93.853.300	D13	8
93.852.300	D17	12

Double block racks connected at lateral ends

Order No.	Rack Type	Packaging pcs./case
93.853.200	D13	8
93.852.200	D17	12

Dimensions of double block racks (length x width x height)

Rack D13 – Connected at lateral ends: 180 x 192 x 45 mm
 Connected at front ends: 360 x 96 x 45 mm

Rack D17 – Connected at lateral ends: 209 x 218 x 45 mm
 Connected at front ends: 418 x 109 x 45 mm



Rack for centrifuge tubes

Suitable for tubes to 30 mm Ø and 25 ml S-Monovettes

- Autoclavable
- Rack with convenient handles
- Size in mm: (W x D x H) 295 x 114 x 65

Order No.	Capacity	Compartments	Packaging bag/case
93.1707	18	3 x 6	1/10



Revolver workstation

- Accommodates a range of sample tubes in one rack
- Apertures from 5 mm Ø to 30 mm Ø per subunit
- Subunits are rotatable and easy to combine
- Suitable in temperature ranges from -80°C to 121°C

Order No.	Size L x W x D	Packaging bag/case
93.879	108 x 108 x 257 mm	1/4



Suitable for the destruction of disposable materials by autoclaving

Sarstedt disposal bags are ideal for the containment and disposal of contaminated laboratory and medical consumables. A 50 µm thick polypropylene bag with a durable wide base seam ensures resistance to tear and puncturing. However, in view of the inherent injury risk, sharp or pointed objects must never be placed into the bags.

Sarstedt's disposal bags are suited for hot steam sterilisation in the autoclave from 121°C⁽¹⁾ to approx. 134°C⁽²⁾. For a complete steam sterilisation, the disposal bags must always be open during autoclaving.

The range includes a variety of sizes and colours as well as options with "Bio Hazard" print.

- Durable PP material (50 µm) for improved safety
- Reduced waste volume
- Suitable for autoclaving at 121°C⁽¹⁾ to approx. 134°C⁽²⁾

Order No.	Dimensions (mm)	Volume**	Bag Colour		Bag Print		Print Colour		Packaging box/case
			neutral	yellow	yes	no	red	blue	
86.1197*	200 x 300 ⁽¹⁾	2 l	•			•			100/1,000
86.1198	300 x 500 ⁽²⁾	7 l	•			•			50/500
86.1201	300 x 500 ⁽¹⁾	7 l	•		•		•		50/500
86.1201.103	300 x 500 ⁽²⁾	7 l		•	•			•	50/500
86.1199	400 x 780 ⁽²⁾	24 l	•			•			50/250
86.1202	400 x 780 ⁽¹⁾	24 l	•		•		•		50/250
86.1202.103	400 x 780 ⁽²⁾	24 l		•	•			•	50/250
86.1200	600 x 780 ⁽²⁾	40 l	•			•			50/250
86.1203	600 x 780 ⁽¹⁾	40 l	•		•		•		50/250
86.1203.103	600 x 780 ⁽²⁾	40 l		•	•			•	50/250
86.1204	700 x 1,120 ⁽²⁾	80 l	•			•			50/150
86.1206.103	700 x 1,120 ⁽²⁾	80 l		•	•			•	50/150

* Disposal bags for table rack in convenient dispenser box (100 box).

** Do not fill above maximum volume to enable closure after autoclaving.



Table rack for disposal bags

Steel rack coated with epoxy resin.

Order Number: 95.1297

1 rack including dispenser box with bags (Order No. 86.1197).

Patient comfort and safety are our mission



Urine Drainage Systems

Urine Drainage Systems UD3 ^{plus} , UD3 TUR-BAG	170
Urine Measuring System UM 500	171
Urine and Secretion Bags / Universal Attachments	172-173
Urine Leg Bags	174
Velcro Straps / UroStretch	175

Pressure Infusion Cuffs/Transfusion Systems

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Warming

SAHARA-III	184
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Syringe Labelling

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Miscellaneous

Miscellaneous Medical Products	187
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UD 3^{plus} Enclosed urine drainage system with 2.0 L drainage tap bag

- Universal step connector with integral pierceable membrane
- Drip chamber with optimised bacteria-tight ventilation and membrane reflux valve
- Universal holder for secure attachment to all common beds, multiple use is possible
- Ventilated 2 L urine bag with printed graduation
- Single-handed drainage tap with pocket

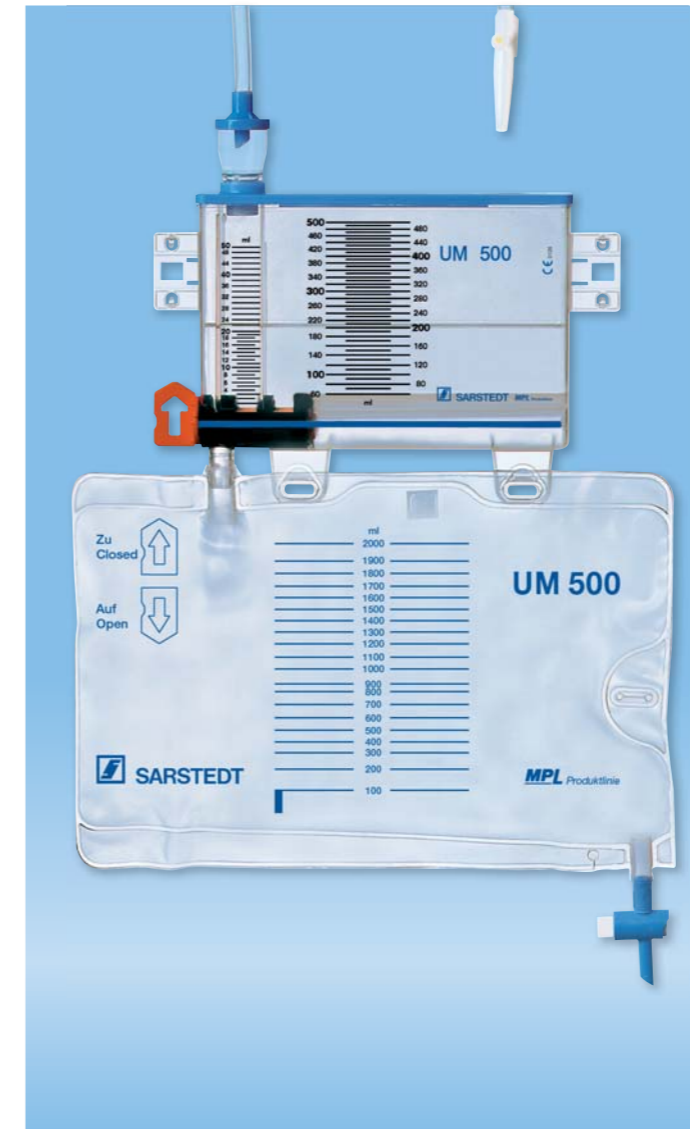
Order No.	Volume	Tube Length	Description	Packaging pcs./case
74.5330	2.0 Liters	100 cm	with holder, sterile	25
74.5330.010	2.0 Liters	120 cm	with holder, sterile	25
74.5335	2.0 Liters	100 cm	without holder, sterile	20
74.5335.010	2.0 Liters	120 cm	without holder, sterile	20
74.5350	Universal holder for secure attachment to all common beds			15



UD 3 TUR-BAG The enclosed urine drainage system for bladder irrigation

- Large-volume, kink resistant 100 cm long drainage tubing
- Drip chamber with hydrophobic ventilation system for optimum irrigation control
- Capacity: 4 Liters
- Single-handed drainage tap for rapid emptying

Order No.	Volume	Description	Packaging pcs./case
74.5340	4.0 Liters	UD 3 TUR-BAG with pump ball, sterile	20
74.5340.001	4.0 Liters	UD 3 TUR-BAG without pump ball, sterile	25



UM 500 Urine measuring system

500 ml measuring chamber with integral ventilated drip chamber, and anti-reflux valve, overflow chamber, precision measuring range, central drainage tap and measuring chamber ventilation.

- Also available with permanent drainage bag and tap or exchange bag
- Individual attachment with elastic straps or special hooks to fit side rails
- Individually packed, sterile

Order No.	Volume	Description	Packaging pcs./case
74.5610.100	2,000 ml permanent bag	UM 500 with hooks to fit side rails	15
74.5610.200	2,000 ml permanent bag	UM 500 with elastic straps	15
74.5620.200	1,800 ml exchange bag	UM 500 with elastic straps	15
74.5630.200	3,000 ml exchange bag	UM 500 with elastic straps	15
74.5622.005	1,800 ml	1,800 ml Drainage bag for UM 500	100
74.5624.005	3,000 ml	3,000 ml Drainage bag for UM 500	100
74.5650.010		Hooks to fit wide bed frames	150



Rapid draining

Rapid draining of the measuring chamber is ensured by a rotary valve which allows maximum flow rates in line with optimum pressure balancing within the system (bacteria-tight ventilation of drip chamber, measuring chamber and collection bag).



Precise reading

A clear and comprehensive milliliter graduation facilitates precise registration of even the smallest volumes. The total measuring volume of 500 ml and the clear graduation permit exact balancing also in cases of high output.



Hygienically safe

The integral drip chamber with bacteria-tight ventilation and anti-reflux membrane valve, plus the additional anti-reflux valve in the collection bag, ensures it to be hygienically safe and prevents retrograde bacterial migration.



Urine and secretion bags with anti-reflux and base relief valve

- Universal step connector
- Length of transfer tubing 90 cm, inner diameter 5 mm
- Anti-reflux valve
- Push/Pull valve

Order No.	Volume	Description	Packaging pcs./case
74.5210.101	1.5 Liters	non-sterile	150
74.5210.001	1.5 Liters	ETO* treated	150
74.5220.101	2.0 Liters	non-sterile	150
74.5220.001	2.0 Liters	ETO* treated	150
74.5220.005	2.0 Liters	sterile, ind. wrapped	100

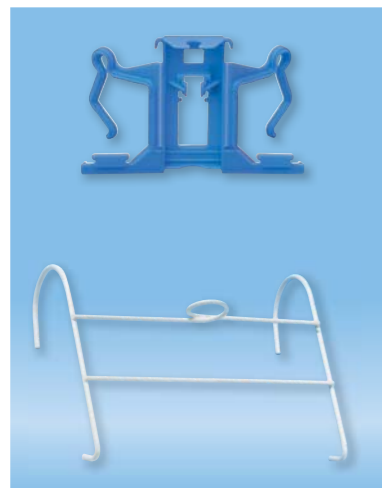
* ethylene-oxide



D-2 urine drainage bag 2.0 L

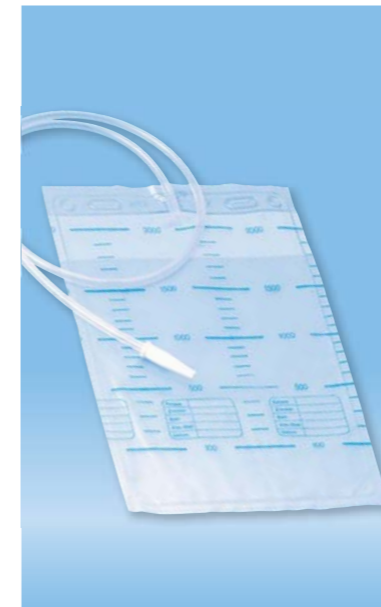
- Step connector with integral sampling site
- Anti-reflux valve
- Bag ventilation
- Single-handed drainage tap

Order No.	Volume	Description	Packaging pcs./case
74.5455.005	2.0 Liters	D-2 urine drainage bag without attachment, individually wrapped, sterile	50



Universal attachment for urine and secretion bags

Order No.	Description	Packaging pcs./case
74.5350	Plastic, suitable for all Sarstedt urine and secretion bags	15
74.5760	Metal	50



Urine and secretion bags with anti-reflux valve

- Universal step connector
- Length of transfer tubing 90 cm, inner diameter 5 mm
- Anti-reflux valve
- Tear-off edge for disposal

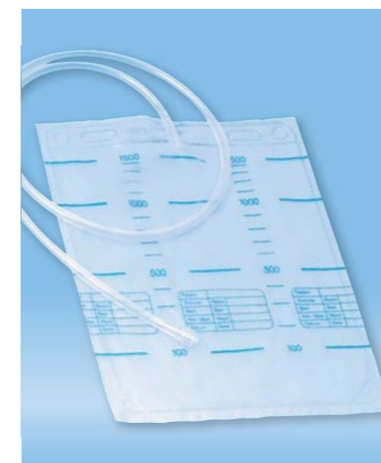
Order No.	Volume	Description	Packaging pcs./case
74.5203.101	1.5 Liters	non-sterile	200
74.5203.001	1.5 Liters	ETO* treated	200
74.5203.005	1.5 Liters	sterile, ind. wrapped	100
74.5204.101	2.0 Liters	non-sterile	200
74.5204.001	2.0 Liters	ETO* treated	200
74.5204.005	2.0 Liters	sterile, ind. wrapped	100



Secretion bags

- Universal step connector
- Length of transfer tubing 90 cm, inner diameter 5 mm
- Tear-off edge

Order No.	Volume	Description	Packaging pcs./case
74.5201.101	1.5 Liters	non-sterile	200
74.5201.001	1.5 Liters	ETO* treated	200
74.5201.005	1.5 Liters	sterile, ind. wrapped	100
74.5202.101	2.0 Liters	non-sterile	200
74.5202.001	2.0 Liters	ETO* treated	200
74.5202.005	2.0 Liters	sterile, ind. wrapped	100



Gall secretion bags with Luer lock connection

Order No.	Volume	Description	Packaging pcs./case
74.5206.005	1.5 Liters	sterile, ind. wrapped	100
74.5207.005	1.5 Liters with base relief valve	sterile, ind. wrapped	100

* ethylene-oxide



Comfort urine leg bags

- Comfortable viscose material
- 10 cm or 45 cm tube length
- Anti-reflux valve
- 500 ml or 1,000 ml capacity
- Easy to use base relief valve with overnight connection

Order No.	Description	Packaging pcs./case
74.5810.005	500 ml, tube length 10 cm, ind. wrapped, sterile	30
74.5810.101	500 ml, tube length 10 cm, non-sterile	30
74.5815.005	500 ml, tube length 45 cm, ind. wrapped, sterile	30
74.5815.101	500 ml, tube length 45 cm, non-sterile	30
74.5820.005	1,000 ml, tube length 10 cm, ind. wrapped, sterile	30
74.5820.101	1,000 ml, tube length 10 cm, non-sterile	30
74.5825.005	1,000 ml, tube length 45 cm, ind. wrapped, sterile	30
74.5825.101	1,000 ml, tube length 45 cm, non-sterile	30



Urine leg bags

- With straight or canted 10 cm inlet tube
- Anti-reflux valve
- Capacity 750 ml, base relief valve

Order No.	Description	Packaging pcs./case
74.5230.001	with straight inlet tube, ETO* treated	200
74.5230.005	with straight inlet tube, ind. wrapped, sterile	50
74.5230.101	with straight inlet tube, non sterile	200
74.5231.001	with canted inlet tube, ETO* treated	200
74.5231.005	with canted inlet tube, ind. wrapped, sterile	50
74.5231.101	with canted inlet tube, non sterile	200

* ethylene-oxide



Velcro band for attachment of leg bags

High level of comfort

- Full-width elastic design
- Comfortable, padded material
- 3 different sizes for individual fit
- Resistant to wear and washable (40°C)



Order No.	Description	Packaging pcs./case
74.5766.001	Size: S 380 - 430 mm	10
74.5766.002	Size: M 440 - 530 mm	10
74.5766.003	Size: L 550 - 650 mm	10



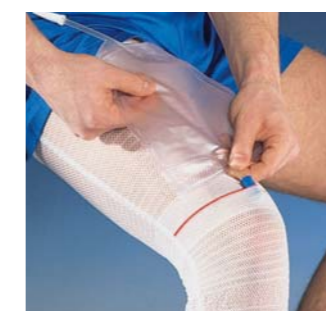
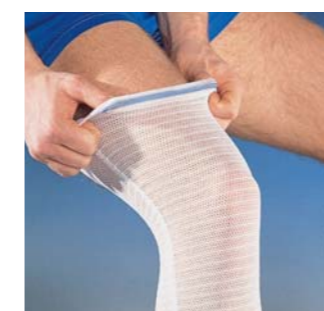
UroStretch leg bag attachment

Elastic, textile tubular bandage for leg bag attachment. For use with all urine leg bags up to 750 ml. Suitable for multiple use and washable at 40°C.

UroStretch offers increased user comfort due to:

- No contact of leg bag with the skin (to avoid allergies and skin irritation)
- Full-length fixation of leg bag surface
- 4 different sizes for individual fit
- Reduction of liquid noise

Order No.	Description	Packaging pcs./case
74.5767.001	Size: S (lower leg) Colour code yellow	10
74.5767.002	Size: M Colour code blue	10
74.5767.003	Size: L Colour code brown	10
74.5767.004	Size: XL Colour code green	10



The UroStretch is pulled over the thigh from below so that the coloured band points towards the body. The red strip should be positioned approximately 5 cm above the knee.

The leg bag is placed on top and the drainage tap is passed through the UroStretch opening in the centre of the red strip. Finally, the outer side of the UroStretch, still resting on the lower leg, is pulled over the leg bag.

More "Comfort" with each application

- For arterial pressure measurement, pressure infusion and pressure transfusion of volumes up to 1,000 ml
- With new valve gauge unit for one-hand operation
- Latex-free and MRT capable
- Washable cover

Order No.	Description	Packaging pcs.
97.8100.600	Pressure infusion cuff "S-Comfort" - up to 500 ml volume	1
97.8100.610	Pressure infusion cuff "K-Comfort" - up to 1,000 ml volume	1
97.8100.620	Pressure Infusion Cuff "FR-Comfort" - up to 1,000 ml volume - solid back and velcro for variable fit - with additional insert pocket for recording patient, ward, medication etc	1

Insert pocket – for recording patient, ward, medication etc.

- Improves identification and documentation
- Prevents writing on the cover

Spare Parts

Order No.	Description	Packaging pcs.
97.8100.630	Rubber ballon latex-free, Inner tube diameter 8 mm	5
97.8100.631	Valve-Gauge-Unit, Valve-Gauge-Unit for inner tube diameter of 8 mm	1
97.8100.632	Bellows for valve-gauge-unit, Bellows for the connection to the valve-gauge-unit, red, latex-free	1
97.8100.633	Cover for pressure infusion cuff "S-Comfort"	1
97.8100.634	Cover for pressure infusion cuff "K-Comfort"	1
97.8100.635	Cover for pressure infusion cuff "FR-Comfort"	1

Quality that pays

- For arterial pressure management, pressure infusion and pressure transfusion of volumes up to 1,000 ml

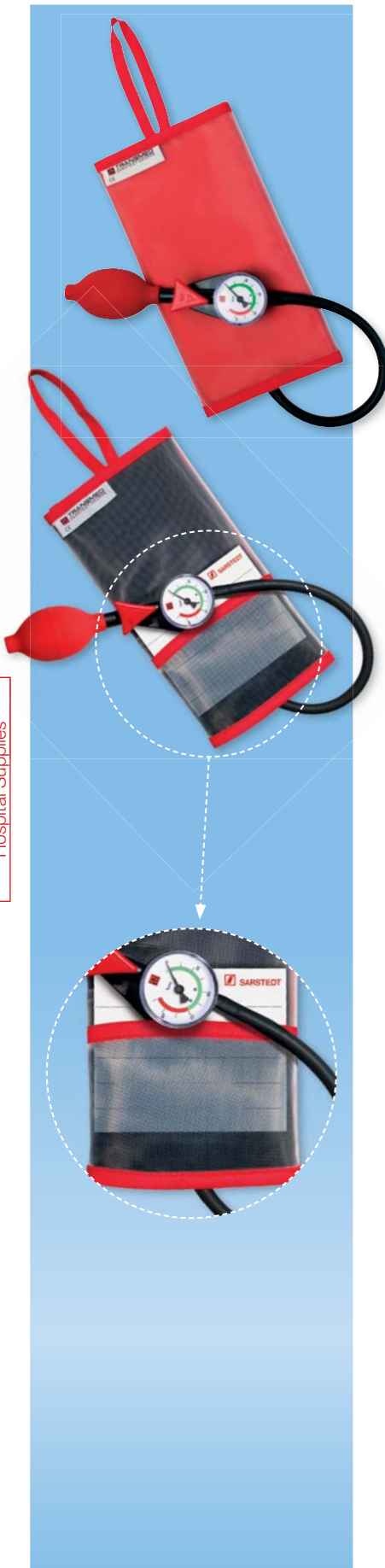
Order No.	Description	Packaging pcs.
97.8100.000	Pressure infusion cuff K - up to 1,000 ml volume - variable fit by Velcro fastener	1
97.8100.011	Pressure infusion cuff K, latex-free - up to 1,000 ml volume - variable fit by Velcro fastener	1
97.8100.100	Pressure infusion cuff Standard - up to 500 ml volume	1
97.8100.111	Pressure infusion cuff Standard, latex-free - up to 500 ml volume	1
97.8100.200	Pressure infusion cuff FR - up to 1,000 ml volume - variable fit by Velcro fastener and integral plate	1
97.8100.211	Pressure infusion cuff FR, latex-free - up to 1,000 ml volume - variable fit by Velcro fastener and integral plate	1

Spare Parts

Order No.	Description	Packaging pcs.
97.8100.010	Rubber ballon, latex free	5
97.8100.001	Rubber ballon, containing latex	5
97.8100.210	Cover for pressure infusion cuff FR	1
97.8100.002	Cover for pressure infusion cuff K	1
97.8100.102	Cover for pressure infusion cuff Standard	1
97.8100.003	Pressure gauge	5
97.8100.004	Bellows with valve, latex-free	5

Disposable Pressure Infusion Cuff

Order No.	Description	Packaging pcs.
97.8100.410	Pressure infusion cuff 500 - for arterial pressure measurement, pressure infusion and pressure transfusion - up to 500 ml volume	2



For the transfusion of blood products

- Easy handling
- Free of latex and DEHP
- Suitable for pressure transfusion
- Filter sizes from 10 µm to 200 µm



TRANSMED 10

- With integrated cascade filter (polyester) 175 µm, 40 µm and 10 µm for effective separation of particles (e.g. fats) larger than 10 µm
- For the transfer of up to six blood units

Order No.	Description	Packaging/pcs.
79.8200.000	TRANSMED 10	100

TRANSMED 40

- With integrated cascade filter (polyester) 175 µm, 40 µm and 10 µm for effective separation of particles (e.g. fats) larger than 10 µm
- For the transfer of up to six blood units

Order No.	Description	Packaging/pcs.
79.8200.100	TRANSMED 40	100

TRANSFLOW

- With integrated fine filter (polyester) with a pore size of 40 µm
- For the transfer of one to three blood units

Order No.	Description	Packaging/pcs.
79.8200.440	TRANSFLOW	100

TRANSFLOW-N

- With integrated fine filter (nylon) with a pore size of 40 µm
- For the transfer of one to three blood units

Order No.	Description	Packaging/pcs.
79.8200.490	TRANSFLOW-N	100

Transfusion set 200 µm

- With integrated fine filter with a pore size of 200 µm
- For the transfer of generally no more than one blood unit

Order No.	Description	Packaging/pcs.
79.8200.500	Transfusion set 200 µm	300



HAEM-o-TRANS

System for autologous direct retransfusion

- Closed low-pressure system for collection and retransfusion of wound and drainage blood
- Latex-free
- Functional erythrocytes are maintained by means of low pressure
- One-way valves prevent retrograde infections
- No change of system, only blood collection bag or drainage bag is changed
- Discharge of cell residues, blood and secretion during the entire drainage period
- Transfusion device enables separation of particles (e.g. fats) larger than 10 µm

Order No.	Description	Packaging/pcs.
79.8400.100	HAEM-o-TRANS Unit - Set with quadruple connector: • Quadruple drain connector • Suction bellows with anti-reflux barrier • HAEM-o-TRANS blood collection bag 700 ml - Transfusion set 10 µm - Drainage bag 700 ml	20
79.8400.203	HAEM-o-TRANS Set with Y connector - Y-drain connector - Suction bellows with anti-reflux barrier - HAEM-o-TRANS blood collection bag 700 ml	20
79.8400.220	HAEM-o-TRANS Blood Collection Bag 700 ml - 175 µm pre-filter - Return stop	20
79.8400.230	HAEM-o-TRANS Transfusion Set 10 µm - With integrated cascading filter 175 µm, 40 µm and 10 µm	20
79.8400.270	HAEM-o-TRANS Drainage Bag 700 ml - Return stop	20

Instruments for all areas of regional anaesthesia: Innovative solutions direct from the manufacturer!

- Development, production and sales of high-quality instruments "Made in Germany"
- Modern manufacturing processes
- Reliable products
- Corporate production of cannulas
- Extensive product range
- Tested and certified product solutions
- Competent service



- ✓ REGANESTH® spinal needles pencil-point in various designs featuring transparent **viewing chamber** with magnifying effect for rapid identification of cerebro spinal fluid
- ✓ Tuohy needles with **large wings** for easier handling and guidance of the cannula
- ✓ **Epidural catheter sets** with extra long (1,000 mm) catheter, ideal for the use with tall or bariatric patients
- ✓ Instruments for spinal and epidural anaesthesia, also with **(S) Surety. Non Luer connector** to avoid incorrect route administration
- ✓ REGANESTH® plexus needles for **nerve stimulation** and **ultrasound monitoring**
- ✓ **Standardised and customised procedure packs** for regional anaesthesia



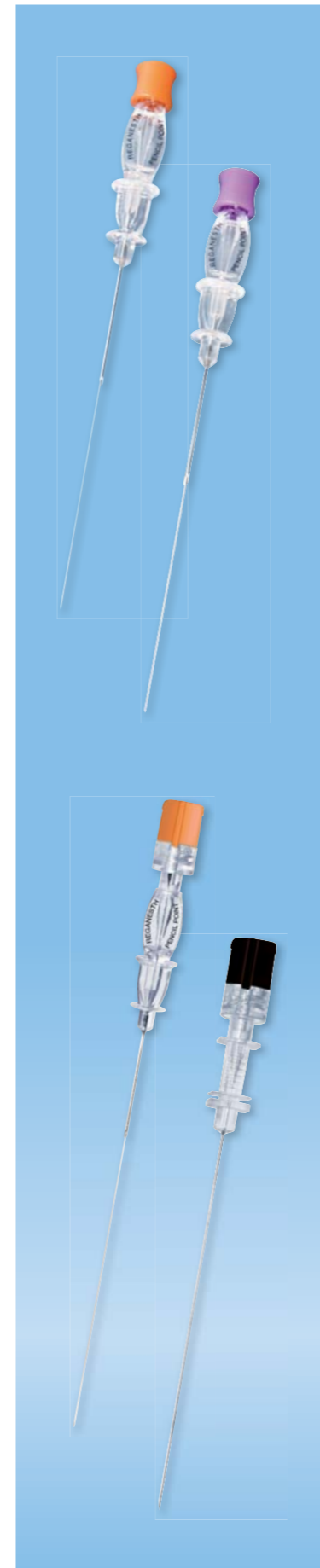
Spinal anaesthesia

- The atraumatic pencil-point tip leads to a distinct dura resistance and significantly reduces the probability of post-dural-puncture-headache (PDPH)
- Anatomically designed needle hub with anti-glare and non-reflective CSF chamber for the identification of even smallest quantities of fluid
- The lateral eye, which is adapted to the inner dimensions, supports a rapid CSF reflux and therefore a quick identification of the subarachnoid space
- Mandrin with excellent fit to avoid punching out tissue or introduction of tissue into the spinal/epidural space
- Introducer, which is designed to match the length of the supported needle, facilitates the insertion of long and thin atraumatic needles and permits the maximum possible puncture length
- Spinal needles available with Luer or **(S) Surety. Non-Luer connector**: to avoid incorrect route administration in case of neuraxial and intravenous applications

Order No.	Description	Sales unit
79.8081.520	REGANESTH® spinal needle 27 G x 38 mm pencil-point	20
79.8081.500	REGANESTH® spinal needle 27 G x 90 mm pencil-point	20
79.8081.515	REGANESTH® spinal needle 27 G x 90 mm pencil-point + Introducer 32 mm	20
79.8081.510	REGANESTH® spinal needle 27 G x 110 mm pencil-point	20
79.8081.530	REGANESTH® spinal needle 27 G x 120 mm pencil-point	20
79.8081.540	REGANESTH® spinal needle 27 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.800	REGANESTH® spinal needle 25 G x 90 mm pencil-point	20
79.8081.805	REGANESTH® spinal needle 25 G x 90 mm pencil-point + Introducer 30 mm	20
79.8081.840	REGANESTH® spinal needle 25 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.810	REGANESTH® spinal needle 24 G x 90 mm pencil-point	20
79.8081.811	REGANESTH® spinal needle 24 G x 90 mm pencil-point + Introducer 30 mm	20
79.8081.812	REGANESTH® spinal needle 24 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.210	REGANESTH® spinal needle 22 G x 90 mm pencil-point	20
79.8081.900	Introducer 20 G x 30 mm	20
79.8081.940	Introducer 20 G x 40 mm	20
79.8082.938	Introducer 20 G x 38 mm for use with spinal needles up to Ø 0.70mm (22G)	20
79.8082.210	Spinal needle 20 G x 178 mm Quincke	20

... with (S) Surety. Non-luer connector

Order No.	Description	Sales unit
79.8081.526	REGANESTH®- (S) spinal needle 27 G x 38 mm pencil-point	20
79.8081.516	REGANESTH®- (S) spinal needle 27 G x 90 mm pencil-point + Introducer 32 mm	20
79.8081.546	REGANESTH®- (S) spinal needle 27 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.806	REGANESTH®- (S) spinal needle 25 G x 90 mm pencil-point + Introducer 30 mm	20
79.8081.846	REGANESTH®- (S) spinal needle 25 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.816	REGANESTH®- (S) spinal needle 24 G x 90 mm pencil-point + Introducer 30 mm	20
79.8081.826	REGANESTH®- (S) spinal needle 24 G x 120 mm pencil-point + Introducer 40 mm	20
79.8081.836	REGANESTH®- (S) spinal needle 24 G x 150 mm pencil-point + Introducer 40 mm	20
79.8081.216	REGANESTH®- (S) spinal needle 22 G x 90 mm pencil-point	20
79.8081.226	REGANESTH®- (S) spinal needle 22 G x 120 mm pencil-point	20
79.8082.276	Spinal needle 27 G x 90 mm Quincke (S) + Introducer 30 mm	20
79.8082.236	Spinal needle 25 G x 38 mm Quincke (S)	20
79.8082.256	Spinal needle 25 G x 90 mm Quincke (S) + Introducer 30 mm	20
79.8082.246	Spinal needle 24 G x 90 mm Quincke (S) + Introducer 30 mm	20
79.8082.226	Spinal needle 22 G x 90 mm Quincke (S)	20
79.8082.206	Spinal needle 22 G x 38 mm Quincke (S)	20
79.8082.216	Spinal needle 22 G x 50 mm Quincke (S)	20
79.8082.126	Spinal needle 22 G x 120 mm Quincke (S)	20
79.8082.186	Spinal needle 22 G x 180 mm Quincke (S)	20
79.8082.026	Spinal needle 20 G x 90 mm Quincke (S)	20



Epidural anaesthesia

- Large, wings for comfortable handling and guidance of the Tuohy needle
- Instruments for epidural anaesthesia available with Luer or **(S) Surety** Non-Luer connector: to avoid incorrect route administration in case of neuraxial and intravenous applications
- Long epidural catheter (1000 mm) suitable for tall or or basiatric patients
- Three terminal openings allow a homogenous distribution of the anesthetic
- Secure filter fixation device stabilises the flat filter on the patient, preventing spinning and bending of the catheter

Order No.	Description	Sales unit
79.8083.100	Tuohy needle 18G x 80 mm	10
79.8083.110	Tuohy needle 18G x 90 mm	10
79.8083.500	Epidural catheter Epidural catheter 21G x 1,000 mm, Tuohy-Borst-adapter, hub insert, flat filter 0.2 µm	5
79.8089.150	Epidural catheter set 21G x 1,000 mm Tuohy needle 18G x 90 mm, epidural catheter 21G x 1,000 mm, Tuohy-Borst adapter, flat filter 0.2 µm, hub insert, L.O.R. syringe	5
79.8089.210	CSE set 18G/27G REGANESTH® spinal needle 27G x 120 mm pencil-point, Tuohy needle 18G x 90 mm, epidural catheter 21G x 1,000 mm, Tuohy-Borst adapter, flat filter 0.2 µm, hub insert, L.O.R. syringe	5
79.8086.000	Flat filter 0.2 µm	20
79.8086.050	REGAfix F flat filter fixation device	20

... with **(S) Surety** Non-Luer connector

Order No.	Description	Sales unit
79.8083.006	Tuohy needle 18G x 50 mm (S)	10
79.8083.106	Tuohy needle 18G x 80 mm (S)	10
79.8083.116	Tuohy needle 18G x 90 mm (S)	10
79.8083.166	Tuohy needle 16G x 80 mm (S)	10
79.8089.166	Epidural catheter set S 21G x 1,000 mm A (S) Tuohy needle 16G x 80 mm, epidural catheter 21G x 1,000 mm, Tuohy-Borst adapter, flat filter 0.2 µm, hub insert, L.O.R. syringe Slip	5
79.8089.156	Epidural catheter set S 21G x 1,000 mm B (S) Tuohy needle 16G x 80 mm, epidural catheter 21G x 1,000 mm, Tuohy-Borst adapter, flat filter 0.2 µm, hub insert, L.O.R. syringe Lock	5

Order No.	Description	Sales unit
79.8083.226	CAUDANESTH® Caudal needle 22G x 25 mm (S)	10

Plexus anaesthesia

- Unipolar atraumatic plexus needle with indwelling cannula
- Flat filter 0.2 µm with a lifetime of up to 96 h
- Plexus catheter with mandrin for optimal gliding of the catheter
- Reliable flat filter fixation device ensures stable attachment of flat filter to patient, thereby minimising risk of catheter detachment

Order No.	Description	Sales unit
79.8091.000	Plexus needle 45° 20G x 48 mm	25
79.8092.005	Plexus needle 45° 18G x 51 mm	25
79.8092.200	Plexus catheter 21G x 400 mm with mandrin	10
79.8093.200	Plexus catheter set 21G/16G x 83 mm Plexus needle 45° 16G x 83 mm, plexus catheter 21G x 400 mm with mandrin, Tuohy-Borst adapter, flat filter 0.2 µm, hub insert	10
97.8071.400	Connecting cable for plexus needle 45°	10
79.8086.000	Flat filter 0.2 µm	20
79.8086.050	REGAfix F flat filter fixation device	20

- REGANESTH® duoplex stimulation cannula allows nerve stimulation and Ultrasound monitoring
- With longer injection tube and stimulation cable (60 cm)
- For blocking peripheral nerves
- Ergonomically designed needle hub for excellent handling
- Optimal positioning of the cannula near the nerve by using ultrasound prevents malpositions and facilitates the performance of plexus blocks

Order No.	Description	Sales unit
79.8095.050	REGANESTH® duoplex • Stimulation cannula 30° 21G x 50 mm	20
79.8095.070	REGANESTH® duoplex • Stimulation cannula 30° 21G x 70 mm	20
79.8095.170	Duoplex catheter set REGANESTH® duoplex 30° 21G x 70 mm with indwelling cannula, plexus catheter 21G x 400 mm with mandrin, Tuohy-Borst adapter, flat filter 0.2 µm	5

Regional anaesthesia sets

- Standard procedure packs for regional anaesthesia
- Customised procedure packs also available

Order No.	Description	Sales unit
79.8043.910	Anaesthesia Set Basic I 1 x contents tray, 1 x aperture drape 60 x 75 cm, 1 x drape 30 x 40 cm, 1 x forceps, 1 x syringe 10 ml, 3-part, 2 x syringe 5 ml, 3-part, 1 x syringe 2 ml, 3-part, 1 x cannula 0.9 x 70 mm, 1 x cannula 0.4 x 40 mm, 4 x ball swabs 25 x 26 cm, 4 x multi-compresses 7.5 x 7.5 cm, 4 x multi-compresses 5.0 x 5.0 cm, 1 x waterproof outer wrap 80 x 80 cm	40
79.8088.920	Anaesthesia Set Spinal 25G x 90 1 x Contents tray, 1 x Aperture film drape 70 x 90 cm Ø 10 cm, 1 x Cannula 0.9 x 70 mm, 1 x Cannula 0.4 x 40 mm, 1 x Syringe 10.0 ml 3 part, 2 x Syringe 5.0 ml 3 part, 1 x Syringe 2.0 ml, 3 part, 1 x Clamp, 4 x Ball swabs 25 x 26 cm, 4 x Multi-compresses 7.5 x 7.5 cm, 4 x Multi-compresses 5.0 x 5.0 cm, 1 x Drape 30 x 40 cm, 1 x Outer wrap 75 x 80 cm, 1 x REGANESTH® Spinal needle pencil point 25 G x 90 mm + Int.	40



SAHARA-III

- Dry tempering device for fast thawing and warming of plasma and blood components
- Contamination risks by water-borne pathogens associated with water baths are prevented
- Active drying of bag surface provides hygienic conditions surrounding the blood bag
- Standardised thawing and warming process
- Contactless measurement of the blood component temperature by an infrared sensor
- Integrated system test to check device functions
- Temperature profile and system test can be documented using protocol printer
- **Note on module change:**
Modular structure allows fast conversion between basic model and MAXITHERM

Order No.	Description	Sales unit
97.8710.500	SAHARA-III basic model	1
97.8710.800	SAHARA-III MAXITHERM	1
Accessories		
97.8710.580	Conversion module MAXITHERM for SAHARA-III basic model	1
97.8710.590	Conversion module warming plate for SAHARA-III MAXITHERM	1
97.8710.550	Conversion module infusion warmer for SAHARA-III	1
97.8710.570	Module protocol printer	1
79.8710.575	Paper for protocol printer	10
79.8710.576	Ink ribbon for protocol printer	1
97.8710.501	Stainless steel tray	1



SAHARA-TSC

- Dry tempering device for standardised thawing of cryo-preserved leukapheresis products
- Allows fast and temperature-controlled thawing of cryo-preserved leukapheresis products

Order No.	Description	Sales unit
97.8710.600	SAHARA-TSC	1
Accessories		
79.8710.610	Adaptation compress TSC	5
97.8710.620	Warming shell SAHARA-TSC	1
97.8710.570	Module protocol printer	1
79.8710.575	Paper for protocol printer	10
79.8710.576	Ink ribbon for protocol printer	1



SAHARA inline

The blood and infusion warmer SAHARA inline is a flow tempering system for the inline warming of liquid blood components and infusions during the ongoing transfusion/infusion. The heat is applied via an actively regulated aluminium heating element, which transfers its heat through the tube fixed in the groove into the contained liquid.

- **Efficient**
 - Excellent heat transfer due to a special conductive groove and a large contact surface at the heating element
 - Can be set from 37°C to 42°C
- **User-friendly**
 - Cone-shaped design of the heating element facilitates coiling of infusion tube
 - Easily readable digital display, even from a distance
 - Adjustable display brightness for different levels of room illuminations
 - Rotatable universal clamp allows secure attachment to infusion stands or standard bars without additional use of tools
 - Individually adjustable temperature unit (°C/°F)
- **Safe**
 - Tube fixing protects the infusion tube against tensile stress and prevents detachment of the heating element
 - Simultaneous numerical display of actual and target temperature level
 - Integrated system test

Order No.	Description	Sales unit
97.8710.200	SAHARA inline EU Blood and infusion warmer, 230 V	1
97.8710.240	SAHARA inline CH Blood and infusion warmer, 230 V (plug standard Suisse)	1
Accessories		
79.8710.205	Infusion tube extension 5 m - with roller clamp and LL connection	100

The risk of medication errors is a latent problem in day-to-day hospital routine. There are a number of risk sources which can ultimately have severe consequences for the patient. In addition to incorrect medication due to connection errors, e.g. in the case of neuraxial and intravenous applications, unstructured labelling of syringes can also result in very serious medication mix-ups.

The up-dated DIVI Recommendation from 2012 addresses this problem and refers to the international standard ISO 26825. The concept of this standard is to classify drugs into drug classes, each of which is assigned a unique colour code. In this way, the most severe medication errors – resulting from mixing up drugs from fundamentally different pharmaceutical effects – are inhibited.

Based on ISO 26825 and DGAI/DIVI Recommendation, SARSTEDT AG & CO. offers a wide range of labels which can be assessed at www.sarstedt.com.

Self-adhesive labels

- Syringe labelling according to ISO 26825 and DGAI/DIVI Recommendation
- Avoidance of incorrect medication based on standardised colour labelling of drug classes
- Consistent distinction from antagonists by means of diagonal stripes
- Compatible with label dispensers 97.8300.500 and 97.8300.501

Order No.	Description	Packaging
79.8300.557	ISO labels Adhesive labels acc. to ISO 26825 (DGAI/DIVI), size 35 mm x 13 mm	1,000 pieces per reel
79.8300.558	DIVI labels Adhesive labels acc. to DGAI/DIVI, size 80 mm x 40 mm	500 pieces per reel
79.8360.003	DIVI background label B Label documenting signature, time and date, substance quantity and total quantity (German)	12 labels per 100 sheets
79.8360.004	DIVI background label R Label documenting signature, time and date, substance quantity and total quantity (German)	500 pieces per reel
97.8300.500	Label dispenser with cover For 7 reels of adhesive labels	1 piece
97.8300.501	Label dispenser Maxi with cover For 10 reels of adhesive labels 13x35mm or 4 reels of adhesive labels 40 x 80 mm	1 piece



Other medical products

- Practical supplies for day-to-day hospital routine

Order No.	Description	Packaging pcs./case
97.8300.450	TRANSKAT catheter quiver Height: 45 cm Ø: 10 cm	1
97.8300.460	TRANSKAT cover Height: 25 cm	1
97.8300.400	Fixing clamp-R, Suitable for bar systems, tables, windowsills, etc.	1
97.8300.600	Tube holder with clip With Velcro fastener, universally applicable through clip lock, length: 10 cm	15
97.8300.601	Tube holder with hook With Velcro fastener, for fastening with hook to bars etc., length: 15 cm	15
97.8300.610	Tube holder, long, 2 clips, With Velcro fastener, for double-side fastening with clips, length: 25 cm	10



Accessories for blood bags

Order No.	Description	Packaging pcs./case
79.8701.990	Sealing lock to seal neck on blood bags	700 single sterile packing



Navel clamp

- For safe closure of the umbilical cord after delivery
- Individually wrapped, sterile

Order No.	Packaging pcs./case
74.4701	250

Patient comfort and safety are our mission



Blood Mixing & Weighing Devices

TOPSWING	190
TRANSWAAG PRO	191

Sealing & Stripping

Segmentation System MS 1000	192
Tube strippers for blood bag tubing	193
Electronic tube stripper/Manual stripping and sealing tongs	194

Transport & Storage

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Incubators & Agitators

Incubators	197
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Accessories for Blood Donation

Donor Seat / Table, Irradiation Indicator	198
Blood bags for Autologous Transfusion / Tube segment Opener	199



TOPSWING

Safe whole blood donation with efficient data management

- Innovative mixing motion
- Large VGA graphic display
- Modular design

Order No.	Description
97.8700.400	TOPSWING PRO - With 2 x interfaces for scanner, 3 x USB, 1 x RS 232, 1 x RJ 45 - Battery-supplied operation by lithium-ion technology - Data transfer via USB stick, RS 232, ethernet or radio
97.8700.402	TOPSWING CL - With 2 x interfaces for scanner, 3 x USB, 1 x RS 232, 1 x RJ 45 - Battery-supplied operation by lithium-ion technology - Data transfer via USB stick, RS 232 and ethernet

Order No.	Accessories
97.8700.420	TS-Power Charger Battery-charging station incl. power cable - For quickly and simultaneously charging up to 12 TS-Power-Packs independent of the charge condition of the TS-Power-Packs
97.8700.423	TS-Power-Pack Li-Ion Mobile power supply unit with integrated charging unit and connection for Module TS-Power-Pack - For battery-powered operation of TOPSWING via Module TS-Power-Pack
97.8700.430	Module TS-Power-Pack Adapter module for connection of TS-Power-Pack to TOPSWING - Integrated drawer for storing scanner TOUCH 65 PRO and accessories
97.8700.431	Module TS-Seal Adapter module for connection to TOPSWING with integrated basic sealer - Incl. drawer for storing sealer, cable and accessories
97.8700.432	Module TS-Transport Storage and transport cover for TOPSWING - Stackable, enables height setting of TOPSWING during the donation
97.8700.433	Module TS-Level Enables height setting of TOPSWING during the donation
97.8700.440	Scanner TOUCH 65 PRO Barcode scanner with connection for TOPSWING
97.8700.445	USB stick Mobile data carrier
97.8700.450	TS-Script-Manager - Allows comfortable setting of TOPSWING as well as configuration of scan sequence during the donation - Incl. installation CD for Windows
97.8700.452	TRANSComm II - Enables data exchange between TOPSWING and PC - Incl. installation CD for Windows
97.8700.453	Custom TS-Software Customisation of TS-Software according to user requirements
97.8700.461	DECT module base station USB Enables data communication with radio module of TOPSWING PRO via TRANSComm II - Connects to PC via USB interface 2.0
97.8700.466	TS data cable RS 232 3 m For connecting TOPSWING to PC via RS 232 interface
97.8700.467	TS data cable RJ 45 3 m For connecting TOPSWING to PC via RJ 45 interface
97.8700.470	TS remote control For convenient operation of TOPSWING
97.8700.980	Calibration weight 500 g Precision weight class M1 for validating TRANSWAAG/TOPSWING



TRANSWAAG PRO

The tried and tested classic featuring state-of-the-art technology

- Low weight
- Large colour graphic display
- Versatile data management function
- Robust aluminium casing

Order No.	Description
97.8700.105	TRANSWAAG PRO - with 1x interface for scanner, 2x USB, 1x RS 232, 1x RJ 45, 1x battery - Battery-supplied operation, Lithium-ion battery technology - Data transfer via USB-Stick, RS 232 and Ethernet

Order No.	Accessories
97.8700.233	TW-Power-Pack Li-Ion Li-Ion battery with integrated charging unit - Can be integrated in transport case - Allows operation of TRANSWAAG PRO for at least 30 hours
97.8700.238	16 Port RS 232 interface module Adds sixteen RS 232 interfaces to a standard PC
97.8700.239	TW data cable RS 232 3 m For connecting TRANSWAAG to a serial PC interface
97.8700.243	Scanner TW Touch 65 PRO Robust impact-resistant, nonwearing barcode scanner
97.8700.261	Customised TW-Software Individual configuration of the standard software according to user requirements, e.g.: - configuration of the options menu - number of scan steps - data transfer online or via USB-Stick - communication with central host computer
97.8700.275	TW PRO radio module Module for data transmission via radio to the host computer
97.8700.445	USB stick Mobile data carrier
97.8700.985	Transport case TW PRO - charging of TW-Power-Pack Li-Ion possible even when transport case is closed - lightweight and solid plastic material - stackable - protects TRANSWAAG PRO during transport and storage and allows the storage of wall power adaptor, TW-Power-Pack Li-Ion, scanner and USB-Stick

Sealing and Stripping

Segmentation System MS 1000

- RF Sealer
- Modular design
- Touchscreen
- Maintenance and test programs
- Compact sealing head
- Tube sensor
- Replaceable electrodes
- Wide seams
- Durable high-quality casing
- Range of rails for connecting multiple sealers (instrument base)



MS 1000

The new MS 1000 Segmentation System is suited for a range of applications. It has been designed as a stand-alone device for use in blood donation, or as a segmentation system in combination with several instruments for the production of blood components.

The standard MS1000 configuration includes a modern touchscreen that, in addition to the typical operational functions, enables routine maintenance and error diagnostics.

For use as a segmentation system, several stand-alone devices can be assembled by simply fixing the instruments on a stable aluminum rail with an audible click. Connect the units using a control cable and pre-configured power cord with a central ON/OFF switch.

Order No.	Description	Packaging pcs.
87.7708.800	MS 1000, incl. base, power cord and control cable, transport case	1
87.7708.813	Instrument rail for 3 devices	1
87.7708.814	Instrument rail for 4 devices	1
87.7708.815	Instrument rail for 5 devices	1
87.7708.816	Instrument rail for 6 devices	1
87.7708.817	Instrument rail for 7 devices	1
87.7708.818	Instrument rail for 8 devices	1
87.7708.823	Power cord with ON/OFF switch for 3 instruments	1
87.7708.824	Power cord with ON/OFF switch for 4 instruments	1
87.7708.825	Power cord with ON/OFF switch for 5 instruments	1
87.7708.826*	Power cord with ON/OFF switch for 6 instruments	1
87.7708.827*	Power cord with ON/OFF switch for 7 instruments	1
87.7708.828*	Power cord with ON/OFF switch for 8 instruments	1
87.7708.833	Base plate with handles for 3 instruments	1
87.7708.834	Base plate with handles for 4 instruments	1
87.7708.835	Base plate with handles for 5 instruments	1
87.7708.836*	Base plate with handles for 6 instruments	1
87.7708.837*	Base plate with handles for 7 instruments	1
87.7708.838*	Base plate with handles for 8 instruments	1

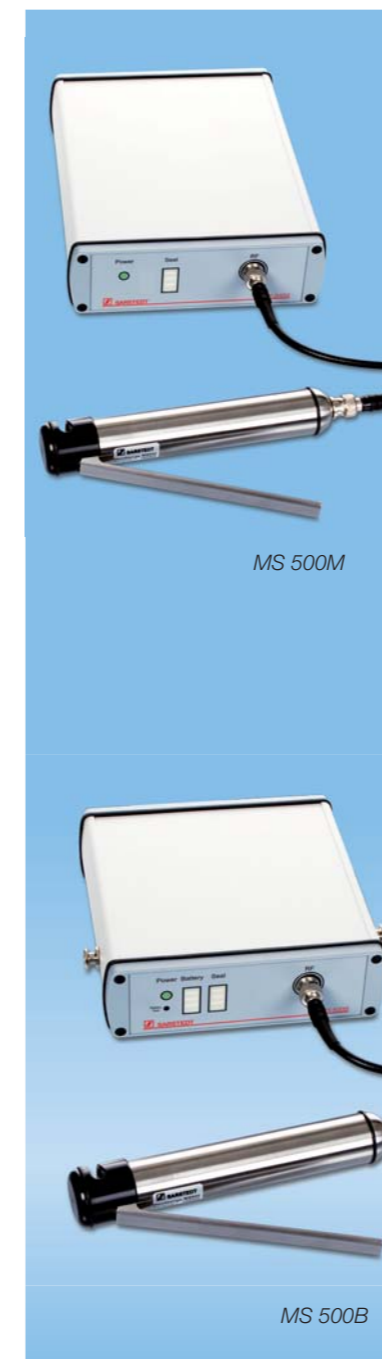
* 115 V available upon request



Sealing and Stripping

Tube strippers for blood bag tubing

- RF sealer
- Precise seams
- Simple segment separation
- Indicator light and audible signal after sealing
- Easy electrode replacement
- Easy to clean
- Replaceable battery (MS 500B)
- Durable hand sealer
- Compact casing



The new hand-held tube sealers, MS 500M (mains) and MS 500B (battery operated) are specially designed for use during blood donation or for the production of blood components.

The hand-held sealer features a specialised mechanical system that compensates for differences in user handling in order to ensure secure and consistent sealing.

The sealing head protector and electrode are also easy to detach for cleaning.

Order No.	Description	Packaging pcs.
87.7708.850	MULTI SEALER MS 500M Power supply 230 V, with hand sealer and transport case Cable length: 1.8 m Dimensions: 18 x 5.5 x 23 cm (W x H x D) Weight: 2 kg	1
87.7708.860	MULTI SEALER MS 500B Battery 24 V, with hand sealer and transport case Cable length: 1.8 m Battery: NiMH 24 V/1,700 mAh (replaceable) Dimensions: 18 x 5.5 x 17 cm (W x H x D) Weight: 2 kg	1



Electronic tube stripper for blood bag tubing

- Electric motor
- Mains or battery operation
- Switch for forward and reverse motion
- Options available with and without auto-stop function (stops automatically close to the blood bag)
- Manual or bench top application with foot pedal
- Weight: 750 g

Order No.	Description	Packaging pcs.
87.7709.029	AST-2 tube stripper incl. transport case (w/o mains adapter – set of rechargeable batteries/charger)	1
87.7709.025	AST-2S tube stripper with auto-stop function incl. transport case (w/o mains adapter – set of rechargeable batteries/charger)	1
87.7709.035	AST-2F tube stripper bench top instrument with auto-stop function and foot pedal (w/o mains adapter – set of rechargeable batteries/charger)	1
87.7709.033	Universal mains adapter 100-240 VAC, 50-60 Hz, 700 mA/7.5 VDC, 3.3 A	1
87.7709.031	Battery pack (rechargeable batteries) 7.2 V, 700 mA	1
87.7709.032	Universal battery charger, 100-240 VAC, 50-60 Hz (for battery – Order No. 87.7709.031)	1



ThermoScan

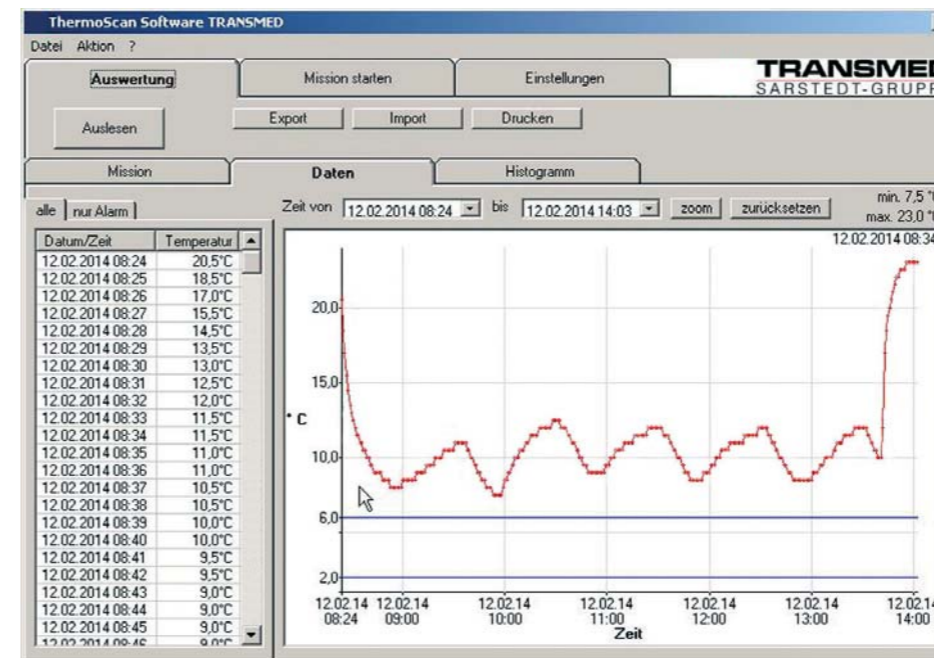
- Convenient system for temperature-controlled transport of blood products

Order No.	Description
97.8750.151	ThermoScan Data Logger TM Temperature data logger tracks transport conditions - Range of operation -40°C to +85°C - Dimensions: 17 mm diameter, 6 mm height - Calibration certificate included
97.8750.153	ThermoScan Port Adapter 9-pin adapter for serial PC COM port
97.8750.154	ThermoScan Reading Unit - Reads data from ThermoScan Data Logger - Connects to port adapter (Order No. 97.8750.153)
97.8750.156	ThermoScan USB Port Adapter For connecting ThermoScan reading unit to the USB port of a PC
97.8750.157	ThermoScan Software TRANSMED - Software for configuration and evaluation of the ThermoScan Data Logger under Microsoft Windows® systems - With graphical display and export function
97.8750.160	ThermoScan Set 1 port adapter (97.8750.153) with 9-pin adapter for PC COM port - Reader unit (97.8750.154) for connecting with port adapter - ThermoScan software TRANSMED (97.8750.157) for configuration and evaluation of the ThermoScan Data Logger under Microsoft Windows® systems - ThermoScan Data Logger TM (Order No. 97.8750.151)
97.8750.161	ThermoScan Set USB Similar to ThermoScan Set (Order No. 97.8750.160) but with 1 USB port adapter (Order No. 97.8750.156)



Manual stripping and sealing tongs

Order No.	Description	Material	Packaging pcs.
87.7708.091	Stripping and sealing tongs	Plastic, hard	1
97.8800.200	Stripping and sealing tongs	Aluminium	1
88.7708.095	Sealing clips	Aluminium	1,000





TRANS Control

- For the transport of blood products, adhering to prescribed transport temperatures

Order No.	Description	Colour code	Packaging pcs.
97.8750.000	TRANS Control 4° Double element for the transport of erythrocyte concentrates and whole blood at temperatures between 2°C and 6°C		1
97.8750.001	TRANS Control 4° Frame Expands the capacity of TRANS Control 4°		1
97.8750.010	TRANS Control 22° Double element for the transport of platelets at room temperatures (22°C)		1
97.8750.011	TRANS Control 22° Frame Expands the capacity of TRANS Control 22°		1
97.8750.015	TRANS Control 37° Double element for the transport of blood products at temperatures of 37°C		1
97.8750.016	TRANS Control 37° Frame Expands the capacity of TRANS Control 37°		1
97.8750.018	TRANS Control -18° Double element for the transport of frozen blood products at temperatures of -18°C		1
97.8750.019	TRANS Control -18° Frame Expands the capacity of TRANS Control -18°		1
97.8750.020	TRANS Control -30° Double element for the transport of fresh frozen plasma at temperatures between -30°C and -32°C		1
97.8750.021	TRANS Control -30° Frame Expands the capacity of TRANS Control -30°		1
97.8750.140	TRANS Control Mono Box Insulated neopor box for shipping 1 TRANS Control double element - The 60 - 80 mm polystyrene insulation protects the contents from temperature impact, shock or damage - Can be extended to Mono/Triple Box - For multiple use		1
97.8750.141	TRANS Control Triple Box Insulated neopor box for shipping 3 TRANS Control double elements - The 60 - 80 mm polystyrene insulation protects the contents from temperature impact, shock or damage - Can be reduced to Mono/Triple Box - For multiple use		1
97.8750.142	TRANS Control Mono/Triple Box Insulated neopor box for shipping 2 TRANS Control double elements - The 60 - 80 mm polystyrene insulation protects the contents from temperature impact, shock or damage - Can be reduced to Mono Box - For multiple use		1
97.8750.143	Covering Box for Mono/Triple Box Shipping cardboard container for the shipping of Mono, Mono/Triple and Triple Box - Protects box for multiple use - Labelling possible		20
97.8750.050	Transport Box For 4 TRANS Control double elements or 1 TRANS Control double element with 3 frames - With extra insulation - Can be locked - With plastic interior and carrying handle		1



Incubators and agitators for platelet storage

- Casing from high grade steel
- Completely insulated interior
- Doors with insulating glass and magnetic seal
- Agitator stops automatically when door is opened
- Control unit for temperature, door position and agitator movement
- Measuring agitator speed
- Freely selectable alarm parameters
- Connection to central alarm system
- RS232 interface
- 7-day round chart recorder
- Pedestal or foot rollers
- External temperature sensor (optionally available)

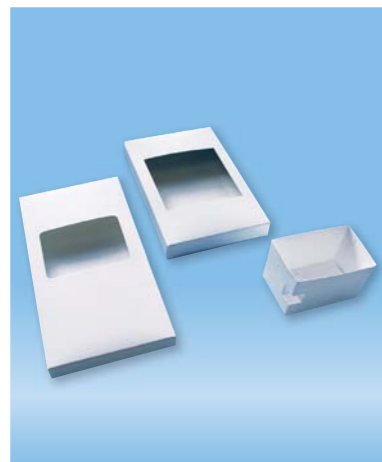
Order No.	Description	Packaging pcs.
87.7708.909	Flat bed platelet agitator TA-3 for about 24/8 bags Size: 448 x 250 x 350 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/20 VA Weight: 20 kg	1
87.7708.911	Flat bed platelet agitator TA-2 for about 48/16 bags Size: 448 x 370 x 350 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/20 VA Weight: 24 kg	1
87.7708.910	Flat bed platelet agitator TA-1 for about 96/32 bags Size: 850 x 370 x 350 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/20 VA Weight: 40 kg	1
87.7708.917	Platelet incubator TI-0/3 Incubator cubicle, + 22°C, +/- 1/2°C, incl. agitator, size TA-2 Size: 592 x 792 x 645 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/705 VA Weight: 75 kg	1
87.7708.915	Platelet incubator TI-1 Incubator cubicle, + 22°C, +/- 1/2°C, to accommodate 2 x agitator TA 2 or 1 x agitator TA 1 Size: 1,042 x 893 x 648 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/705 VA Weight: 95 kg	1
87.7708.916	Platelet incubator TI-2 Incubator cubicle, + 22°C, +/- 1/2°C, to accommodate 4 x agitator TA 2 or 2 x agitator TA 1 Size: 1,042 x 1,403 x 648 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/705 VA Weight: 156 kg	1
87.7708.914	Platelet incubator TI-3 Incubator cubicle, + 22°C, +/- 1/2°C, to accommodate 6 x agitator TA 2 or 3 x agitator TA 1 Size: 1,042 x 1,913 x 648 mm (W x H x D) Power supply: 230 VAC 50-60 Hz/705 VA Weight: 210 kg	1
88.7740.102	Record charts for round chart recorder 120 mm diameter 0 to 30°C	50
88.7740.109	Record charts for round chart recorder 150 mm diameter (interior) + 50 bis - 5°C (exterior) Type CEC/TI models	50
88.7740.103	Felt tip pen for round chart recorder	2



Donor seat/table

- For safe and quick use during mobile blood donation

Order No.	Description	Packaging pcs.
97.8700.310	Mobile Blood Donation Seat - Relaxing lying position for the donor - Quick and easy to set up and fold up - Convenient transport dimensions	1
97.8700.330	Mobile Blood Donation Table Console table for mobile donation - WxDxH: 55 cm x 40 cm x 70 cm - Robust - Foldable - Easy to transport	1
97.8700.335	Mobile blood donation table XL Console table for mobile donation - WxDxH: 95 cm x 45 cm x 73 cm - Robust - Foldable - Easy to transport	1
79.8673.901	Headrest cover - 28 x 32 cm with Velcro fastener	100



Box for plasma bags

- Suited for snap-freezing
- Customised options on request

Order No.	Description	Size mm	Packaging pcs.
88.7780.190	Box for cryoprecipitate	95 x 60 x 60	1
88.7780.197	Box for FFP	130 x 25 x 200	1
88.7780.198	Box for FFP	130 x 21 x 245	1



Irradiation indicator

- For semi-quantitative determination of irradiation intensity
- Options for gamma or x-ray irradiation

Order No.	Description	Packaging pcs.
88.7750.400	RadTag® Blood Irradiation Indicator 25/50 Gy (gamma)	200
88.7750.415	RadTag® Blood Irradiation Indicator 15/50 Gy (X-ray)	200



Blood bags for autologous transfusion

Order No.	Description	Packaging pcs.
88.7801.933	Blood bag, 3-fold, 500 ml, T/B system, cannula for venous blood collection, 500 ml, CPD/PPAGGS-M, MINI BAG with Sarstedt Multi-Adapter for S-Monovette®, and y-piece with female Luer lock, 2 pcs./pack, Order No. 8001933	30
88.7801.149	Blood bag, 4-fold, T/B system for naval blood collection, 1x cannula for venous blood collection 150 ml 17 ml CPD/150 ml empty/150 ml empty/100 ml/20 ml SAG-M/with 1 clamp, Order No. 8001149	30



Glass tube for Coombs Test

- Regular wall thickness, safe packaging

Order No.	Volume ml	Length/Ø mm	Packaging pcs./case
86.1509	5	75/11.5	294/case 2.352/StackPack



Tube Segment Opener

Safety and hygiene in your cross-matching laboratory

- Easy access to tube segment samples
- Minimal risk of contamination

Order No.	Description	Packaging
95.1000	Tube Segment Opener	2,000/case
95.1000.476	T S O with tube 75 x Ø 12 mm, assembled	400/case, StackPack
95.1000.800	T S O for inner tube diameter 8.2 mm	2,000/case
55.476	Tube 75 x Ø 12 mm, PS	2,000/case, StackPack
55.476.005	Tube 75 x Ø 12 mm, PS	2,000/case
86.1509	Tube 75 x Ø 11.5 mm, glass	2,352/case, StackPack

Tube Segment Opener for Bed Side Test cards

Order No.	Description	Packaging
95.1000.100	Tube Segment Opener for bed side test	200/box 2,000/case

Our Philosophy: Quality Management without Compromise

Quality management means systematic planning of all phases of product development.

Each phase is subject to a planning and control process from market analysis to the supply of the final product.

EN ISO 13485 DE-M

TRBA 250

CE ISO 8669

ISO 26825

Biosphere® plus

PCR Performance Tested

P 650

AFNOR



ISO 14820

ISO 23907

Disposal and the environment

- ✓ The plastics used for our products are environmentally neutral during disposal.
- ✓ The plastics can be stored on waste disposal sites without any problems as they do not give off any harmful substances to air, ground or water.
- ✓ The plastics PS, PP, PC and PE are valuable energy carriers to maintain incinerator temperature. The more plastics in waste the less use of fuel. The disposal in waste incineration plants does not yield any harmful emissions.

	Polystyrene	Polypropylene	Polycarbonate	Polyethylene
Abbreviation	PS	PP	PC	HD-PE High Density LD-PE Low Density
Optical features	transparent, bright surface 90% light permeability (with 400-800 nm)	translucent, bright surface	transparent, 88% light transmission (at 400 to 800 nm)	translucent to opaque, wax-like surface
General mechanical properties	high breaking strength and heat resistance, excellent electrical insulating features, not suitable for high centrifugal forces	high breaking strength, insensitive to tension cracks, high rigidity	displays high levels of mechanical optical, electrical and thermal properties, autoclavable and gamma capable	relatively low breaking strength and surface hardness, high viscosity, soft to rigid, sensitive to tension cracks, water repellent
Autoclaving	not suitable	Products made from PP can be autoclaved up to 121°C without significantly impairing their mechanical properties. Users are to test for themselves if autoclaving may have any effect on other characteristic product features so as to influence the individual application concerned.	Products made from PC can be autoclaved up to 121°C without significantly impairing their mechanical properties. Users are to test for themselves if autoclaving may have any effect on other characteristic product features so as to influence the individual application concerned.	not suitable
Max. usage temperature*1	60 - 70°C	100 - 110°C	115 - 125°C	HD-PE 70 - 80°C LD-PE 60 - 75°C
Short-term max. usage temperature*1	75 - 80°C	120 - 140°C	125 - 140°C	HD-PE 90 - 120°C LD-PE 80 - 90°C
Suitable for application in temperature ranges below zero*2	not suitable	suitable for limited applications*1	down to -80°C	suitable for limited applications*1
Density g/cm³	1.05	0.90	1.19	HD-PE 0.95 LD-PE 0.92
Flammability	inflammable	inflammable	inflammable	inflammable
Ignition temperature*1	300 - 400°C	300 - 360°C	380 - 450°C	350 - 360°C
Humidity absorption	< 0.1%	< 0.1%	0.1 - 0.3%	< 0.1%
General chemical resistance	PS is resistant to salt solutions, leaching solutions, non-oxidizing acids as well as alkalis and alcohol. Fuel, etheric oils, strong oxidizing agents and aromatic substances lead to the formation of cracks in PS.	PP is resistant to aqueous solutions of inorganic salts, acids, organic solvents up to 60°C. Alcohols, esters and ketones do not "attack" PP either. Aromatic and halogenised carbon dioxides, oxidizing substances such as concentrated nitric acid and with higher temperature fat, oil and wax make PP swell.	PC is resistant to higher concentrations of mineral acids, many organic acids (e.g. carbonic, oleic and citric acid), oxidation and reduction agents, neutral and acidic saline solutions, a number of fats and oils, saturated aliphatic and cycloaliphatic hydrocarbons and alcohols, except for methanol. PC is destroyed by lyes, ammonia gas, its solution and amines. PC is soluble in a number of industrial solvents. Other organic compounds such as benzene, acetone and carbon tetrachloride tend to make it expand or swell.	PE is highly resistant to chemicals. The chemical resistance of HD-PE is generally higher than that of LD-PE. Aqueous solutions, leaching solutions, alcohol, oil as well as water and salt solutions do not "attack" PE. Concentrated, oxidizing acids such as nitric acid and halogens have a decomposing effect.
Disposal	PS is a pure hydrocarbon compound and thus environmentally neutral during disposal. Incineration does not yield any harmful substances.	PP is a pure hydrocarbon compound and thus environmentally neutral during disposal. Incineration does not yield any harmful substances.	PC is a pure hydrocarbon compound and thus environmentally neutral during disposal. Controlled incineration does not yield any harmful substances.	PE is a pure hydrocarbon compound and thus environmentally neutral during disposal. Incineration does not yield any harmful substances.

*1 Suitability depending on the plastic material and the nature of load applied.

*2 Caution: Plastics start to become brittle at temperatures below zero. The suitability of products intended for use in these temperature ranges should be tested prior to application. These notes serve as a guideline only and do not constitute any confirmation of warranted quality.

Caution

For safety reasons, CryoPure tubes must always be stored in the gas phase of liquid nitrogen.

During the freezing process, a vacuum is created inside the tubes. The strength of the vacuum is dependent upon the filling volume (freezing volume). When CryoPure tubes are stored in liquid nitrogen, liquid nitrogen may enter the tubes in proportion to the vacuum inside. During removal and/or thawing of the tubes the liquid nitrogen changes into the gas phase and causes an internal pressure to build. As a result, infectious material may be released or the tubes may explode. Contaminated nitrogen entering the tubes may also harm the cellular components of the sample.

Always observe appropriate safety precautions when working with CryoPure tubes:

- Store tubes in the gas phase only.
- Fill the tubes to the fill mark.
- Apply screw cap handtight. Do not over-tighten or use any tool.
- Wear protective clothing, face protection, glasses and gloves.
- Place tubes into a container (e.g. water bath) with cover during the thawing process.

Please also observe your institutional safety guidelines!

Standard Protocol for Freezing Mammalian Cells

- Rinse cells with PBS.
- Remove cells with suitable method depending on the cell type (e.g. treatment of cell layer with EDTA-, Trypsin- or EDTA-Trypsin solution).
- Stop reaction with cell culture medium containing serum.
- Count cells by means of Neubauer cell chamber.
- Centrifuge cells (5 min, 350 x g, room temperature), discard supernatant.
- Re-suspend the cell pellet in a culture medium containing serum in order to render a final cell concentration of approx. 10⁷ cells/ml.
- Add 1 volume of double-concentrated freezing medium (e.g. 50% medium, 30% FCS, 20% DMSO). The number of cells should be at least 5 x 10⁶ cells/ml.
- Fill CryoPure tubes to fill mark.
- Freeze samples in an insulating container at -80°C that ensures a cooling rate of 1°C/min. Cells should be stored at -80°C for at least 6 hours. Depending on the cell type, cells may also be viable for several days at -80°C.
- Transfer the tubes to a liquid nitrogen tank.

Standard Thawing Protocol

- Quickly remove the CryoPure tubes from the liquid nitrogen freezer and place into a 37°C water bath with cover.
- After thawing, briefly disinfect the tubes with 70% alcohol. Dry and transfer the cell suspension into a 15 ml centrifuge tube (e.g. Order No. 62.554.002).
- Add culture medium and centrifuge cells (350 x g at room temperature for 5 minutes).
- Discard the supernatant and re-suspend cells in a suitable fresh culture medium.
- Transfer to a cell culture vessel and incubate.

The following table is to serve as a general guideline. The factors given are non-binding recommendations taken from details rendered by plastic manufacturers and from literature. As a matter of principle, it is the user's responsibility to check the resistance of the plastic material under the specific test conditions concerned, including though not limited to applications where any mixtures of chemical substances and modified temperatures are involved.

The first letter refers to the conditions at +20°C, the second to conditions at +60°C.

	LD-PE	HD-PE	PP	PS	PC		LD-PE	HD-PE	PP	PS	PC
1,4-dioxane	G P	G G	P P	N N	N N	methanoic acid	E G	E E	E N	P P	P N
acetaldehyde	P N	G P	G N	N N	N N	methanol	E P	E E	E P	P N	N N
acetic acid up to 10%	E E	E E	E E	E E	E G	methyl ethyl ketone	P N	G G	G P	N N	N N
acetic acid up to 50%	E E	E E	E E	G G	P P	methyl propyl ketone	N N	N N	G P	N N	N N
acetone	P N	P P	E G	N N	N N	methylene chloride	P P	N N	P N	N N	N N
allyl alcohol	P P	E E	—	E P	—	mineral oil	P N	E P	E E	E E	G P
aluminum salts	E E	E E	E E	G G	—	nitric acid up to 10%	E E	E E	E E	E E	G P
amino acids	E E	E E	E E	E E	E E	nitric acid up to 50%	P N	P N	P N	N N	G P
ammonia, conc.	E E	E E	E E	G P	N N	nitric acid up to 70%	P N	P N	N N	N N	N N
ammonium carbonate	E E	E E	E E	E E	P N	n-octane	N N	P N	P N	N N	E -
ammonium phosphate	E E	E E	E E	G G	—	oleic acid	P N	G G	G P	G G	E E
ammonium sulphate	E E	E E	E E	G G	E G	oxalic acid, sat.	E E	E E	E E	E G	E E
amyl acetate	N N	P P	P P	N N	N N	ozone	N N	P N	P P	N N	N N
amyl chloride	N N	P N	N N	N N	N N	perchloric acid	G N	G N	G N	G P	N N
aniline	N N	G G	G P	N N	N N	perchloroethylene	N N	N N	N N	N N	N N
benzene	N N	P N	P N	N N	N N	phenol up to 90%	P N	G G	G P	N N	N N
benzine	P N	P P	N N	N N	P P	phosphoric acid 10%	E E	E E	E E	E -	P N
benzyl alcohol	G P	G G	G P	N N	P P	phosphoric acid 85%	E E	E E	E G	E P	N N
boric acid	E E	E E	E E	E G	E E	phosphorous trichloride	N N	N N	G P	N N	N N
bromine	N N	N N	N N	N N	N N	potassium acetate	E E	E E	E E	E E	N N
butanol	E P	E E	E P	G G	N N	potassium bromide	E E	E E	E E	P -	E G
butyric acid	P N	G P	P N	N N	P N	potassium carbonate	E E	E E	E E	E E	G P
calcium chloride	E E	E E	E E	E E	E E	potassium hydroxide, conc.	E E	E E	E E	G G	N N
calcium hydroxide	E E	E E	E E	G G	N N	potassium permanganate	E E	E E	E E	P P	N N
calcium sulphate	E E	E E	E E	G G	E E	propylene glycol	E E	E E	E E	E E	G P
carbon tetrachloride	N N	P N	N N	N N	N N	pyridine	P N	G P	P N	N N	N N
chlorine in water	N N	P N	P N	N N	P N	salicylic acid, sat.	E E	E E	E E	E G	E G
chlorobenzene	N N	N N	N N	N N	N N	silver acetate	E E	E E	E E	G G	—
chromic acid up to 10%	E E	E E	E P	E E	G P	silver nitrate	E E	E E	E G	G P	E E
chromic acid up to 50%	E E	E E	G P	P P	P N	sodium carbonate	E E	E E	E E	E E	G P
citric acid	E E	E E	E E	E E	E E	sodium chloride	E E	E E	E E	E E	E E
cresol	N N	P N	G P	N N	N N	sodium dichromate	E E	E E	E E	E E	—
cyclohexane	N N	N N	E -	N N	E -	sodium hydroxide up to 1%	E E	E E	E E	G G	—
diethyl ketone	P N	P P	G G	N N	N N	sodium hydroxide up to 50%	E E	E E	E E	G G	N N
dimethylsulphoxide	E E	E E	E E	E G	N N	sodium hypochlorite up to 15%	—	E E	E -	—	—
ethanol up to 95%	P P	—	E E	E E	N N	sodium nitrate	E E	E E	E E	E E	P N
ethyl acetate	P N	E N	P N	N N	N N	sodium sulphate	E E	E E	E E	E E	E -
ethyl benzene	N N	N N	P N	N N	P P	sucrose	E E	E E	E E	E E	—
ethylene glycol	E E	E E	E E	E E	E E	sulphuric acid up to 6%	E E	E E	E E	E E	E E
ethylene oxide	P P	G P	P P	N N	P N	sulphuric acid up to 20%	E E	E E	E E	E G	E G
fluoride	E E	E E	E E	G G	—	sulphuric acid up to 60%	E G	E E	E G	G N	P N
fluorine	N N	N N	P N	N N	—	sulphuric acid up to 98%	P N	P N	P N	N N	N N
formaldehyde up to 10%	E E	E E	E E	P N	E G	tannic acid	E E	E E	E E	G G	N N
formaldehyde up to 40%	G P	E G	E G	N N	P P	tetrahydrofurane	N N	N N	P N	N N	N N
glacial acetic acid	P N	E P	E P	N N	N N	toluene	N N	P N	P N	N N	N N
glycerine	E E	E E	E E	E E	E E	trichloroacetic acid	P N	G P	P N	N N	N -
heating oil	P N	G P	E G	N N	G P	trichlorethane	N N	P N	N N	N N	N N
hexane	P P	G P	G P	N N	P N	turpentine	N N	N N	N N	N N	—
hydrochloric acid up to 5%	E E	E E	E E	E E	E E	urea, sat.	E E	E E	E E	E G	N N
hydrochloric acid up to 20%	E E	E E	E E	E E	P P	xylene	N N	N N	N N	N N	N N
hydrochloric acid up to 35%	E E	E E	E P	P P	N N	zinc chloride	E E	E E	E E	E E	E E
hydrocyanic acid	E E	E E	E E	G G	—						
hydrofluoric acid up to 4%	E G	E E	E G	G P	G P						
hydrofluoric acid up to 40%	E E	E E	E -	N N	—						
hydrofluoric acid up to 48%	E G	E E	E G	N N	N N						
hydrogen peroxide up to 3%	E E	E E	E E	E G	E E						
hydrogen peroxide up to 30%	E P	E E	E P	E G	E E						
isobutyl alcohol	E P	E E	E E	G G	E E						
isopropanol	E E	E E	E E	E G	P -						
isopropyl acetate	G P	E P	G P	N N	N N						
kerosene	N N	N N	G P	N N	P P						
lactic acid	E E	E E	E E	G G	E E						
lactose	E E	E E	—	E -	E -						
lead acetate	E E	E E	E E	E E	—						
mercury	E E	E E	E E	E E	E -						

Explanations

- E = excellent** This plastic is totally resistant to that substance.
- G = good** Influence of that substance for an extended period of time does not cause any or only small defects.
- P = partially resistant** Constant exposure of the plastic material might possibly lead to hairline cracks and a reduced mechanical strength or discolouration.
- N = non-resistant** Plastics are not suitable for use in combination with this substance. Application is not recommended.
- There are no tests available.

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