

Blood collection systems

As individual as your patients



The complete solution



for all requirements

Your partner in medicine and science worldwide



For over **55** *years*



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SARSTEDT Group

Growth means progress



SARSTEDT

Growth means progress

Progress has been a constant focus since the company's foundation in 1961. Today, the SARSTEDT Group is a global company with 13 production sites in Europe, North America and Australia and 2,600 employees. Decades of research and user-friendly product development using innovative technologies and direct dialogue with users have helped us evolve into a leading provider of laboratory and medical equipment.

Quality from a single source – from the product idea through to the customer

From development through to production and sales – all services come from a single source.

Development

Product development takes place using the latest technologies in discussion with users in the company's development center – from the idea through to the finished product.

Production

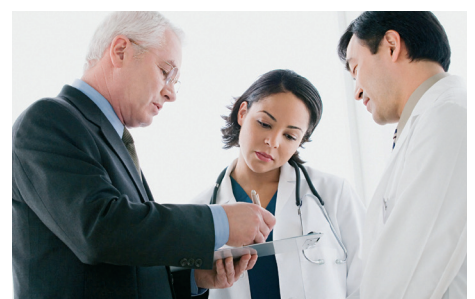
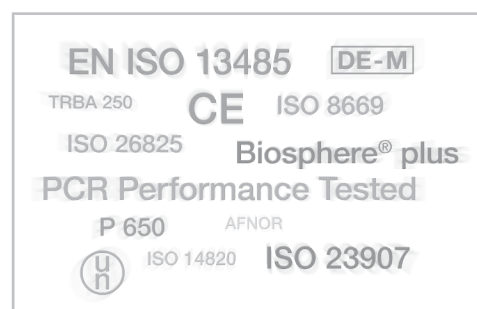
Well over 90% of all products are manufactured at Sarstedt-owned production facilities around the world using the latest equipment.

Quality

The use of our products directly on the patient as well as in research and development laboratories demands a high quality standard. We meet this demand with our modern, integrated quality management system in accordance with EN ISO 13485.

Sales

The SARSTEDT Group sells its products in 32 countries via its own sales organizations with in-house sales reps. In many other countries, the market is serviced by experienced retailers.



S-Monovette®

The modern blood collection system

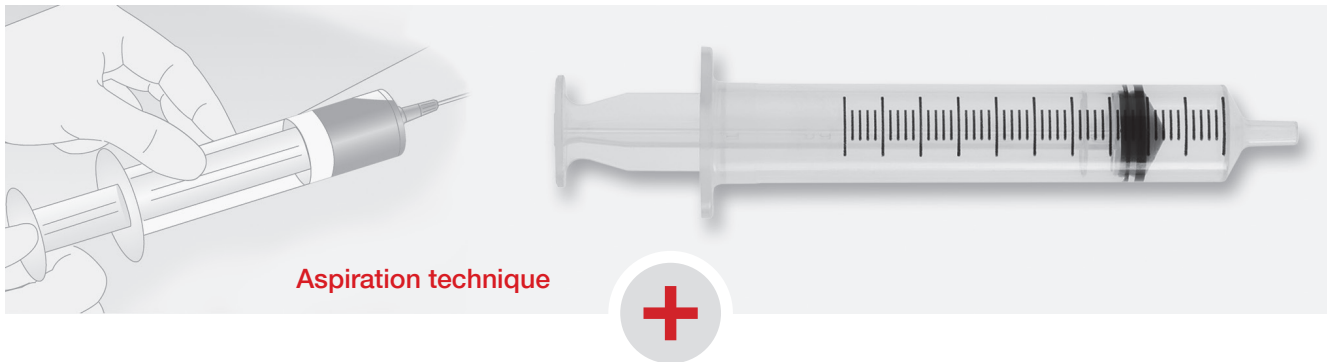


The focus is on the individual

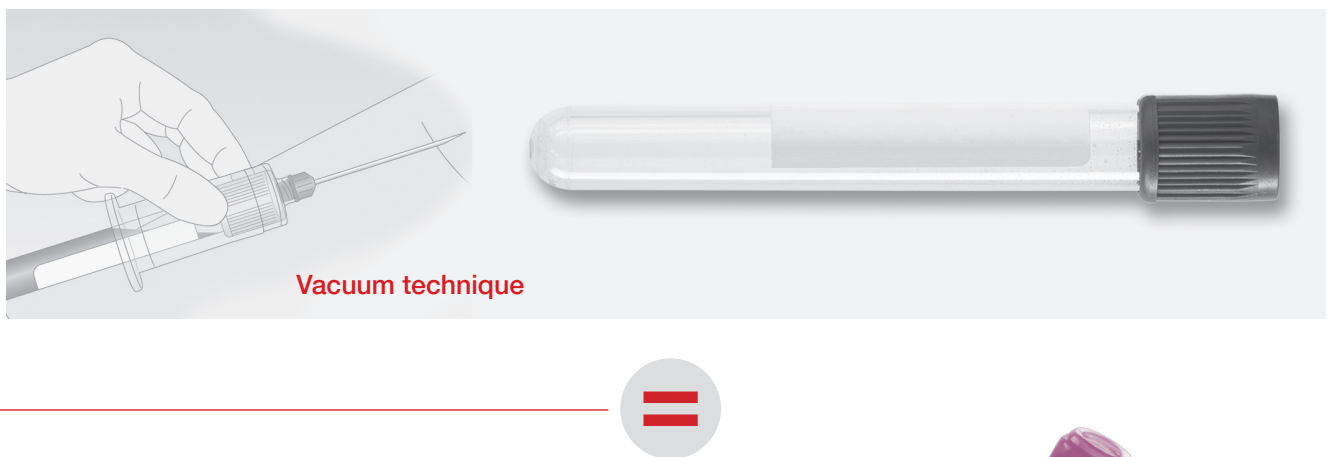


SARSTEDT

Open system



Closed system



One system – 2 techniques
combined in the S-Monovette®

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



The focus is on the individual

An aging population places particular demands on medical care and blood collection, as difficult vein conditions are increasingly common in older people. Blood collection can also be complicated for children with extremely fragile veins. The S-Monovette® provides the answer with its variable collection technique in a single system. The user decides on the aspiration or vacuum technique as required.



It has been shown that **49.1%*** of all patients are

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

*Deutsche Krankenhausgesellschaft (German Hospital Federation) Zahlen, Daten, Fakten 2011

A gentle technique is essential for successful blood collection in these significant patient groups.

Aspiration technique

...the gentle collection technique for routine blood collection

The aspiration technique is **the** gentle collection technique for all vein conditions. It prevents collapse in even the most sensitive veins.



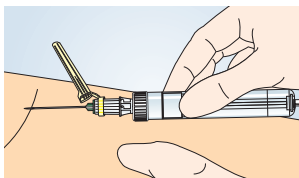
Vacuum technique

...a 'fresh' vacuum is always available

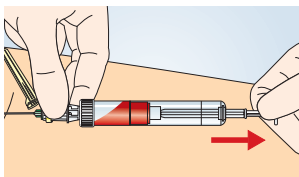
A particular benefit of the S-Monovette® vacuum technique is the 'fresh' vacuum, which is only generated immediately before blood collection. This ensures that an exact fill volume is achieved throughout the shelf life of the product.



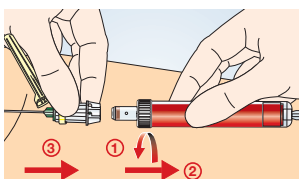
Aspiration technique



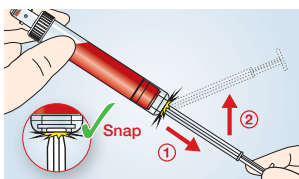
1. The Safety Needle/Safety-Multify® is assembled with the S-Monovette® immediately before blood collection. The puncture is made.



2. Slowly pulling back the plunger creates a gentle blood flow. For multiple blood collections, additional S-Monovettes are assembled onto the Safety Needle/Safety Multify® and blood samples are collected as described above.

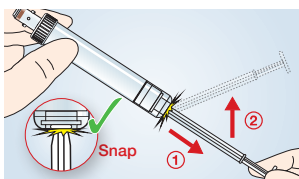


3. After completing the blood collection, the last S-Monovette® is disassembled from the Safety Needle/Safety-Multify® and then the needle is removed from the vein.

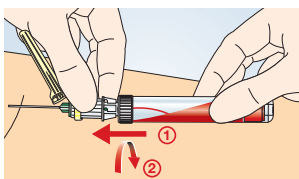


4. The piston must be locked into the base of the S-Monovette® and plunger snapped off for transport and centrifugation.

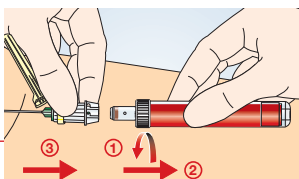
Vacuum technique



1. We recommend filling the first S-Monovette® using the aspiration technique so that the blood collection starts gently and successfully. Pulling back the plunger and locking the piston in the base of the S-Monovette® creates a fresh vacuum immediately before blood collection. The plunger is snapped off.



2. The freshly evacuated S-Monovette® is connected to the Safety Needle/Safety-Multify® needle already in the vein and filled. For multiple tubes, this process is repeated accordingly.



3. After completing the blood collection, the last S-Monovette® is disassembled from the Safety Needle/Safety-Multify® needle and then the needle is removed from the vein.

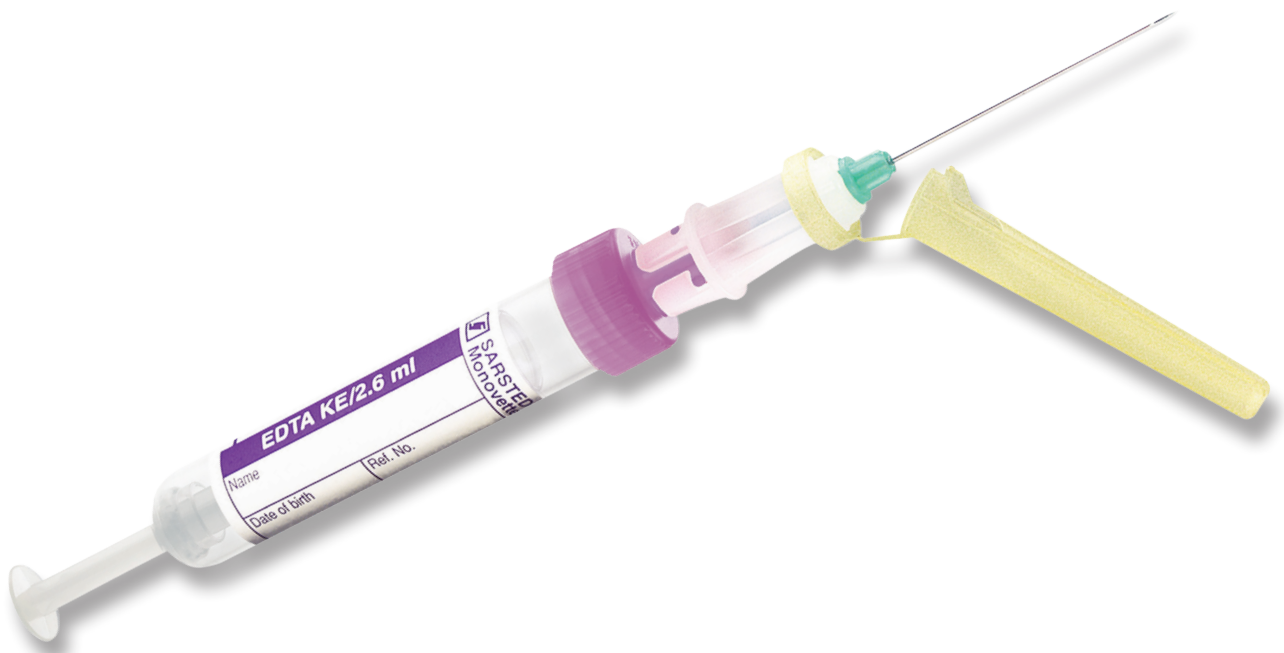
Visual check of successful venipuncture - “flash”

When a successful venipuncture is performed with a Safety-Needle preassembled to a S-Monovette® tube (aspiration technique), a blood droplet will enter the S-Monovette® providing visual confirmation or “flash”.



S-Monovette® and Safety Needle/Safety-Multify® needle

A safe, secure connection



Safety Needle – safety in blood collection

One-piece system

The Safety Needle is one piece and **always ready for use**.
No needle holder assembly is required.



Safe, low puncture angle

The small diameter of the Safety Needle enables a recommended low puncture angle.



Safety Needle protection

After use, the yellow safety device is easily locked over the needle with one hand to protect the user against needlestick injury. The Safety Needle is then disposed of in a sharps disposal container.

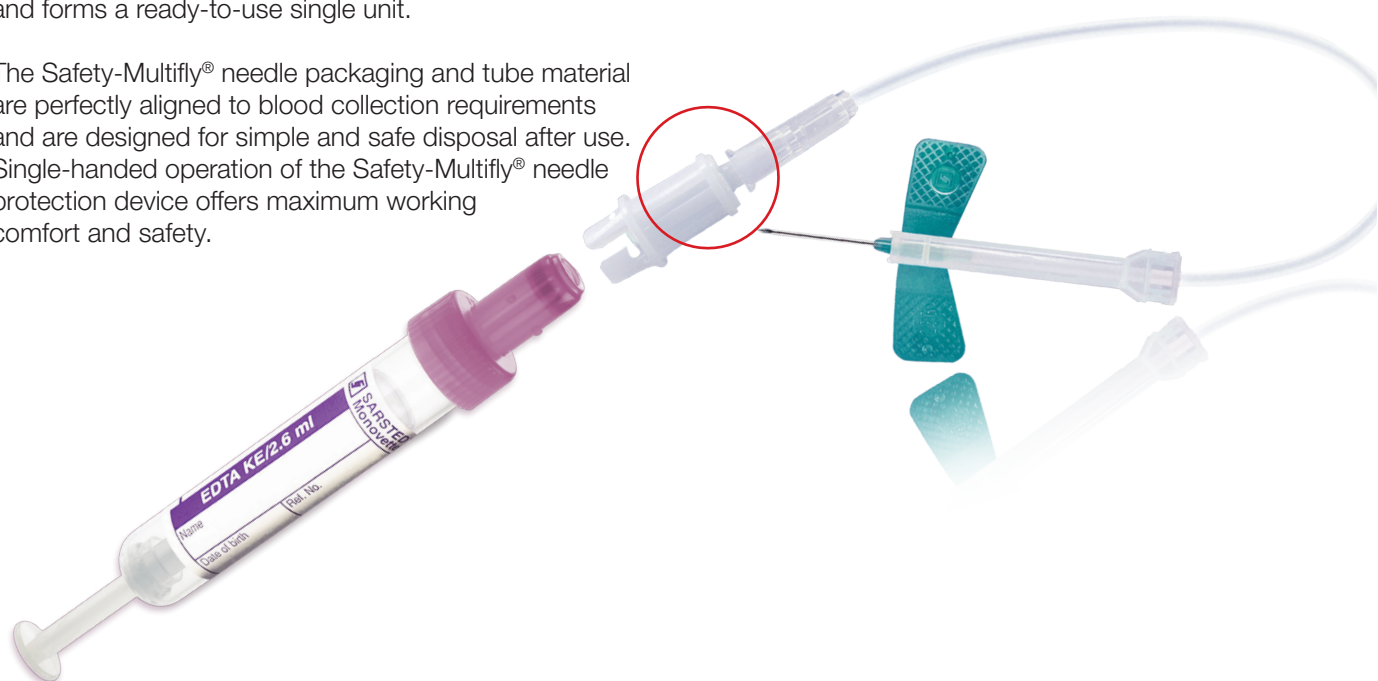


Safety-Multify® needles – safety for difficult vein conditions

1. Single-handed operation of the needle protection device
2. Pre-assembled adapter
3. Optimum packaging and tubing material

The Safety-Multify® needle adapter is already pre-assembled and forms a ready-to-use single unit.

The Safety-Multify® needle packaging and tube material are perfectly aligned to blood collection requirements and are designed for simple and safe disposal after use. Single-handed operation of the Safety-Multify® needle protection device offers maximum working comfort and safety.



Cost benefits of using Safety Needles

140 S-Monovette® Safety Needles can be disposed of in a quart sharps disposal container. For vacuum system disposal, roughly **5 times the number** of disposal boxes are required for the equivalent quantity. The S-Monovette® system therefore has much lower sharps disposal costs. Besides the cost savings, it also ensures a better life cycle and environmental assessment.

S-Monovette®



1 quart box =
330 needles

Vacuum system



1 quart box =
70 needles

Packaging

- User-friendly cardboard packaging for environmentally neutral disposal
- Minimal storage space required for the compact boxes of 50 S-Monovettes
- Boxes fold flat when empty, significantly reducing the waste volume

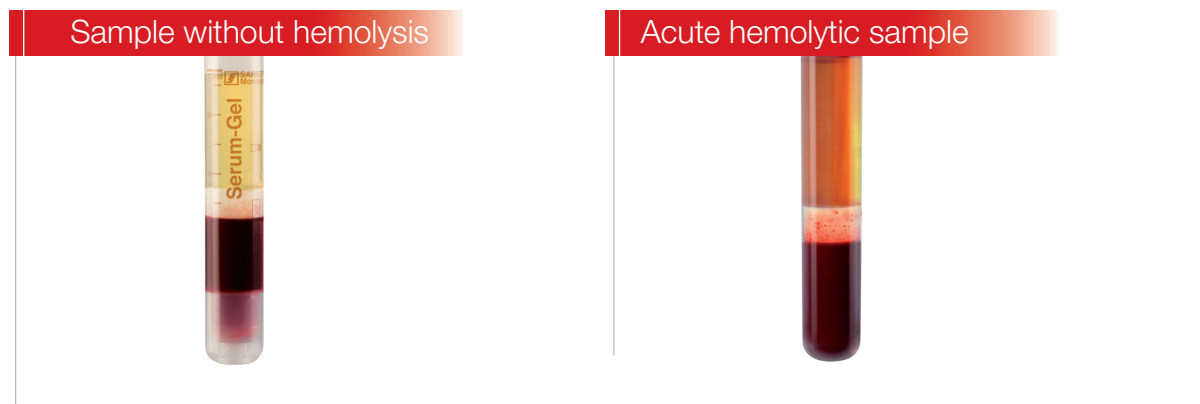
5x more waste volume
for vacuum tube packaging



Savings with reduced hemolysis rate

Laboratory values are distorted for acutely hemolytic samples and can necessitate re-collection. Studies* show that lower hemolysis rates are achieved with gentle aspiration of the sample, as is possible when using an S-Monovette® or single use syringe, than with pure vacuum systems. The S-Monovette® system can reduce hemolysis rates, which provides decisive benefits:

- ✓ Reduced time and personnel expense
- ✓ Reduction of the material costs
- ✓ No additional reagent costs

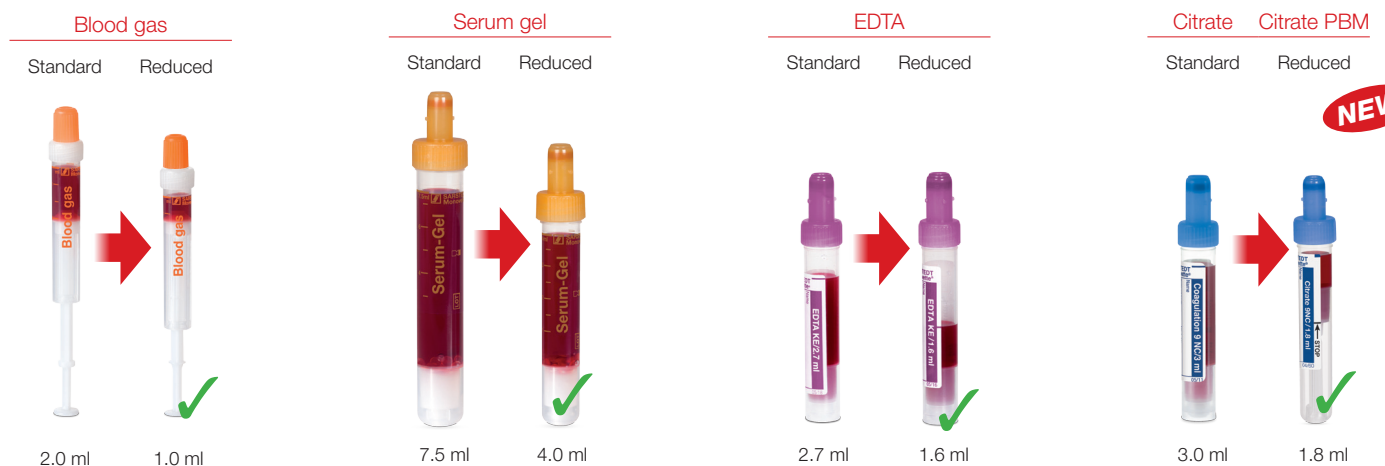


* Lippi et al, Clin Biochem 46:561–564, 2013 'Prevention of hemolysis in blood samples collected from intravenous catheters'
 Heyer et al, Clin Biochem 45:1012–1032, 2012 'Effectiveness of practices to reduce blood sample hemolysis in EDs: A laboratory medicine best practices systematic review and meta-analysis'
 Lippi et al, Biochimica Medica 23(2):193–200, 2013 'Critical review and meta-analysis of spurious hemolysis in blood samples collected from intravenous catheters'
 Ong et al, Am J Med 122:1054.e1–1054.e6, 2009 'Reducing Blood Sample Hemolysis at a Tertiary Hospital Emergency Department'

Patient Blood Management

S-Monovette® with reduced sample volume – benefits for the patient

- Significantly reduced laboratory diagnostic blood loss
- Reduced rate of hospital-acquired anemia
- Better patient outcomes



NEW!

S-Monovette®

A wide range of dimensions and preparations



Choice of color code



SARSTEDT



Choice of color code

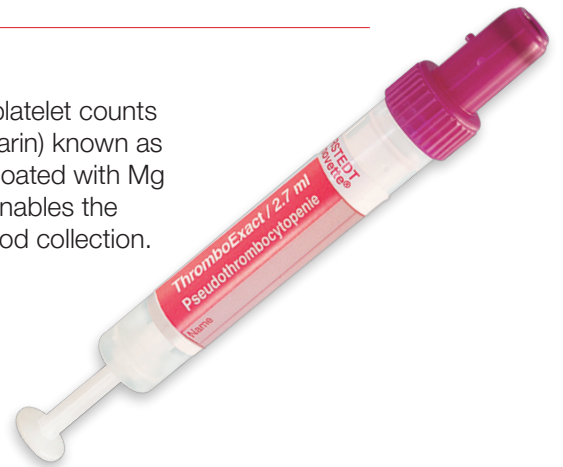
In EN 14820, single-use containers for human venous blood specimen collection, it is noted that no international agreement with regard to color coding currently exists. Sarstedt therefore lets you choose between the color code based on the BS 4851 “EU Code” and the ISO 6710 “US Code” – as per your requirements.

Based on BS 4851 “EU Code”		Based on ISO 6710 “US Code”
	<p>Serum (clotting activator)</p> <p>The S-Monovettes contain beads that are coated with a clotting activator (silicate). This clotting additive enables the blood to clot within 20–30 minutes, after which the sample can be centrifuged.</p>	
	<p>Serum gel (clotting activator)</p> <p>In addition to coated beads, the S-Monovette® also contains a polyacrylic gel. Its density allows it to form a stable separating layer between the blood clot and the serum during centrifugation, creating a barrier during transport and storage of the sample.</p>	
	<p>Plasma/plasma gel (lithium heparin)</p> <p>Heparin is an anticoagulant for collecting plasma. Lithium heparin, sodium heparin or ammonium heparin (generally 16 IU/ml blood) is coated onto beads or is provided in droplet form as a spray dose (generally 19 IU/ml blood) in the S-Monovette®.</p>	
	<p>Hematology (potassium EDTA)</p> <p>K₃ EDTA is available in droplet form as a spray dose in an average concentration of 1.6 mg EDTA/ml blood. The S-Monovette® K₂ EDTA Gel contains EDTA (1.6 mg/ml blood) as well as gel for a clear separating layer between the blood cells and plasma post centrifugation.</p>	
	<p>Glucose determination (fluoride)</p> <p>The S-Monovette® for glucose determination contains fluoride (1.0 mg/ml blood) as a glycolysis inhibitor as well as EDTA (1.2 mg/ml blood) as an anticoagulant.</p>	
	<p>Coagulation analysis (sodium citrate)</p> <p>Citrate is prepared as a 0.106 molar solution (corresponds to 3.2% tri-sodium citrate) to perform all coagulation studies (e.g. Quick, PTT, TZ, fibrinogen). A mixing ratio of 1:10 (1 part citrate + 9 parts blood) must be strictly observed.</p>	
	<p>Blood sedimentation (sodium citrate)</p> <p>Citrate is prepared as a 0.106 molar tri-sodium citrate solution for ESR determination. A mixing ratio of 1:5 (1 part citrate + 4 parts blood) must be strictly observed. Either the S-Monovette® Sediplus® system (Westergren method) or the S-Sedivette® closed system (modified Westergren method) can be selected for ESR determination.</p>	

S-Monovette® ThromboExact

Pseudothrombocytopenia

The S-Monovette® ThromboExact is used to rule out false low platelet counts due to anticoagulant incompatibility (such as EDTA, citrate, heparin) known as pseudothrombocytopenia. The S-Monovette® ThromboExact (coated with Mg compound) prevents the formation of platelet aggregates and enables the correct platelet count to be determined up to 12 hours after blood collection.

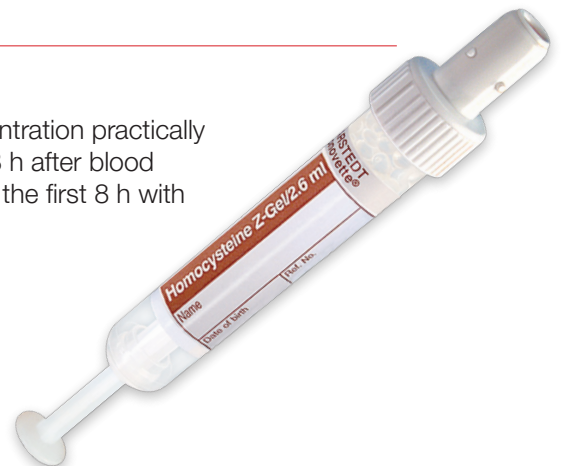


Schuff-Werner et al, Br J Haematol 162(5):684-92, 2013 'Effective estimation of correct platelet counts in pseudothrombocytopenia using an alternative anticoagulant based on magnesium salt'

S-Monovette® Homocysteine Z-Gel

Homocysteine investigation

A specially developed stabilizer keeps the homocysteine concentration practically constant at room temperature without centrifugation for up to 8 h after blood collection and for up to 96 h if centrifugation takes place within the first 8 h with gel barrier formation.



De Graff et al, CCLM 46(11): 1652-1654, 2008 'Evaluation of blood collection tubes specific for homocysteine measurement'

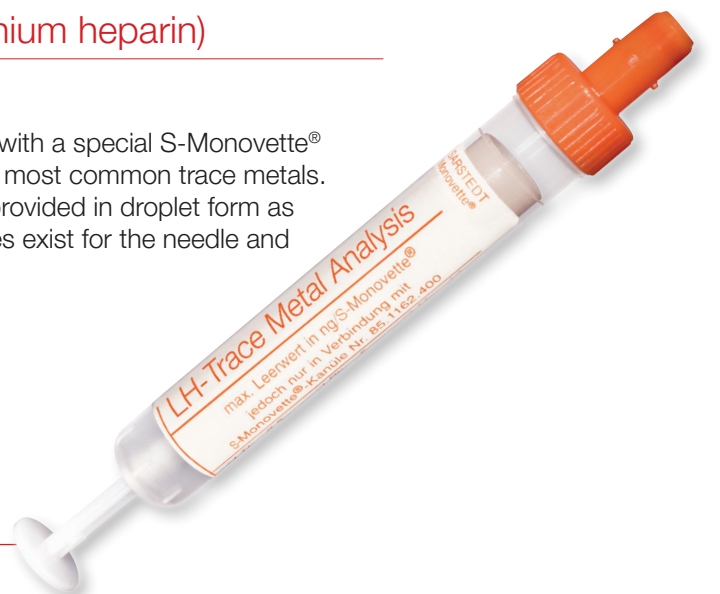
S-Monovette® for metal analysis (lithium heparin)

Trace element determination

The S-Monovette® Metal Analysis in combination with a special S-Monovette® Safety Needle was developed for determining the most common trace metals. Anticoagulant lithium heparin (19 IU/ml blood) is provided in droplet form as a spray dose. The following maximum blank values exist for the needle and S-Monovette® system (ng/system):

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

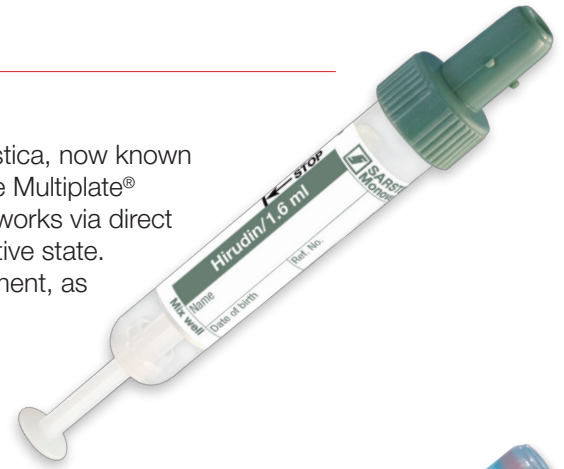
Heitland et al, JTEMB 20: 253-262, 2006 'Biomonitoring of 37 trace elements in blood samples from inhabitants of northern Germany by ICP-MS'



S-Monovette® Hirudin

Platelet function

S-Monovette® Hirudin was developed together with Verum Diagnostica, now known as Roche Diagnostics, for measuring thrombocyte activity using the Multiplate® multiple platelet function analyzer. Unlike citrate or heparin, hirudin works via direct thrombin inhibition and allows platelet function diagnostics in its native state. It is used for monitoring platelet-inhibiting medications during treatment, as well as for detecting or ruling out platelet function disorders.

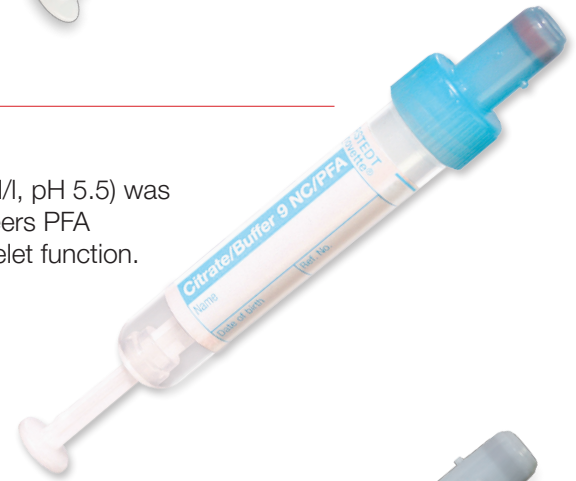


S-Monovette® for PFA 100

Platelet function

The S-Monovette® PFA preparation (3.8% citrate buffer, 0.129 mol/l, pH 5.5) was specially developed for the requirements of the Siemens Healthineers PFA measuring system in order to enable a precise analysis of the platelet function.

Lutze et al, J Lab Med 28(5):463-469, 2004 'Blutungszeit in vitro am PFA-100®: Präanalytik bei der Blutentnahme / Bleeding time in vitro measured by the PFA-100® system: Pre-analytical conditions for blood collection'



S-Monovette® GlucoEXACT

Precise glucose investigation

The S-Monovette® GlucoEXACT, with its citrate/fluoride glycolysis inhibitor preparation for direct and reliable glycolysis inhibition, corresponds to the German guidelines on gestational diabetes of the German Diabetes Association (DDG) as well as the German National Disease Management Guidelines (NVL) on type 2 diabetes. The S-Monovette® GlucoEXACT immediately stabilizes the glucose concentration for up to 48 h at room temperature. A correction factor for calculating the actual glucose concentration of 1.16 must be taken into account.

Sarstedt WhitePaper: Will et al, 2016 'Sarstedt S-Monovette® GlucoEXACT – A blood collection device for stabilizing glucose levels for 96 hours' Bonetti et al, Primary care diabetes 10(3):227-32, 2016 'Which sample tube should be used for routine glucose determination?' Yagmur et al, J Lab Med, 36(3): 169-177, 2013 'Effective inhibition of glycolysis in venous whole blood and plasma samples'

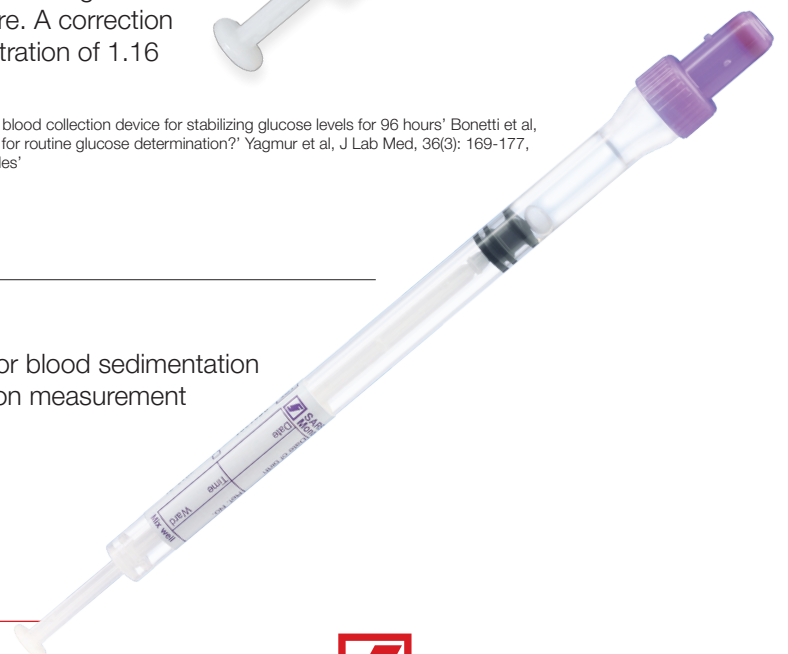


S-Sedivette®

Blood sedimentation measurement

The S-Sedivette® is a closed, hygienic system for blood sedimentation made from break-resistant plastic. Sedimentation measurement takes place directly in the collection tube.

'Comparative studies of the Sarstedt S-Monovette® ESR and Sedivette® blood sedimentation systems and the Sediplus® S 200 and S 2000 measuring instruments'



Collection systems for arterial, venous and capillary samples

The choice of collection technique enables safe and hygienic blood collection – for every patient and every application.



Venous and arterial blood collection

The Blood Gas Monovette® is available in 1 and 2 ml options for venous and arterial blood collection. Prepared with Ca²⁺-balanced heparin, the tubes are also suitable for investigating electrolytes. The heparin is available as a liquid dose in the Blood Gas Monovette®. This ensures the rapid and optimum mixing of blood and anticoagulant.

Gruber et al, CinChimActa 395:187, 2008 'Heparin release is insufficient in syringes with platelets as heparin source'



1 ml option

2 ml option

The Blood Gas Monovette® is also available with a pre-assembled membrane adapter!

Capillary blood collection and accessories

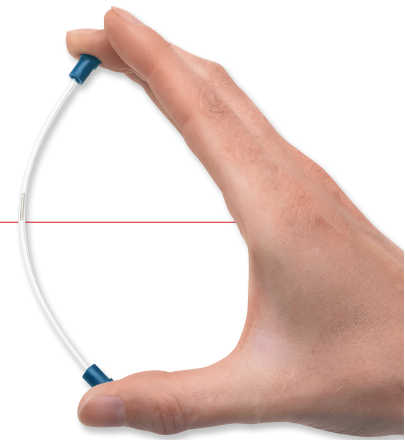
Reliable results

Special plastic with low gas permeability and coated with Ca^{2+} -balanced heparin ensures correct measurement results. A unique surface treatment allows the capillaries to be quickly filled. Sampling is easier and the risk of clotting is reduced.



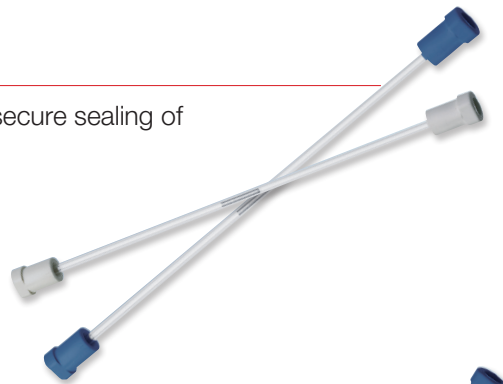
Safe collection

The break-resistant plastic prevents user injuries and infection associated with glass versions.



Quick-release caps

Two quick-release cap sizes ensure the correct and secure sealing of capillaries with different outer diameters.



Mixing wires and magnets

The easy-grip bell-shaped magnet moves the mixing wire back and forth within the capillary for optimal mixing of the sample material with the anticoagulant.



S-Monovette® Pediatrics

Lowest possible patient discomfort with minimum sample volumes



Special requirements in pediatrics



SARSTEDT

Special requirements in pediatrics

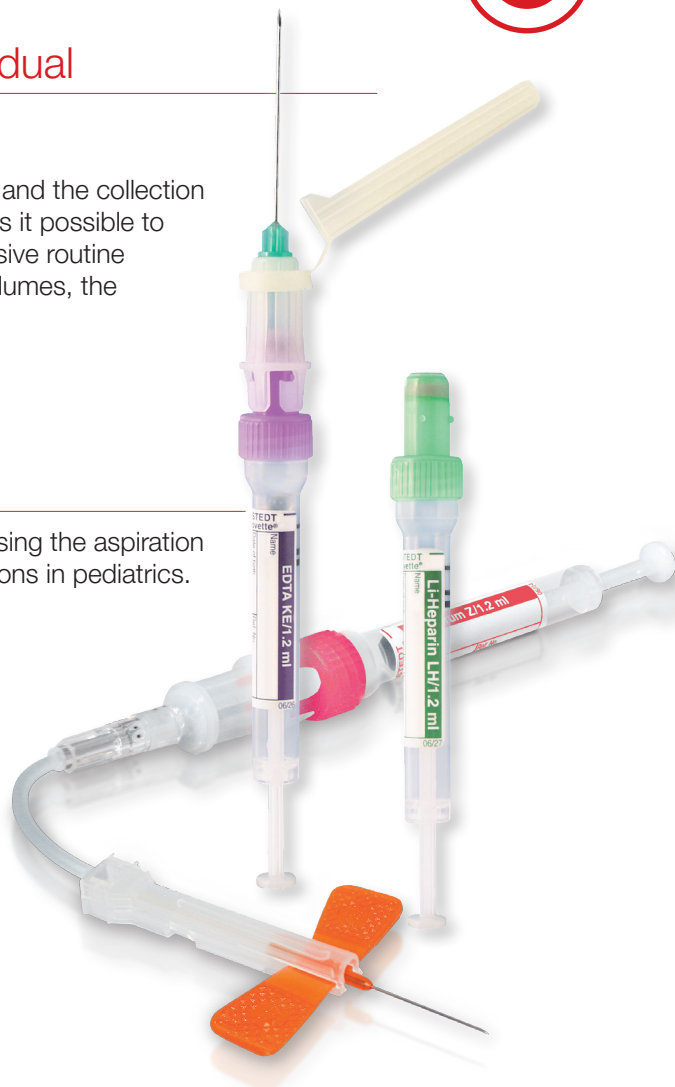


The blood collection system for individual requirements in pediatrics

Blood collection in pediatrics places high demands on staff and the collection system. The increasing sensitivity of analysis systems makes it possible to reduce the sample volume required to conduct comprehensive routine investigations. With smaller dimensions and low nominal volumes, the S-Monovette® is ideal for pediatrics.

Aspiration technique

Gentle blood collection with the S-Monovette® Pediatrics using the aspiration technique (see page 9) accommodates difficult vein conditions in pediatrics.



Carrier tubes

Carrier tubes are available for the S-Monovette® Pediatrics for adaptation to all common analysis systems and centrifuges.

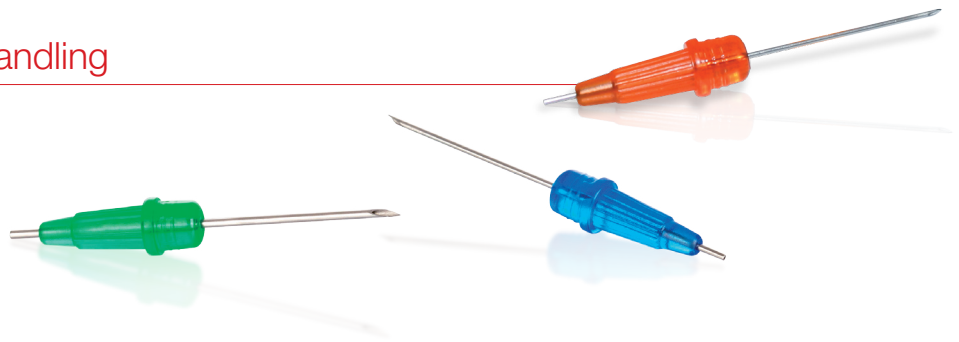


Gentle blood collection for newborns and premature babies

The Micro Needle eliminates the precarious procedure of snapping off the Luer end of hypodermic needles. Specially created for drip collections from newborns and premature babies, its ribbed holder can be securely held and rotated by 360°. The exceptional needle quality and the exposed outlet opening enables free blood flow.



Micro Needle – simple handling and superior blood flow



Simple application

The ribbed holder ensures safe, secure, and easy puncture. Blood flows directly into a collection tube.



Prepared micro sample tubes

Prepared micro tubes are ideal in combination with the Micro Needles for venous blood collection in infants or premature babies. With a low nominal volume and small size, these tubes are the perfect solution for this type of blood collection. A large range of preparations is available.



Micro sample tubes with attached push caps

The looped push caps are convenient for single-handed operation. The transparent label enables visible fill level control during blood collection. The tubes are also available with a paper label upon request.

Micro sample tubes with screw caps

The extremely secure screw cap with O-ring seal in combination with the robust polypropylene tube is ideal for transport and storage. A screw cap with membrane is available for direct adaptation to analyzers.



Carrier tubes

A carrier tube is available for the prepared tubes, enabling adaptation to all common analysis systems and centrifuges.

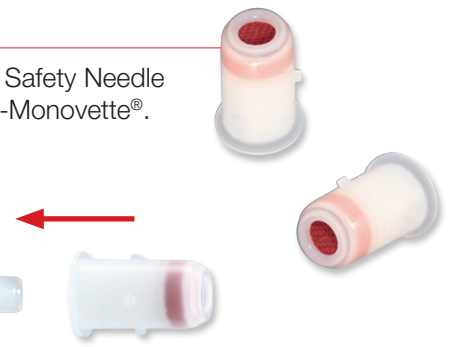
Color-coded cap rings

Cap rings of various colors can be used to code STAT samples from ambulances, intensive care units, and operating rooms or to optimize laboratory organization. Samples with cap rings can be easily identified upon receipt in the lab to prioritize processing.



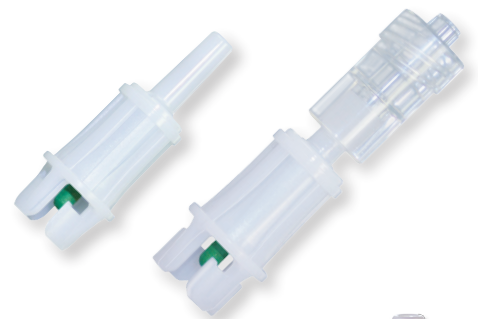
Membrane adapter

The membrane adapter enables the safe adaptation of an S-Monovette® Safety Needle and the Safety-Multify® needle to a Luer system, such as the Blood-Gas-Monovette®.



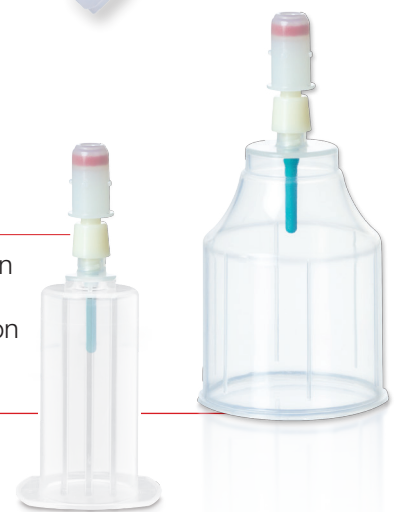
Multi-Adapters

Multi-Adapters are available in Luer and Luer-Lock options. They enable an adaptation between the S-Monovette® and Luer systems like intravenous catheters, three-way valves, or butterfly needles.



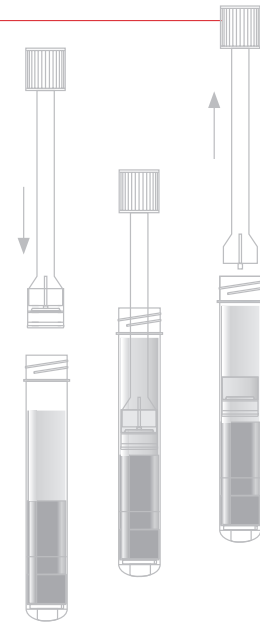
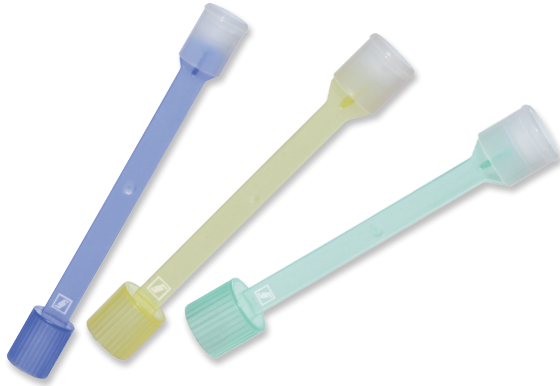
Blood culture adapters

Blood culture adapters are available in two versions for compatibility with common blood culture bottles with wide and/or narrow necks. After filling bottles, the adapters can be removed from the puncture needle for routine blood collection using S-Monovettes.



Seraplas® V

The Seraplas® V valve separates serum/plasma and the blood clot/cells after centrifugation.



Haemo-Diff®

The Haemo-Diff® is attached to the S-Monovette® to produce blood smears without opening the tube. The Haemo-Diff® provides an adequate blood droplet and optimum smear for reliable analysis results.



Reusable tourniquet

The reusable tourniquet is conveniently designed for single-handed use and safe blood collection and is also available in a latex-free version.



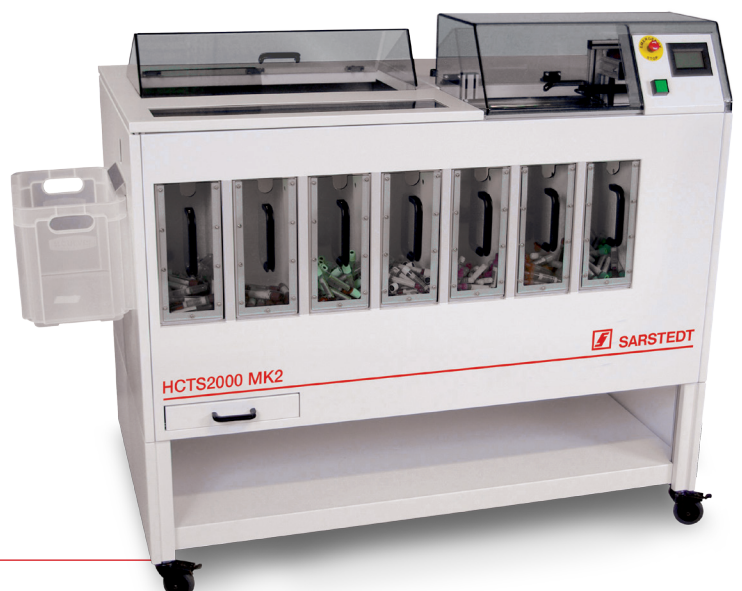
Disposable tourniquet

The disposable tourniquet minimizes the risk of cross-infection and any nosocomial infections.



System solutions for efficient sample processing

Sarstedt offers a comprehensive range of instruments for pre- and post-analytics. The system solutions pictured below and described on the following page provide an initial overview of our device portfolio. Please visit www.sarstedt.com for further information.



Laboratory automation

Sarstedt offers a wide range of automation systems, from the Tube Labeler used prior to blood collection through to pre- and post-analytics. Depending on the size of the laboratory and the task, a variety of individual solutions like stand-alone re/decappers, multi-function compact systems, and large modular sample distributors are available.



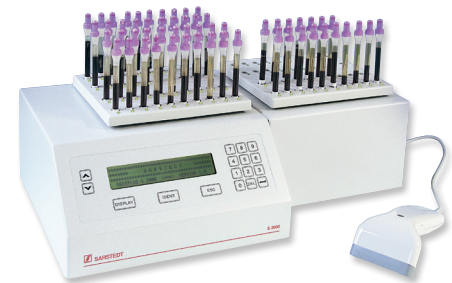
Centrifuges

The quality of analysis results is directly dependent on the quality of the preanalytics. Our compact and cost-effective centrifuges enable direct centrifugation at the draw station.



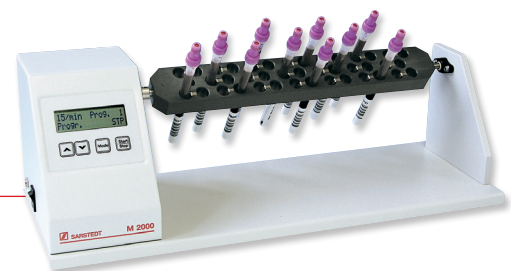
Blood sedimentation systems

Automatic measuring systems combined with the S-Sedivette® blood sedimentation system enable the convenient and reliable determination of the ESR, while the digital multi-function display makes it easy to read the measured values.



Mixers

A range of mixers is available for preparing samples in various sample containers.



Capillary blood collection

Developed and designed to meet individual requirements



Individuality requires flexible systems



SARSTEDT

Individuality requires flexible systems

Individual requirements for capillary blood collection were a critical factor in the development of our capillary blood collection systems. Successful blood collection across the different patient groups – infants, adults and geriatric patients – demands functional and flexible collection systems. Sarstedt's innovative Microvette®, Multivette®, Minivette®, Safety Lancet and Incision Lancet capillary blood collection systems meet these demands.



The easy capillary blood collection system

Microvette® 100/200

Depending on requirements, the Microvette® 100/200 with a round or conical inner tube shape and a volume range of 100 and 200 µl is available. Both versions feature a pre-assembled end-to-end capillary for ready collection.

Advantages of the Microvette® 100/200:

- Pre-assembled capillary for blood collection based on the end-to-end principle
- Collection is also possible without capillary using the tube rim
- Easy-open twist cap reduces aerosol effect
- Color-coded caps and tube labels provide quick preparation identification and volume control
- The Microvette® 100/200 is delivered in a convenient and compact StackPack box



The twist cap design reduces the aerosol effect when opening and ensures a secure seal.



Handling the Microvette® 100/200 and Microvette® 300/500

Microvette® 100/200 – blood collection with end-to-end capillary or with collection rim

Microvette® 300/500 – blood collection with collection rim



Microvette® 300/500

The Microvette 300/500 is for capillary blood collection using the entire thin-walled tube rim. Tubes can also be used for drip collections. The conical or round inner tubes facilitate mixing of even small amounts of blood.

Advantages of the Microvette® 300/500:

- A choice between inner tubes with 300 µl or 500 µl volume with corresponding fill lines
- Easy-open twist cap reduces aerosol effect
- The cylindrical outer tube is ideal for barcode and patient labels
- To prevent mix-ups or loss, the cap can be attached to the tube base during blood collection

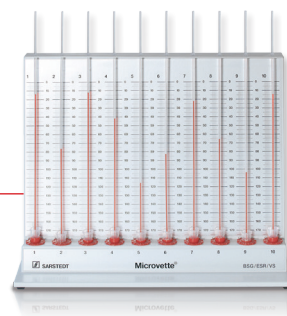


The conical inner tube of the Microvette® 300 maximizes serum and plasma yield, even with small amounts of blood.

Microvette® CB 200 ESR

The Microvette® CB 200 ESR is ideal for measuring blood sedimentation from capillary blood. The Microvette® CB 200 ESR, pre-dosed with citrate, contains an enclosed cap with assembled and prepared end-to-end collection capillary and a sedimentation capillary. Comparative studies confirm comparable values to the Westergren method. The low sample volume of 200 µl minimizes patient discomfort.

The graduated ESR rack with 10 measuring stations is specifically designed for the Microvette® CB 200 ESR.



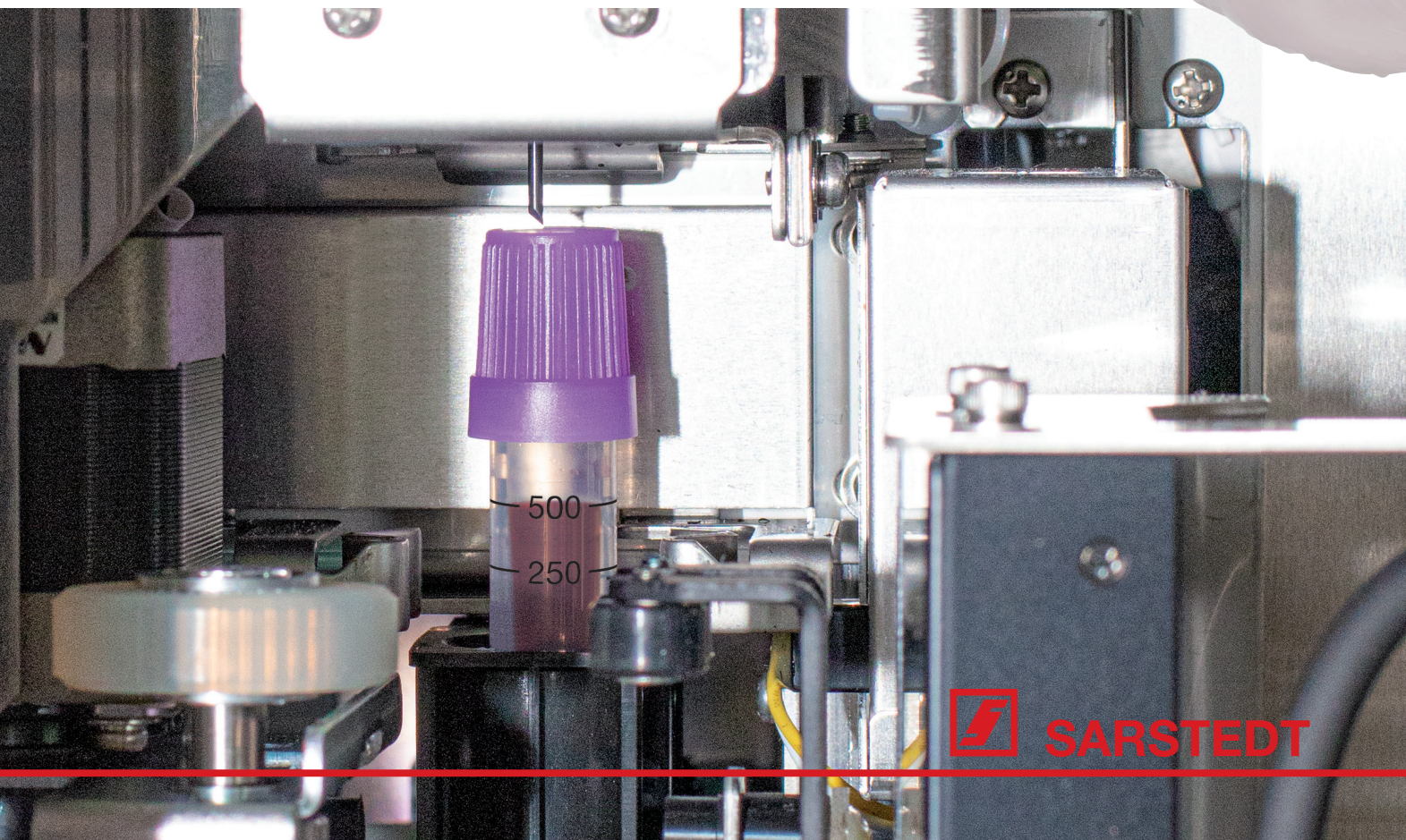
Microvette® APT

Automated Processing Tube

Capillary blood collection is necessary when it is not possible to obtain a venous blood sample, for instance with pediatric and elderly patients that have difficult vein conditions.

The Microvette® APT was specially developed for automated processing in blood count analysis systems and meets all the important processing requirements for a primary container, as the outer tube dimension of 75 x 13 mm.

The combination of standardized tube dimensions and the newly developed pierceable and leak-resistant cap makes it possible to carry out automated blood analysis - exactly the same as with venous samples - without manual sample preparation or workflow interruption.



SARSTEDT

FLEXIBLE

- ✓ End-to-end capillary (250 µl) for a precise filling volume
- ✓ Entire collection rim promotes optimum mixing with the anticoagulant
- ✓ Transparent product label for easy sample assessment



Gentle blood collection with end-to-end capillary (250 µl) or with entire collection rim. Decide for yourself!

Easy-to-read markings facilitate accurate filling.

Reliable sample identification right from the start. The tube length provides plenty of space for the patient label.

Microvette® APT 250



Microvette® APT 500

Time-saving analysis – direct and hygienic primary tube. Newly developed membrane cap also guarantees safe sample transport and shipping.





When only small quantities of blood are available or vein conditions are difficult, every drop is crucial for achieving conclusive diagnostics.



Greater flexibility thanks to two collection techniques



End-to-end capillary – 250 µl

The Microvette® APT 250 has an integrated end-to-end capillary, making it ideal for collecting 250 µl capillary blood.

After the end-to-end capillary has been completely filled, the blood sample can be conveniently and hygienically transferred into the primary container by holding the Microvette® APT 250 upright.

The user-friendly cap enables the sample to be quickly prepared for leak-proof transport.



Collection rim 250– 500 µl

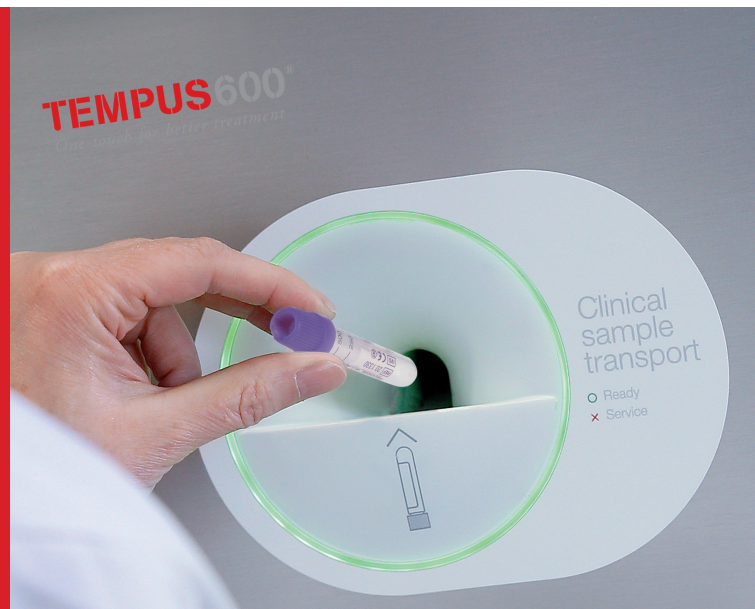
The Microvette® APT 500 has a variable filling volume between 250 and 500 µl. It is the ideal sample container for blood count analysis systems that require a sample volume between 250 and 500 µl.

Collection via the entire collection rim promotes optimum mixing of blood and anticoagulant, and prevents clot formation.

The user-friendly cap enables the sample to be quickly prepared for leak-proof transport.

SECURE

- ✓ Leak-proof as required by ADR/RID packaging regulation P 650
- ✓ Tempus600® approved
- ✓ Suitable for pneumatic tube dispatch for fast transportation



The Microvette® APT is suitable for transport with most of the modern transport systems and meets the requirements of the packaging regulation P 650 of the ADR/RID for primary containers.

Using the same processes as for routine venous samples, the Microvette® APT conveniently minimizes potential errors during transport and shipping and automated processing on blood count analysis systems.

Using the Microvette® APT also improves the Turn-Around-Time (TAT) in capillary blood analysis and reduces the need for repeated blood collection for the well-being of special patient groups.





Ordering information

Order no	Description	Dimensions	Volume	Color code	Packaging
20.1330.100	Microvette® APT 500 K ₂ EDTA	75 x 13 mm	250–500 µl	US	100 pieces/inner box 500 pieces/case
20.1331.100	Microvette® APT 250 K ₂ EDTA with capillary	75 x 13 mm	250 µl	US	50 pieces/inner box 500 pieces/case



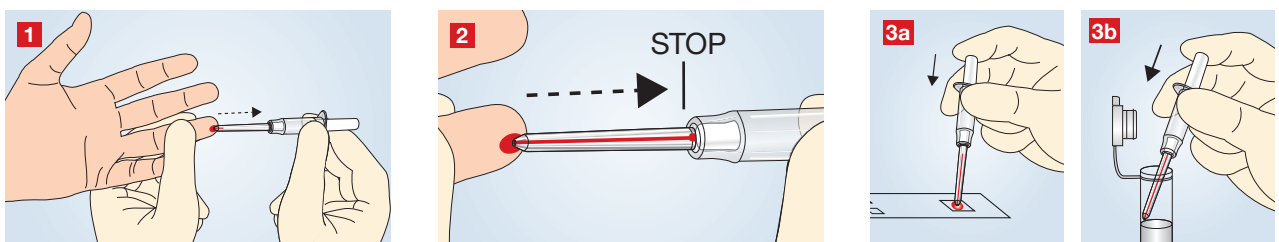
Minivette® POCT

The Minivette® POCT was developed specifically for simple capillary blood collection and dispensing of small, precise blood volumes needed for point-of-care-tests (POCT).

- Direct and precise dispensing of small volumes
- Drip-free transfer to POC device
- Many volume options: 10 µl, 20 µl, 50 µl, 100 µl, 200 µl
- Available in 3 preparations: Neutral, Heparin, EDTA



Handling – Minivette® POCT



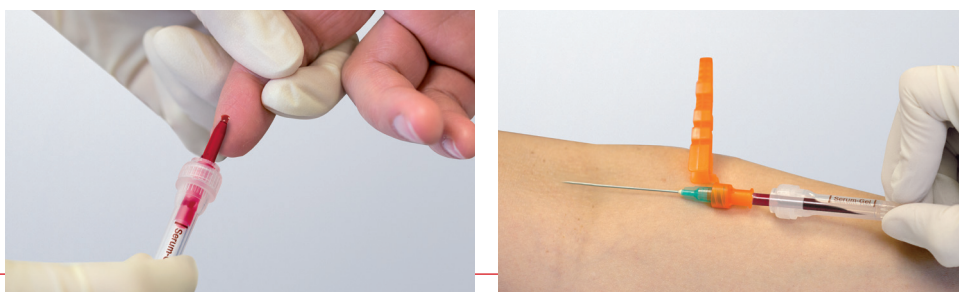
Capillary and venous blood collection in a single system

Multivette® 600

The flexible Multivette® 600 blood collection system can be used for both capillary and venous blood collection.

For single venous collection, a Luer needle is attached to the Multivette® capillary tube. Its innovative design enables the automatic filling of the inner tube using only venous pressure.

Capillary blood is collected using the end-to-end principle. The capillary tube accommodates a blood volume of 600 µl.





Safety Lancet

For a safe, comfortable, and gentle puncture

The Safety Lancet ensures superior safety for the patient and user. The needle or blade are always safely concealed in the lancet body before and after use, preventing needle-stick injuries and cross-contamination. Reuse is not possible.

User-friendly handling and patient comfort

Safety Lancets are primed, ready for use, and simple to use. The secured firing button prevents accidental activation and inactivation. The Safety Lancets are ergonomically designed with a ridged grip for a comfortable hold. The small contact face facilitates precise puncturing. Ultra-sharp, siliconized blades and triple-sharpened needle tips minimize pain for patients, and controlled penetration depths prevent bone injuries.



Handling – Safety Lancet



Safety-Heel[®] – incision lancet

Designed specifically for heel punctures of premature babies and newborns

The semi-circular incision path of the Safety-Heel[®] incision reduces hematoma formation and the sensation of pain. Cutting across a large section of capillary beds provides ample blood supply.

Handling – Safety-Heel[®]



Disposal, mailing, and transport of samples

In addition to our blood collection systems, Sarstedt also offers solutions for streamlining the blood collection process from supply to disposal. This range is complemented by products for sample handling, processing, storage, and mailing.

Separate brochures are available with more information.



Multi-Safe disposal boxes

Multi-Safe disposal boxes ensure the safe and user-friendly disposal of pointed, sharp, and hazardous objects for in-patient and out-patient use.



Safety Tray

The practical Safety Tray lets you perfectly organize and streamline the entire blood collection process. The Safety Tray contains all of the components required for blood collection, from S-Monovette® Racks to Multi-Safe disposal boxes.

Transport cases and mailing boxes

The transport cases and mailing boxes are designed and approved for the safe transport of biological substances in category B of substance class UN3373 in accordance with packaging regulation P650. The transport case is available with a wide aperture or plastic bag with closure clip. The mailing box protects inner tubes and can accommodate mailing containers and bottles of different dimensions. It is available in three sizes.



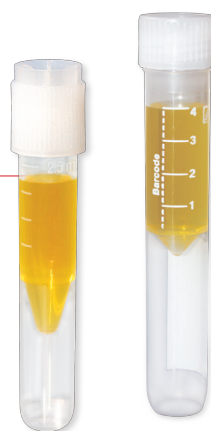
S-Monovette® Rack

The universal block rack with and without a handle is perfect for space-saving sample storage and automated processes in sample distribution systems. Racks are available in several colors for color-coded organization.



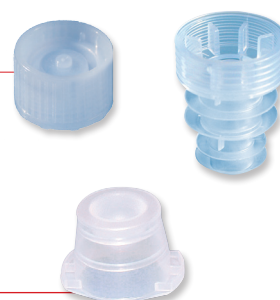
Tubes with false bottoms

Sarstedt offers false bottom tubes in a range of diameters and volumes specifically for analyzer compatibility and laboratory automation.



Caps

An extensive range of screw caps and push caps in various diameters are available for sealing primary tubes or for evaporation protection.



If you have any questions,
we're happy to help!



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