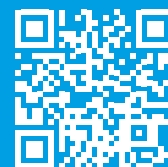
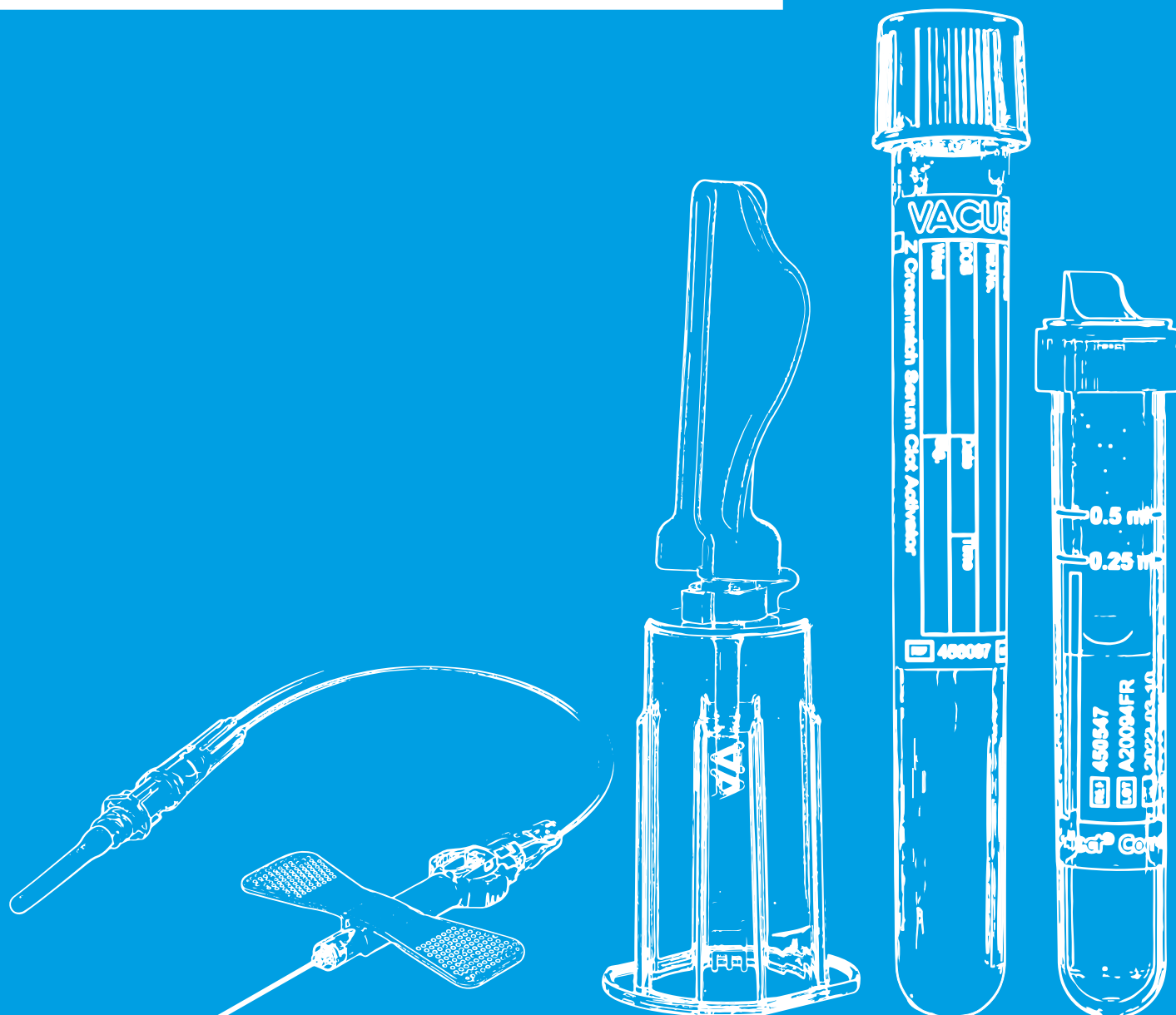


making a difference

Download our
latest catalogue:



PREANALYTICS CATALOGUE



EDITION 2024

www.gbo.com


greiner
BIO-ONE

making a difference



To us, health is the highest personal priority.
This inspires our daily mission of serving life sciences
and healthcare professionals with advanced and
sustainable products and solutions.

We empower people to make a difference in health.

CONTENT

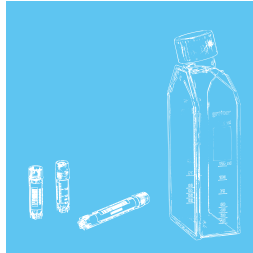
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PRODUCTS

Product overview

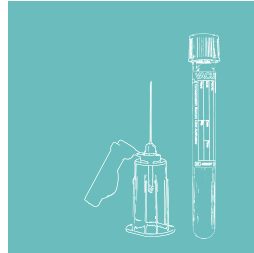
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BIOSCIENCE

Making a difference in research and science

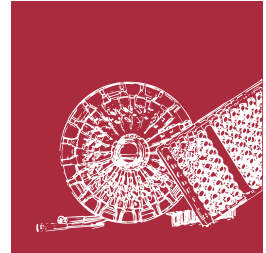
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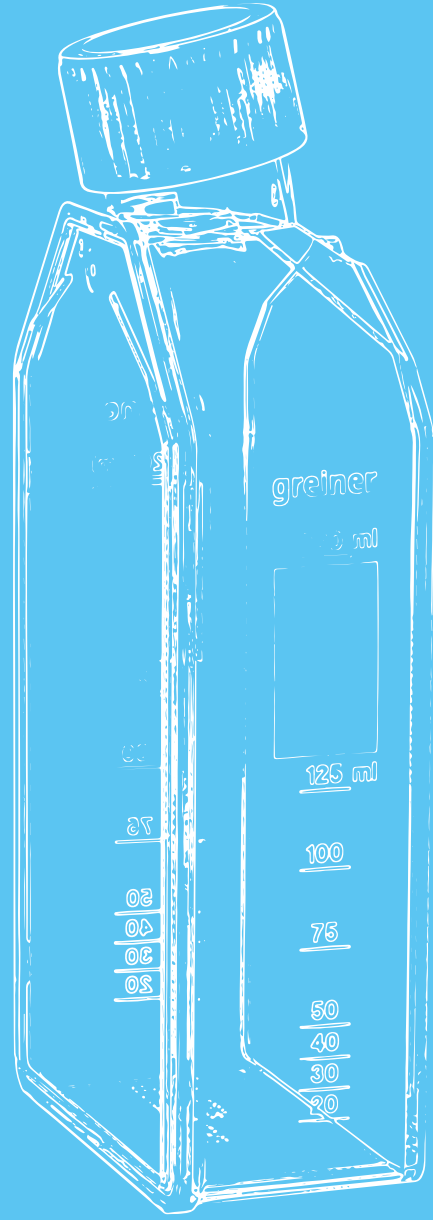
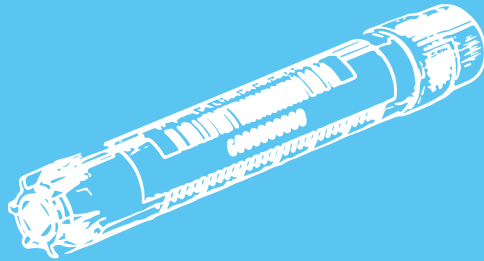
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WE ARE PROUD TO PRESENT YOU OUR
NEW DIGITAL SHOWROOM:



BIOSCIENCE



MAKING A DIFFERENCE IN RESEARCH AND SCIENCE

Greiner Bio-One is one of the leading suppliers of special products for the cultivation and analysis of cell and tissue cultures. Under the brand name CELLSTAR®, we offer cell culture flasks, dishes and plates in a wide variety of formats and surface modifications, so that you will always find exactly the right product for every application and all cell types.

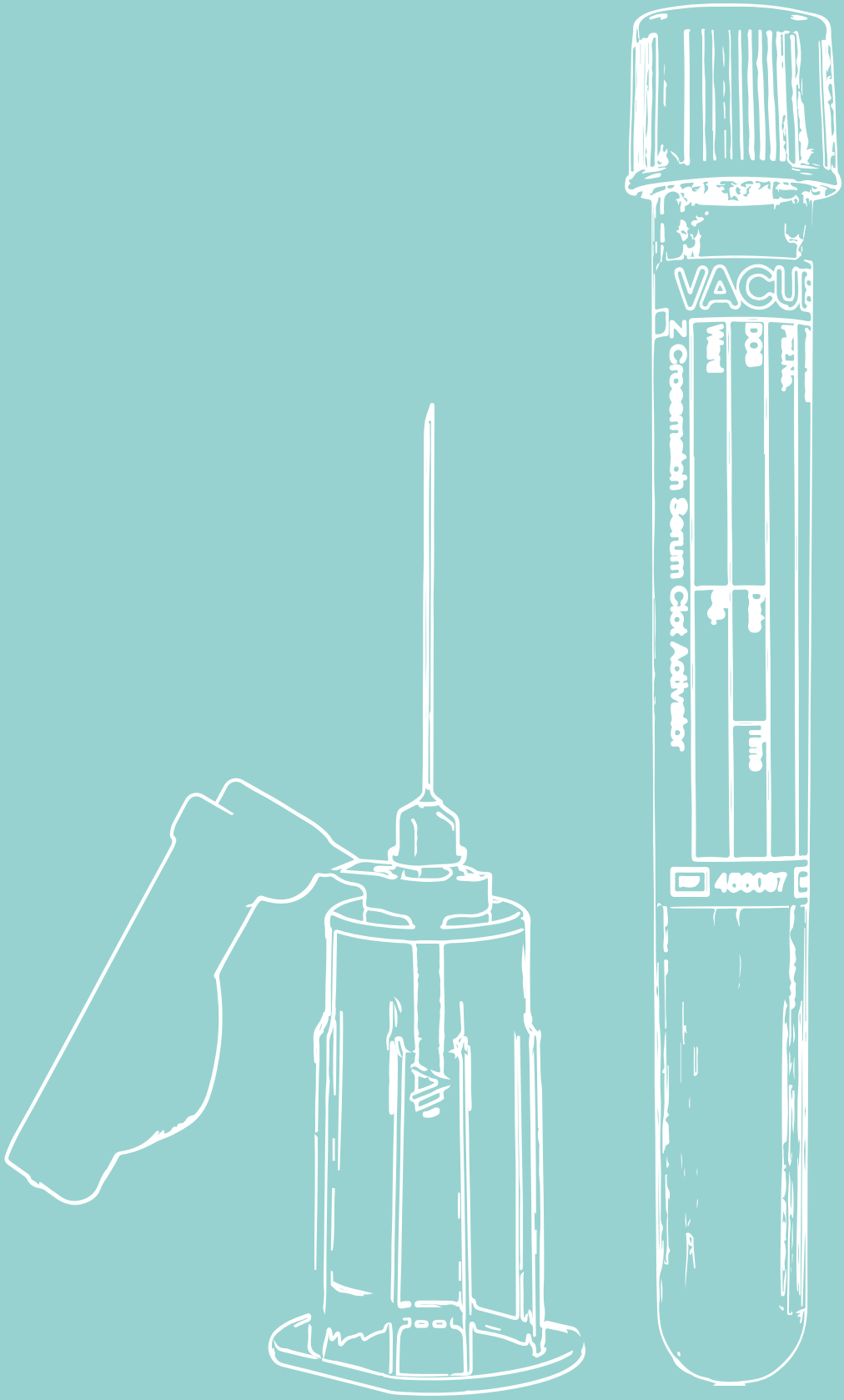
In addition, we have been developing and producing microplates for high-throughput screening for more than 60 years, enabling

industry and research to carry out fast and efficient drug testing. Among other things, Greiner Bio-One was the first manufacturer to introduce a microplate in 1536 well format to the market, setting new standards in terms of automation, performance and cost reduction.

Based on decades of experience in the cryogenic storage of samples, we also offer comprehensive solutions for automated storage systems in biobanks.

- / **High-quality products for your lab**
- / **Special products for cell and tissue culture**
- / **Microplates for industry and research**
- / **Cryogenic storage systems**

PREANALYTICS



VACUUM

| DATE | TIME |
|------|------|
| | |
| | |
| | |

450087

PREANALYTICAL SPECIMEN COLLECTION SYSTEMS AND SAFETY SOLUTIONS

Greiner Bio-One was the first company in the world to successfully launch a blood collection system made out of virtually unbreakable PET plastic including a safety cap. Many components of the VACUETTE® System have often been copied, but never reached our high quality standards.

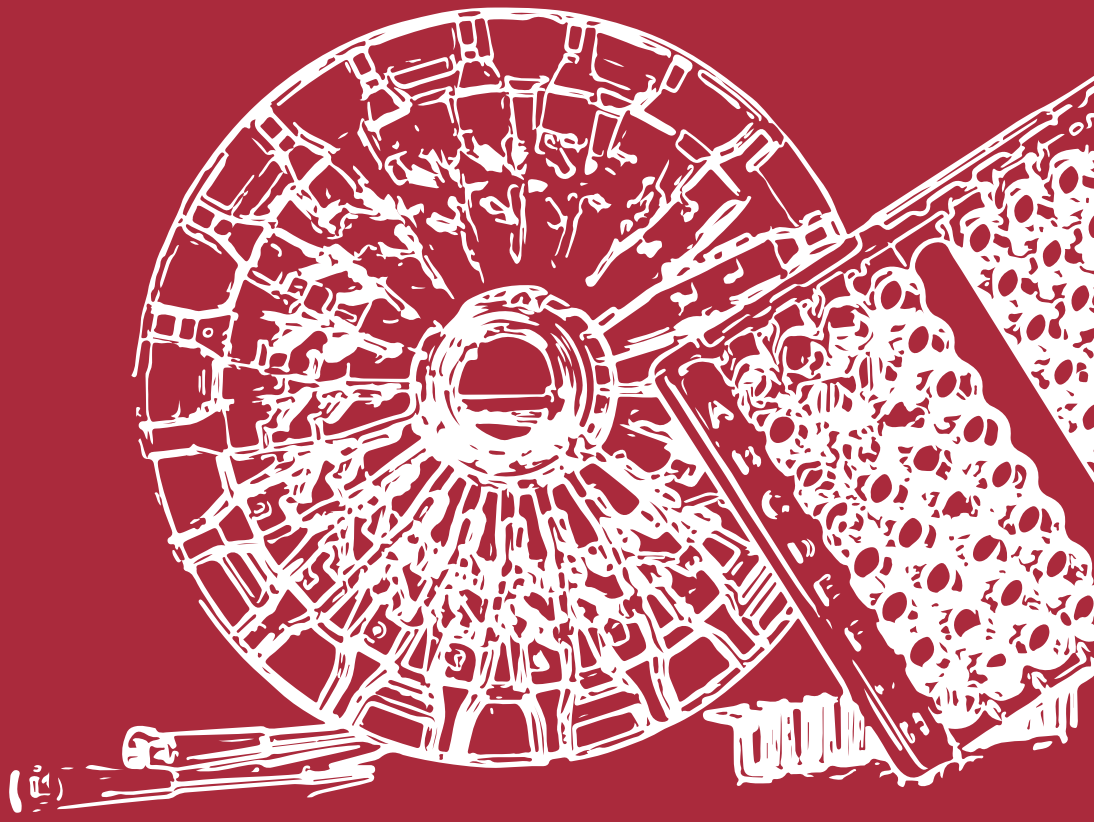
As a trendsetter in the field

of sample collection, we offer solutions that meet the highest demands of our customers. Because your work is an important contribution to health protection.

Continuously new and improved product solutions, perfect functionality, maximum safety and high product quality are the result of decades of experience.

- / **Provide safety**
- / **Simplify handling**
- / **Provide support**
- / **Increase efficiency**
- / **Save costs**

OEM



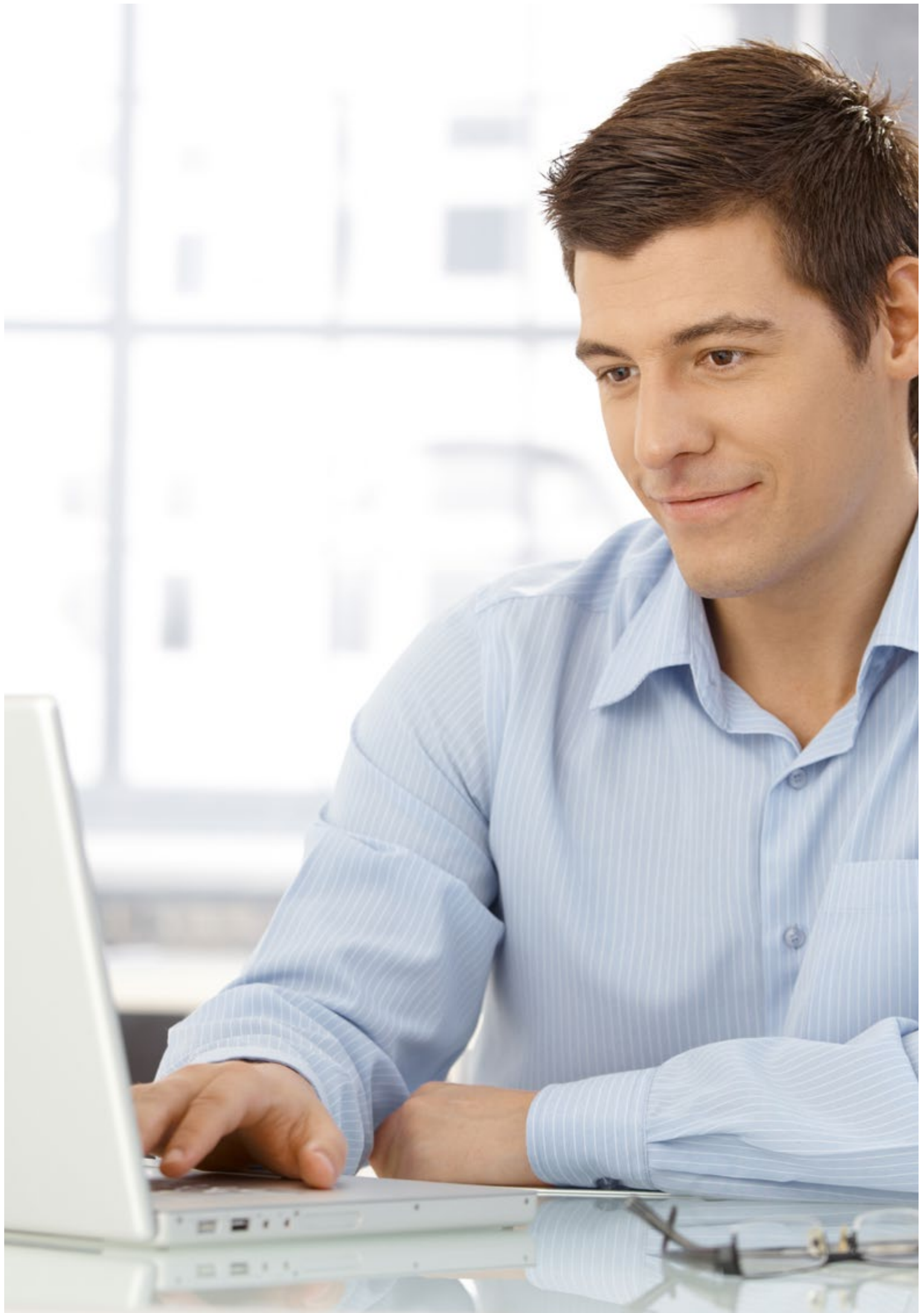
TAILOR MADE SOLUTIONS

Greiner Bio-One as an Original Equipment Manufacturer (OEM) is a long-term partner of the pharmaceutical industry, biotechnology, diagnostic and medical technology industries. The company manufactures numerous products through injection moulding and offers the entire product development and production process. From design,

via prototyping, through fully automated manufacturing, Greiner Bio-One delivers the complete solution with support of experienced scientists, engineers and specialists.

With a global sales network specifically established for the field of OEM, Greiner Bio-One offers custom-made solutions with personal service.

- / Research & development with diverse application and research laboratories**
- / Construction of moulds, planning of plants and assembly lines**
- / Modern, fully automated production**
- / Post-production according to customer requirements**
- / Comprehensive quality assurance and management system**
- / Worldwide networked warehousing and customer service**



FAST. SECURE. EFFICIENT. E-COMMERCE SOLUTIONS FROM GREINER BIO-ONE

As your strong partner in the fields of biotechnology, diagnostics, medical devices and research, Greiner Bio-One already provides you with solutions on a daily basis. In addition, we can offer you a wide selection of e-business solutions to ensure the optimal integration of our products and services into your purchasing process. That in turn will significantly reduce your process-related costs and warehouse costs.

Take advantage of e-business connectivity and make your processes faster, more secure and more efficient.

Greiner Bio-One offers you numerous solutions and the necessary expertise to support your processes, regardless of which ERP system you use. Would you like to purchase via our online shop or are you interested in one of our eProcurement solutions such as EDI or OCI?

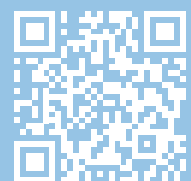
In order to stay informed, you can subscribe to our Greiner Bio-One Newsletter and never miss any news about our products and events.




- / Online-Shop
- / EDI (Electronic Data Interchange)
- / OCI (Open Catalogue Interface)
- / Electronic catalogues



Subscribe to our newsletter
and never miss
the latest news!



A male scientist in a white lab coat and hairnet is smiling and gesturing with his hand in a laboratory. The lab coat has a 'greiner' logo on the pocket. The background shows laboratory equipment and another person in a hairnet.

As scientists, we
share your passion for
your research success.
We are happy to support you
wherever and whenever
we are needed.

TRUE TRUST

Take advantage of our experience and passion for your projects and tasks

WE KEEP OUR PROMISES

For us, real trust means keeping promises. This is one of the core values that we are committed to as a company, both towards you as our customers and towards our employees.

As a family-owned company, we believe that trusting, active partnership is the key to sustainable and reliable processes. We

understand your requirements, speak your language and are happy to support you in advancing your scientific progress. We are at your side at every stage – our competent team of experts is always on hand, from the first contact and flawless delivery of our products, to all forms of after-sales service.



PUT YOUR TRUST IN US:

- / Partner for sustainable and reliable processes
- / 60 years of experience in science and healthcare
- / Innovation with tradition
- / Support during every work step



DISCOVER MORE:



With state-of-the-art technology,
we develop high-performance
solutions for consistent,
reproducible results that
you can always rely on.



QUALITY

Reproducible results
you can rely on

CONSISTENTLY HIGH QUALITY FOR RELIABLE RESULTS

Quality has been our top priority for 60 years. This applies all over the world, as all of our production facilities are committed to the same high standard.

Our products are made from strictly controlled, certified raw materials. With state-of-the-art production technology and

continuous in-process checks by specially trained employees, we ensure consistent quality of the products. Quality promise not only relates to the manufacturing process and therefore to product quality, but to every process and every interaction with you. We are ISO 9001 and ISO 13485 certified.




CONSISTENT HIGH
QUALITY:

- / Location-independent
- / State-of-the-art manufacturing technologies
- / Controlled and certified raw materials
- / ISO 9001 and ISO 13485 certified



DISCOVER
MORE:





Thanks to our presence in over 100 countries, you can rely on us to provide you with consistent high quality, availability and support. Wherever you are.

GLOBAL PRESENCE

There to support you
- wherever you are

ON-SITE FOR YOU WORLDWIDE

By global presence we mean being there for you whenever and wherever you need us.

Our seven production sites in Europe, Asia and North and South America meet the same high quality standards and

ensure low-risk delivery routes and a secure product supply. The support teams of our 28 offices and distributors in more than 100 countries are helpful and competent, and are always on hand when you need help or support.



WE PLACE IMPORTANCE ON:

- / **Competent local support**
- / **Optimum product availability**
- / **Consistent high quality worldwide**



DISCOVER MORE:



A man with glasses and a light blue button-down shirt is standing in front of a whiteboard. He is holding a black marker and has just finished drawing a lightbulb. The lightbulb is drawn with thick, dark green lines. The background is a blurred office setting with wooden paneling and windows. The text is overlaid on the right side of the image, in white font on a dark teal background.

Our innovative spirit
supports the results of
your pioneering work.
In the past, present
and future.

STATE- OF-THE-ART TECHNOLOGY

Pioneers for
progress

IDEAS BECOME SOLUTIONS

For more than 60 years, our passion for plastic technology and manufacturing processes has driven us to constantly innovate to support you optimally in your daily work and ensure your success.

We have been instrumental in the development of consumables in the diagnostics and life sciences industries, as well as in the medical market, since 1963.

We are proud of our rich pioneering history – from the production of the first plastic petri dishes, to Europe’s first plastic vacuum sampling system or the invention of the world’s first 1536-well microplates. We will continue to strive for new and innovative product solutions that are precisely tailored to your requirements and optimally support you in your daily work.



PROGRESS NEEDS PIONEERS:

- / Product solutions for current and emerging trends
- / Innovative production technologies



DISCOVER MORE:



We work hand in hand with you to
develop tailored solutions to suit
your requirements.



CUSTOMER FOCUS

We focus on you and your goals

WE SUPPORT YOU SO WE CAN MAKE BIG THINGS HAPPEN TOGETHER

Everything we do and the way we do it is designed to make your work easier. By understanding your wishes and needs, as well as your requirements and workflows, we are able to offer you real added value and thus trust in long-term and sustainable customer relationships.

We are here to provide you with the best products and solutions

to suit your needs. Our dedicated team ensures that processes run smoothly and is always on hand when needed. Our multidisciplinary teams have many years of practical experience in science and laboratory work and understand the challenges of your daily work first hand. We are happy to use this expert knowledge to create training materials tailored to your specific needs.



WE OFFER:

- / Long-term customer relationship
- / Solutions to suit your requirements
- / Training and training materials



DISCOVER MORE:



We use over 60 years of experience
in the laboratory and healthcare
sectors, and our passion
for innovation, to meet your
requirements and grow with you.



EXPERTISE

In all relevant market trends

WE SPEAK YOUR LANGUAGE

We understand your tasks and their workflows with all their requirements. Our experts are at your side with more than 60 years of experience – from the development of products and solutions to support with regulatory issues or individual training.

More than 80% of our sales and application specialists have a background in natural sciences

and practical experience in the laboratory. We would be happy to advise you on site – at the place where your requirements arise. You can rely on our expertise to quickly integrate our products into your processes, because we know and understand your workflow. We are happy to support you in every step of your individual workflow, for example with product training, support documentation and service.



WHAT WE OFFER:

- / **Comprehensive portfolio for your workflow needs**
- / **Experienced team of industry experts**
- / **Best practices for optimal efficiency**



DISCOVER
MORE:



We help you to optimize your operations and processes so that you can always achieve the best possible results.



EFFICIENCY

We are your partner
for increasing
efficiency – inside
and outside the
laboratory

WE INCREASE YOUR EFFICIENCY

In the laboratory and day-to-day work, increasing efficiency is no longer just an option, but an essential requirement. As a strategic cooperation partner for day-to-day routine activities in and outside the laboratory, we support you in overcoming your current and future challenges.

We offer significant added value by supporting the efficien-

cy of your workflows. For example, our digital solutions create a connection between pre-bar-coded test tubes and patient data from the laboratory information system. This reliably rules out mix-ups and minimizes sampling errors. Your workflows can thus be measurably optimized, better results can be achieved with minimum time, resources, and work.



YOUR STRATEGIC PARTNER:

- / Increased efficiency
- / Digital solutions
- / Best practice recommendations



DISCOVER MORE:



We are committed to climate protection and limiting global warming to 1.5°C.



SUSTAINABILITY

the principle behind
our processes for
many years

BECAUSE IT'S REALLY IMPORTANT TO US

Sustainable action is the basic prerequisite for a future worth living in. As a plastics processing company, we strive to develop sustainable solutions that provide answers to the major challenges of our time.

Greiner AG's overarching "Blue-Plan" strategy focuses on the three pillars of climate, circular economy and people. Greiner

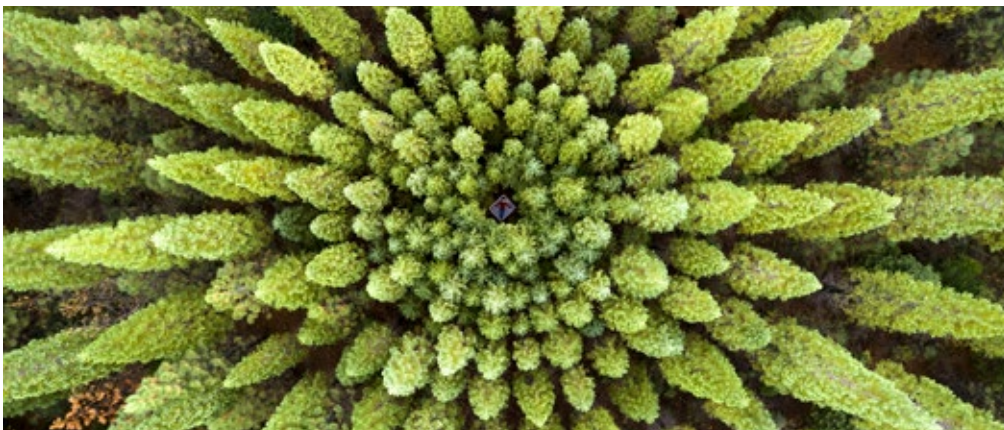
Bio-One is also working intensively on these sub-areas.

As a producer of plastic medical products, it is our declared long-term goal to combine ecological, economic and social aspects. We attach particular importance not only to your excellent supply of high-quality products, but also to energy-efficient and sustainable operation as a plastics producer.

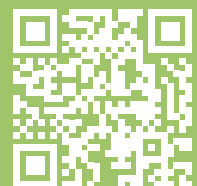


OUR GOALS UNTIL 2030:

- / **Comprehensive circular approach**
- / **Preparation of employees for the challenges of the future**



DISCOVER
MORE:





The innovative VACUETTE® Blood Collection Tubes made out of virtually unbreakable PET plastic have set the standard on today's market. They provide improved safety and hygiene during specimen collection procedures with the advantage of being as clear as glass.

VACUETTE®**BLOOD COLLECTION TUBES**

| | | | |
|--|----|--|----|
| / VACUETTE® Coagulation Tubes..... | 40 | / VACUETTE® Blood Grouping Tubes..... | 62 |
| 9NC Coagulation Sodium Citrate 3.2 % | 41 | ACD-A | 63 |
| 9NC Coagulation Sodium Citrate 3.8 % | 42 | ACD-B | 63 |
| CTAD | 42 | CPDA | 64 |
| | | | |
| / VACUETTE® Serum Tubes | 43 | / VACUETTE® Trace Element Tubes..... | 65 |
| CAT Serum Clot Activator | 44 | NH Trace Elements Sodium Heparin | 66 |
| CAT Serum Separator Clot Activator | 45 | | |
| CAT Serum Fast Separator | 46 | | |
| | | | |
| / VACUETTE® Heparin Tubes | 47 | / VACUETTE® Blood Sedimentation Rate Tubes..... | 67 |
| LH Lithium Heparin | 48 | 4NC ESR Sodium Citrate 3.2 % PP | 68 |
| LH Lithium Heparin Separator | 49 | 4NC ESR Sodium Citrate 3.2 % Glass | 68 |
| NH Sodium Heparin | 50 | | |
| | | | |
| / VACUETTE® EDTA Tubes | 51 | / VACUETTE® Homocysteine Tubes..... | 69 |
| K2E K2EDTA | 52 | Homocysteine | 70 |
| K2E K2EDTA Separator | 53 | | |
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| | | K3E Crossmatch K3EDTA | 72 |
| | | | |
| / VACUETTE® Discard Tube | 57 | | |
| Z Discard | 58 | | |
| | | | |
| / VACUETTE® Glucose Tubes | 59 | | |
| FX Sodium Fluoride / Potassium Oxalate | 60 | | |
| FE Sodium Fluoride / K3EDTA | 60 | | |
| FC Mix | 61 | | |

THE VACUUM SYSTEM: SIMPLE APPLICATION AND RELIABLE RESULTS

The main advantage of a user-friendly evacuated specimen collection system is that a clearly defined quantity of blood sample material can be collected without further handling requirements. VACUETTE® tubes can be changed quickly and hygienically during blood collection, without any risk of coming into contact with specimen material.

Most tubes contain chemical additives, which in combination with the pre-determined vacuum ensure the correct mixing ratio for the blood sample. The cap colours of the tubes are based on the internationally recommended colour code so that different tube types can be recognized at first glance.





ADDITIONAL OPTICAL RECOGNITION

thanks to different
coloured rings on the
top of the cap.

All tubes with 13 mm diameter are available in two versions: as PREMIUM tubes with screw thread or as non-ridged tubes without screw thread. The VACUETTE® PREMIUM tube with screw thread allows hygienic opening and safe reclosing of the tube during manual use. VACUETTE® non-ridged tubes can also be opened with a simple pulling motion.



PREMIUM Tubes with screw thread.

Due to the interaction of cap and thread on the PREMIUM tube, the VACUETTE® PREMIUM tube can be opened with a simple twisting movement with minimal effort.



Non-Ridged Tubes without screw thread.

Even without a thread, the non-ridged tubes are ideally opened with a twist and pull movement. All tubes with 16 mm diameter are offered with "non-ridged" pull-off caps as standard.



Of course, all tubes
have the CE-mark.

100% TRACK & TRACE WORLDWIDE

from production to
sample disposal

The item number is encoded in a barcode (GS1 DataMatrix) together with manufacturer-relevant information such as time and place of production, lot number or expiry date

Automated placement of barcode labels according to ISO allows free view of the sample material

Digital support in the use of the correct sample material during collection possible through coded sample type



Standardized label and barcode placement according to ISO guideline Code-128 for optimal readability on all common laboratory equipment

High barcode quality prevents smearing by disinfectants or sweat

Support of GDPR by pseudonymized barcode = no patient data on the tube



VACUETTE® barcode tubes are labelled during the manufacturing process.

PRE-BARCODED TUBES: THE NEW GENERATION FOR INCREASED SAFETY AND EFFICIENCY

Pre-barcode tubes enable a new digital sample collection process that radically minimizes the risk of patient and sample mix-ups. As a result, the quality of laboratory results improves and patient treatment is enhanced. Ultimately, this helps increase efficiency and reduce costs.

The VACUETTE® barcode tubes form the basis for generating and processing information from the

preanalytical process automatically using the appropriate software solution. The sample collection process is made up of three simple steps: scanning the patient's wristband, scanning the tube and finally, handling in the laboratory.

Our pre-barcode tubes are in compliance with current data protection requirements and there is no risk of labelling over the viewing space, ensuring optimal quality control.



**GUARANTEED
ISO BARCODE
QUALITY**

for automated
readability of
laboratory devices.



/ You can find more information about this product in our web-shop.



VACUETTE® COAGULATION TUBES

VACUETTE® coagulation tubes with sodium citrate are used for determinations in coagulation tests.

Coagulation tubes from Greiner Bio-One are available in three versions: 9NC Coagulation Sodium Citrate 3.2 %, 9NC Coagulation Sodium Citrate 3.8 % and CTAD.

The additive trisodium citrate contained in the tube prevents

blood coagulation by binding Ca-ions.

Some of our VACUETTE® Coagulation Tubes are also known as “sandwich” tubes due to their double-wall-technology. The inner tube is made of PP (polypropylene) and prevents the evaporation of liquid. The outer tube is made of PET (polyethylene terephthalate) and ensures a stable vacuum for a correct draw volume.



9NC Coagulation Sodium Citrate 3.2 %

VACUETTE® 9NC coagulation 3.2 % trisodium citrate (0.109 mol/l) tubes are filled with a buffered trisodium citrate solution. The choice of concentration depends on the laboratory's procedure. The mixing ratio is 1 part citrate to 9 parts blood. Selected versions are also available with a transparent label.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|--------------|-------------|-------------|-----------|-------------------|---------|--------------------|
| 454321 | 2 ml | ● light blue | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474321 | 2 ml | ● light blue | ○ white | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484517 | 2 ml | ● light blue | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 494512 | 2 ml | ● light blue | ○ white | PREMIUM | 13 x 75 | BiBarcode (paper) | yes | 50 / 1,200 |
| 454325 | 3 ml | ● light blue | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454327 | 3.5 ml | ● light blue | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474327 | 3.5 ml | ● light blue | ● black | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484518 | 3.5 ml | ● light blue | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 486505 | 5 ml | ● light blue | ● black | PREMIUM | 13 x 100 | paper | yes | 50 / 1,200 |
| 454322 | 2 ml | ● light blue | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454334 | 3 ml | ● light blue | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 484508 | 3 ml | ● light blue | ● black | non-ridged | 13 x 75 | paper | yes | 50 / 1,200 |
| 454332 | 3.5 ml | ● light blue | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 455322 | 9 ml | ● light blue | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



9NC Coagulation Sodium Citrate 3.8 %

VACUETTE® 9NC coagulation 3.8 % trisodium citrate (0.129 mol/l) tubes are filled with a buffered trisodium citrate solution. The choice of concentration depends on the laboratory's procedure. The mixing ratio is 1 part citrate to 9 parts blood.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|--------------|-------------|-------------|-----------|-------|---------|--------------------|
| 454381 | 2 ml | ● light blue | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454385 | 3 ml | ● light blue | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454387 | 3.5 ml | ● light blue | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 455382 | 9 ml | ● light blue | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



CTAD

VACUETTE® CTAD tubes contain buffered citrate solutions, theophylline, adenosine and dipyridamole. As dipyridamole is extremely sensitive to light, the tubes are wrapped in white plastic film.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|--------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 474065 | 2 ml | ● light blue | ● yellow | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 474064 | 3.5 ml | ● light blue | ● yellow | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE® SERUM TUBES

VACUETTE® serum tubes are used for determinations in serum for routine clinical chemistry tests and hormones, serology, immunohaematology and TDM.

Serum tubes from Greiner Bio-One are available in three versions: CAT Serum Clot Ac-

tivator, CAT Serum Sep Clot Activator and CAT Serum Fast Separator.

The inner wall of each serum tube is coated with microscopic silica particles (clot activator main component SiO_2) which activate clotting when the tubes are carefully inverted.



CAT Serum Clot Activator

VACUETTE® CAT serum clot activator tubes are coated with micronized silica particles that activate clotting when the tubes are gently turned. Selected tubes are also available with a transparent label.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 454098 | 1 ml | ● red | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454096 | 2 ml | ● red | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 484515 | 2 ml | ● red | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454092 | 4 ml | ● red | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474092 | 4 ml | ● red | ● black | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484525 | 4 ml | ● red | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 456092 | 6 ml | ● red | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 476092 | 6 ml | ● red | ● black | PREMIUM | 13 x 100 | transparent | no | 50 / 1,200 |
| 486504 | 6 ml | ● red | ● black | PREMIUM | 13 x 100 | paper | yes | 50 / 1,200 |
| 454236 | 2 ml | ● red | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454204 | 4 ml | ● red | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 456089 | 6 ml | ● red | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 456048 | 6 ml | ● red | ● black | non-ridged | 13 x 100 | transparent | no | 50 / 1,200 |
| 455092 | 9 ml | ● red | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



CAT Serum Separator Clot Activator

VACUETTE® CAT serum separator clot activator tubes contain a separating gel that migrates up to the interface between serum and clot during centrifugation, where it forms a stable barrier and separates the serum from the fibrin and cells.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------------|---------|--------------------|
| 454028 | 2.5 ml | ● red | ● yellow | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 484513 | 2.5 ml | ● red | ● yellow | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454071 | 3.5 ml | ● red | ● yellow | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454214 | 3.5 ml | ● gold | ● gold | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474214 | 3.5 ml | ● gold | ● gold | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484514 | 3.5 ml | ● red | ● yellow | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 456010 | 5 ml | ● gold | ● gold | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 456071 | 5 ml | ● red | ● yellow | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 476010 | 5 ml | ● gold | ● gold | PREMIUM | 13 x 100 | transparent | no | 50 / 1,200 |
| 476071 | 5 ml | ● red | ● yellow | PREMIUM | 13 x 100 | transparent | no | 50 / 1,200 |
| 486503 | 5 ml | ● red | ● yellow | PREMIUM | 13 x 100 | paper | yes | 50 / 1,200 |
| 496503 | 5 ml | ● red | ● yellow | PREMIUM | 13 x 100 | BiBarcode (paper) | yes | 50 / 1,200 |
| 454243 | 2.5 ml | ● red | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454067 | 3.5 ml | ● red | ● yellow | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454319 | 3.5 ml | ● gold | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454228 | 3.5 ml | ● gold | ● gold | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 455057 | 4 ml | ● red | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485514 | 4 ml | ● red | ● yellow | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |
| 456073 | 5 ml | ● red | ● yellow | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 456069 | 5 ml | ● red | ● yellow | non-ridged | 13 x 100 | transparent | no | 50 / 1,200 |
| 456234 | 5 ml | ● gold | ● gold | non-ridged | 13 x 100 | transparent | no | 50 / 1,200 |
| 456018 | 5 ml | ● gold | ● gold | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 486500 | 5 ml | ● gold | ● gold | non-ridged | 13 x 100 | paper | yes | 50 / 1,200 |
| 455071 | 8 ml | ● red | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485502 | 8 ml | ● red | ● yellow | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |
| 495071 | 8 ml | ● red | ● yellow | non-ridged | 16 x 100 | BiBarcode (paper) | yes | 50 / 1,200 |
| 455072 | 8 ml | ● gold | ● gold | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



CAT Serum Fast Separator

VACUETTE® CAT serum fast separator tubes contain a separating gel at the bottom of the tube. In contrast to conventional serum tubes, the Serum Fast Tube contains additional thrombin to accelerate the clotting process.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 454592 | 3.5 ml | ● orange | ● yellow | PREMIUM | 13 x 75 | paper | no | 50 / 1.200 |
| 456309 | 5 ml | ● orange | ● yellow | PREMIUM | 13 x 100 | paper | no | 50 / 1.200 |
| 486509 | 5 ml | ● orange | ● yellow | PREMIUM | 13 x 100 | paper | yes | 50 / 1.200 |
| 454593 | 3.5 ml | ● orange | ● yellow | non-ridged | 13 x 75 | paper | | 50 / 1.200 |
| 456313 | 5 ml | ● orange | ● yellow | non-ridged | 13 x 100 | paper | no | 50 / 1.200 |



/ You can find more information about this product in our web-shop.



VACUETTE® HEPARIN TUBES

VACUETTE® heparin tubes are used for plasma determinations of routine clinical chemistry tests.

Heparin tubes from Greiner Bio-One are available in three different versions: LH Lithium

Heparin, LH Lithium Heparin Sep and NH Sodium Heparin.

The additive heparin contained in the tube accelerates the action of ATIII, which neutralizes thrombin and thus prevents the formation of fibrin from fibrinogen.



LH Lithium Heparin

VACUETTE® LH lithium heparin tubes are coated with lithium heparin on the inside. The anticoagulant heparin activates antithrombin, which blocks the clotting cascade and thus produces a whole blood/plasma sample. Selected tubes are also available with a transparent label.



IVD

STERILE

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 454081 | 1 ml | ● green | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454089 | 2 ml | ● green | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 484589 | 2 ml | ● green | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 474084 | 4 ml | ● green | ● black | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484522 | 4 ml | ● green | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 486508 | 6 ml | ● green | ● black | PREMIUM | 13 x 100 | paper | yes | 50 / 1,200 |
| 456084 | 6 ml | ● green | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 454237 | 2 ml | ● green | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 455222 | 4 ml | ● green | ● green | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485222 | 4 ml | ● green | ● black | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |
| 456088 | 6 ml | ● green | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 455084 | 9 ml | ● green | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



LH Lithium Heparin Separator

VACUETTE® LH lithium heparin separator tubes also contain a separating gel that migrates upwards during centrifugation, where it then creates a stable barrier that separates the plasma from the cells. Selected tubes are also available with a transparent label.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 454083 | 3.5 ml | ● green | ● yellow | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 456083 | 5 ml | ● green | ● yellow | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 476083 | 5 ml | ● green | ● yellow | PREMIUM | 13 x 100 | transparent | no | 50 / 1,200 |
| 454008 | 3.5 ml | ● green | ● yellow | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454489 | 3.5 ml | ● green | ● yellow | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 484523 | 3.5 ml | ● green | ● yellow | non-ridged | 13 x 75 | paper | yes | 50 / 1,200 |
| 455229 | 4 ml | ● green | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485513 | 4 ml | ● green | ● yellow | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |
| 456087 | 5 ml | ● green | ● yellow | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 456216 | 5 ml | ● green | ● yellow | non-ridged | 13 x 100 | transparent | no | 50 / 1,200 |
| 486507 | 5 ml | ● green | ● yellow | non-ridged | 13 x 100 | paper | yes | 50 / 1,200 |
| 455083 | 8 ml | ● green | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



NH Sodium Heparin

The inner wall of the VACUETTE® NH sodium heparin tubes is coated with spray-dried sodium heparin. The anticoagulant heparin activates antithrombin, which blocks the clotting cascade, producing a whole blood/ plasma sample.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 484531 | 4 ml | ● green | ● green | PREMIUM | 13 x 75 | paper | yes | 50 / 1.200 |
| 455051 | 9 ml | ● green | ● green | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE® EDTA TUBES

VACUETTE® EDTA tubes are used for determinations in EDTA whole blood for haematology, immunohaematology or for the molecular biological identification of viruses, parasites and bacteria after centrifugation and plasma for clinical laboratory use.

- / Di-Potassium K2EDTA
- / Tri-Potassium K3EDTA

EDTA tubes from Greiner Bio-One are available in three versions: K2E K2EDTA, K2E K2EDTA Separator and K3E K3 EDTA.

The additive potassium EDTA (ethylenediaminetetraacetic acid) contained in the tube interferes with calcium and thus blockades the coagulation cascade.



K2E K2EDTA

VACUETTE® K2E K2EDTA tubes contain di-potassium K2EDTA which blocks the coagulation cascade. Selected tubes are also available with transparent labels.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------------|---------|--------------------|
| 484586 | 2 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454024 | 2 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454020 | 3 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 484526 | 3 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454023 | 4 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 456023 | 6 ml | ● lavender | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 454047 | 2 ml | ● lavender | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454246 | 3 ml | ● lavender | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454411 | 3 ml | ● lavender | ● black | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 454209 | 4 ml | ● lavender | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454410 | 4 ml | ● lavender | ● black | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 484507 | 4 ml | ● lavender | ● black | non-ridged | 13 x 75 | paper | yes | 50 / 1,200 |
| 456043 | 6 ml | ● lavender | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 455045 | 9 ml | ● lavender | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 495045 | 9 ml | ● lavender | ● black | non-ridged | 16 x 100 | BiBarcode (paper) | yes | 50 / 1,200 |



K2E K2EDTA Separator

VACUETTE® K2E K2EDTA separator tubes contain an additional separating gel and are used for plasma testing in molecular diagnostics and for virus load determination. Selected tubes are also available with a transparent label.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 454235 | 3.5 ml | ● lavender | ● yellow | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 456211 | 5 ml | ○ white | ● yellow | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 456058 | 5 ml | ○ white | ● yellow | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 455040 | 8 ml | ● lavender | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 455021 | 8 ml | ○ white | ● yellow | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



K3E K3EDTA

VACUETTE® K3E K3EDTA tubes contain tri-potassium K3EDTA which blocks the coagulation cascade. Selected tubes are also available with transparent labels.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 484509 | 1 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454087 | 2 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474087 | 2 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484512 | 2 ml | ● lavender | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454086 | 3 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |

VACUETTE® Blood Collection Tubes

VACUETTE® EDTA Tubes

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------------|---------|--------------------|
| 474086 | 3 ml | ● lavender | ● black | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484511 | 3 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454036 | 4 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 474036 | 4 ml | ● lavender | ● black | PREMIUM | 13 x 75 | transparent | no | 50 / 1,200 |
| 484510 | 4 ml | ● lavender | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 456036 | 6 ml | ● lavender | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 486502 | 6 ml | ● lavender | ● black | PREMIUM | 13 x 100 | paper | yes | 50 / 1,200 |
| 454222 | 2 ml | ● lavender | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 494508 | 2 ml | ● lavender | ○ white | non-ridged | 13 x 75 | BiBarcode (paper) | yes | 50 / 1,200 |
| 454217 | 3 ml | ● lavender | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 454287 | 3 ml | ● lavender | ● black | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 454021 | 4 ml | ● lavender | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 456038 | 6 ml | ● lavender | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 496511 | 6 ml | ● lavender | ● black | non-ridged | 13 x 100 | BiBarcode (paper) | yes | 50 / 1,200 |
| 455036 | 9 ml | ● lavender | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485501 | 9 ml | ● lavender | ● black | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |



- / VACUETTE® no additive tubes can be used like VACUETTE® discard tubes.
- / You can find more information about this product in our web-shop.



VACUETTE® NO ADDITIVE TUBES

VACUETTE® no additive tubes are used as discard tubes or for the collection of blood.

The tubes without additive from

Greiner Bio-One are available in the version Z no additive. There is no chemical additive in the tube.

VACUETTE® Blood Collection Tubes

VACUETTE® No Additive Tubes



Z No Additive

VACUETTE® tubes without additives contain no chemical additives, but like the other tubes with an additive, are evacuated and are sterile on the inside.



IVD

STERILE

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------------|---------|--------------------|
| 454088 | 2 ml | ○ white | ○ white | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 454001 | 4 ml | ○ white | ● black | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |
| 484530 | 4 ml | ○ white | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 494510 | 4 ml | ○ white | ● black | PREMIUM | 13 x 75 | BiBarcode (paper) | yes | 50 / 1,200 |
| 456001 | 6 ml | ○ white | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 454241 | 3 ml | ○ white | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |
| 456085 | 6 ml | ○ white | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 455001 | 9 ml | ○ white | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |
| 485506 | 9 ml | ○ white | ● black | non-ridged | 16 x 100 | paper | yes | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE® DISCARD TUBE

VACUETTE® discard tubes are not intended for analytical purposes.

Discard tubes do not contain any additives, but are evacuated and sterile on the inside. If blood is drawn, for example with a (safety) blood collection set, it

is recommendable to use a discard tube to displace any air in the tubing of the winged needle prior to filling other tubes. This helps prevent underfilling, which is especially significant when using a VACUETTE® coagulation tube.

VACUETTE® Blood Collection Tubes

VACUETTE® Discard Tube



CE

IVD

STERILE

Z Discard

VACUETTE® discard tubes are not intended for analytical purposes and do not contain any additive. The tubes are evacuated and sterile inside. To avoid underfilling the first tube, it is recommended to use a discard tube in advance.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456202 | 5 ml | ● black | ● red | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE® GLUCOSE TUBES

VACUETTE® glucose tubes are used to determine glucose. All glucose tubes (except FC mix) can also be used for the determination of lactate.

The glucose tube from Greiner Bio-One is available in three versions: FX sodium fluoride/potassium oxalate, FE sodium fluoride/K3 EDTA and FC mix.

The powder additive in the FC mix tube lowers the pH and blocks the pH-dependent enzymes that would be active in the initial phase of the glycolysis cascade. The combination of the citrate-fluoride-EDTA additive in the tube stabilizes the in vivo concentration of glucose in the sample from the beginning.



FX Sodium Fluoride / Potassium Oxalate

These VACUETTE® tubes contain sodium fluoride as a stabilizer and the additive potassium oxalate as an anticoagulant.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 484528 | 2 ml | ● grey | ○ white | non-ridged | 13 x 75 | paper | yes | 50 / 1,200 |
| 454297 | 4 ml | ● grey | ● black | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |



FE Sodium Fluoride / K3EDTA

In addition to sodium fluoride as a stabilizer, the VACUETTE® tubes also contain the additive K3EDTA as an anticoagulant.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 484520 | 2 ml | ● grey | ○ white | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 484527 | 4 ml | ● grey | ● black | PREMIUM | 13 x 75 | paper | yes | 50 / 1,200 |
| 454221 | 2 ml | ● grey | ○ white | non-ridged | 13 x 75 | paper | no | 50 / 1,200 |



FC Mix

FC Mix tubes contain buffered Na₂ EDTA, sodium fluoride, citric acid and sodium citrate. This additive mixture reduces the pH value and blocks the pH-dependent enzymes that would be active in the initial stage of the glycolysis cascade.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------------|---------|--------------------|
| 454510 | 2 ml | ● pink | ○ white | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 454511 | 2 ml | ● grey | ○ white | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 454513 | 3 ml | ● pink | ● black | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |
| 454514 | 3 ml | ● grey | ● black | non-ridged | 13 x 75 | transparent | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE®

BLOOD GROUPING TUBES

VACUETTE® blood grouping tubes preserve red blood cells. They are used for blood grouping tests or cell preservation.

VACUETTE® blood grouping tubes are available in three versions: ACD-A, ACD-B and CPDA. ACD blood grouping tubes from Greiner Bio-One contain the additives citric acid, trisodium

citrate and dextrose. The additive dextrose maintains the cell metabolism. In addition to citric acid and dextrose, CPDA tubes also contain monobasic sodium phosphate and adenine, which helps replenish ATP. All three tube versions have their specific concentration and additive ratio.



ACD-A

ACD-A tubes contain citric acid, trisodium citrate and dextrose in a specific ratio. In addition to blood group determinations, they are also suitable for cell preservation.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 455055 | 9 ml | ● yellow | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



ACD-B

ACD-B tubes contain citric acid, trisodium citrate and dextrose in a specific ratio. In addition to blood group determinations, they are also suitable for cell preservation.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 455094 | 9 ml | ● yellow | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |

VACUETTE® Blood Collection Tubes

VACUETTE® Blood Grouping Tubes



CE

IVD

STERILE

CPDA

CPDA tubes contain citric acid, monobasic sodium phosphate, dextrose and additionally adenine. In addition to blood grouping, they are also suitable for cell preservation.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456057 | 6 ml | ● yellow | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |
| 455056 | 9 ml | ● yellow | ● black | non-ridged | 16 x 100 | paper | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE® TRACE ELEMENT TUBES

VACUETTE® trace element tubes are used to determine trace elements such as arsenic, copper, mercury and many more.

The trace element tube from Greiner Bio-One is available in the version NH trace elements sodium heparin.

Trace element tubes contain sodium heparin and are used to investigate trace elements. Prior to trace element determination, all equipment used during collection, transport and storage should be checked. A blank measurement must first be carried out for each tube batch.

VACUETTE® Blood Collection Tubes

VACUETTE® Trace Element Tubes



CE

IVD

STERILE

NH Trace Elements Sodium Heparin

The tubes are suitable for testing most trace elements. NH trace elements sodium heparin tubes contain the anti-coagulant sodium heparin.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|--------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456080 | 6 ml | ● royal blue | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 456275 | 6 ml | ● royal blue | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |



/ You can find more information about this product in our web-shop.



VACUETTE®

BLOOD SEDIMENTATION RATE TUBES

VACUETTE® ESR tubes are used to collect and transport venous blood for sedimentation rate tests. ESR measurements refer to the Westergren method.

The ESR analysis mainly shows changes in plasma proteins that follow most of the acute and chronic infections, tumours, and

degenerative diseases.

ESR tubes from Greiner Bio-One are plastic tubes with a predefined vacuum for an exact aspiration volume. The VACUETTE® ESR tubes contain a buffered 3.2 % trisodium citrate solution (0.109 mol/l). The mixing ratio is 1 part citrate solution to 4 parts blood.

VACUETTE® Blood Collection Tubes

VACUETTE® Blood Sedimentation Rate Tubes



4NC ESR Sodium Citrate 3.2 % PP

VACUETTE® ESR tubes are used to determine the blood sedimentation rate. This version is made of polypropylene (PP).

| Item no. | Nominal volume | Cap colour | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-----------|-------------|---------|--------------------|
| 729073 | 1.5 ml | ● black | 9 x 120 | transparent | no | 50 / 800 |
| 769094 | 1.5 ml | ● black | 9 x 120 | paper | yes | 50 / 800 |
| 729070 | 2.75 ml | ● black | 9 x 120 | transparent | no | 50 / 800 |



4NC ESR Sodium Citrate 3.2 % Glass

VACUETTE® ESR tubes are used to determine the blood sedimentation rate. This version is made of glass.

| Item no. | Nominal volume | Cap colour | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-----------|-------|---------|--------------------|
| 729093 | 1.6 ml | ● black | 9 x 120 | paper | no | 50 / 800 |
| 729090 | 2.9 ml | ● black | 9 x 120 | paper | no | 50 / 800 |



/ You can find more information about this product in our web-shop.



VACUETTE® HOMOCYSTEINE TUBES

VACUETTE® homocysteine tubes are used to stabilize the in vivo homocysteine concentration.

Homocysteine tubes from Greiner Bio-One contain a buffered sodium citrate/citric acid solution (pH = 4.2).

Due to the dilution effect of the stabilizer, the result must

be multiplied by a factor of 1.11. This compensates the dilution by the citrate.

Homocysteine is produced in cell metabolism as an intermediate product during the breakdown of methionine. An increased homocysteine concentration in the blood increases the risk of cardio- and cerebrovascular occlusions.

VACUETTE® Blood Collection Tubes

VACUETTE® Homocysteine Tubes



Homocysteine

VACUETTE® homocysteine tubes contain a buffered sodium citrate/citric acid solution to stabilize the homocysteine in whole blood. The analytical result of the homocysteine concentration must be multiplied by a factor of 1.11 to compensate for the dilution by the citrate.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 454421 | 2 ml | ○ white | ● red | PREMIUM | 13 x 75 | paper | no | 50 / 1,200 |



- / VACUETTE® No Additive Tubes can also be used for crossmatching.
- / You can find more information about this product in our webshop.



VACUETTE® CROSSMATCH TUBES

VACUETTE® crossmatch tubes are used for serological compatibility testing.

The crossmatch is used for in vitro compatibility testing. Crossmatch tubes from Greiner Bio-One are available in two versions: CAT serum crossmatch (additive: silicon dioxide) and K3

EDTA crossmatch (additive: potassium EDTA).

The tube type CAT serum crossmatch contains a clot activator which is used for crossmatching with serum, while the other type contains K3EDTA and is used for crossmatching with whole blood.



CAT Crossmatch Serum Clot Activator

CAT serum clot activator crossmatch tubes contain a clot activator to enable crossmatching in serum.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456097 | 6 ml | ● pink | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |



K3E Crossmatch K3EDTA

K3E K3EDTA crossmatch tubes contain tri-potassium K3EDTA to enable crossmatching in whole blood.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456093 | 6 ml | ● pink | ● black | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 456052 | 6 ml | ● pink | ● black | non-ridged | 13 x 100 | paper | no | 50 / 1,200 |



MiniCollect® offers a gentle way to collect small blood samples for a wide range of analyses. The system is perfectly suited for young children, geriatric patients as well as patients with fragile veins. It is also recommended in situations where venous blood collection proves particularly difficult.

MINICOLLECT®**BLOOD COLLECTION TUBES**

| | |
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| / MiniCollect® Coagulation Tubes | 80 |
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THE IDEAL SYSTEM

for collecting, transporting & processing capillary blood

integrated scoop (ready-to-use-device)

wide opening of the tube ensures an efficient blood flow

combined filling volumes for the EDTA and serum tubes

transport-safe and piercable cap

overlapping cap rim for easier opening

already irreversibly assembled with the carrier tube





Easy and hygienic sample collection with MiniCollect®.

A GENTLE WAY TO COLLECT SMALL BLOOD SAMPLES

MiniCollect® offers a gentle way to collect small blood samples for a wide range of analyses. The system is perfectly suited for young children, geriatric patients as well as patients with fragile veins.

MiniCollect® is also recommended in situations where venous blood collection proves particularly difficult or contraindicated. For delicate vein con-

ditions, patients who have to take blood samples very often or people with severe burns, capillary blood collection with the MiniCollect® system offers a great alternative to venous blood collection.

The MiniCollect® tube includes an integrated scoop, allowing droplets of blood to be collected easily and hygienically. The additional use of a capillary or funnel is not necessary anymore.

MAXIMUM TUBE OPENING FOR MINIMUM ADHESION.

- / wide opening of the tube ensures an efficient blood flow
- / increased diameter facilitates the mixing of the sample
- / minimizes adhesion to the wall of the tube



MINICOLLECT® WITH CARRIER TUBE

for your automatized laboratory process

MINIMAL BLOOD VOLUME YET MAXIMUM SPECTRUM OF ANALYSIS

The capillary blood sample is becoming increasingly popular as specimen material due to its simpler and less invasive sampling procedure. One of the advantages is the low blood volumes.

Small quantities are sufficient to enable a variety of parameters to be tested. Capillary blood collec-

tion supports the Patient Blood Management approach: As little blood as possible, as much as necessary. If for some reason venous blood collection is not possible, capillary blood collection could be a promising alternative. For children and patients who require frequent sampling it is essential that the volume of blood collected is minimized.





TWO VOLUMES ONE TUBE

Combined filling volumes simplify the sample processing.

Combined filling volumes for the EDTA and serum tubes simplify sample processing and reduce logistic demands. To ensure a correct mixing ratio for the capillary blood sample with the additive, the tubes just need to be filled to between the fill marks.



Transparent labels and colour-coded caps.

The various coloured caps reflect the international colour codes according to ISO 6710. The coloured label text ensures that the type of tube can be identified even when the cap is removed. The transparent label allows a visual inspection of the sample material.



Transport-safe caps.

The caps are virtually leakproof and can be transported via pneumatic post without loss of sample material. MiniCollect® tubes are leakproof according to ISO 6710 Annex C.



Ready to use device.

Due to the integrated scoop, no additional capillary or funnel is needed for sample collection. This increases efficiency compared to conventional capillary blood collection systems. Inventory management and planning can be completed easily and efficiently as no additional accessories are required.



/ You can find more information about this product in our web-shop.



MINICOLLECT® COAGULATION TUBES

MiniCollect® Coagulation Tubes with sodium citrate are used for determinations in coagulation tests.

Coagulation Tubes from Greiner

Bio-One are available in one version with sodium citrate 3.2%. The additive trisodium citrate contained in the tube prevents blood coagulation by binding Ca-ions.



9NC Coagulation Sodium Citrate 3.2 %

MiniCollect® 9NC Coagulation 3.2 % Trisodium Citrate Tubes are filled with a buffered trisodium citrate solution at a concentration of 0.109 mol/l and are used to collect venous blood samples anticoagulated with citrate for coagulation tests.

Model: MiniCollect® Tube, Nominal volume: 1 ml

| Item no. | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|--------------|-------------|---------|--------------------|
| 450539 | ● light blue | transparent | no | 500 / 2,000 |
| 480539 | ● light blue | paper | yes | 500 / 2,000 |



/ You can find more information about this product in our web-shop.



MINICOLLECT® **SERUM TUBES**

MiniCollect® Serum Tubes are used for determinations in clinical chemistry from serum.

Serum tubes from Greiner Bio-One are available in two versions: CAT Serum (without separating gel) and CAT Serum Sep

(with separating gel).

The inner wall of each serum tube is coated with microscopic silica particles (clot activator main component SiO_2) which activate clotting when the tubes are carefully inverted.



CAT Serum Clot Activator

MiniCollect® CAT Serum Clot Activator tubes are available with 0.5 to 1 ml fill volume. The serum tubes are available as standard MiniCollect® tubes or as MiniCollect® Complete tubes in pre-assembled carrier tubes.

Volume range: 0.5 - 1 ml

| Item no. | Model | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|------------|-------------|---------|--------------------|
| 450534 | MiniCollect® Tube | ● red | transparent | no | 500 / 2,000 |
| 450549 | MiniCollect® Complete | ● red | transparent | no | 500 / 2,000 |
| 450569 | MiniCollect® Complete | ● red | paper | no | 500 / 2,000 |
| 480548 | MiniCollect® Complete | ● red | paper | yes | 500 / 2,000 |



CAT Serum Separator Clot Activator

MiniCollect® CAT Serum Separator Clot Activator Tubes are available with 0.5 to 0.8 ml fill volume and contain an additional separating gel. The serum tubes are available as standard MiniCollect® tubes or as MiniCollect® Complete tubes in pre-assembled carrier tubes.

Volume range: 0.5 - 0.8 ml

| Item no. | Model | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|------------|-------------|---------|--------------------|
| 450533 | MiniCollect® Tube | ● gold | transparent | no | 500 / 2,000 |
| 450548 | MiniCollect® Complete | ● gold | transparent | no | 500 / 2,000 |
| 450568 | MiniCollect® Complete | ● gold | paper | no | 500 / 2,000 |



/ You can find more information about this product in our web-shop.



MINICOLLECT® HEPARIN TUBES

MiniCollect® Heparin Tubes are used for determinations in clinical chemistry from plasma.

Greiner Bio-One lithium heparin tubes are available in two versions: Lithium Heparin (without

separating gel), Lithium Heparin Sep (with separating gel).

The additive heparin contained in the tube accelerates the action of ATIII, which neutralizes thrombin and thus prevents the formation of fibrin from fibrinogen.



LH Lithium Heparin

MiniCollect® LH Lithium Heparin tubes are coated with lithium heparin on the inside. The anticoagulant heparin activates antithrombin, thus blocking the coagulation cascade and producing a whole blood/plasma sample. This is ideal for rapid analyses and blood analyses of patients on anticoagulant therapy.

| Item no. | Model | Nominal volume | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|----------------|------------|-------------|---------|--------------------|
| 450536 | MiniCollect® Tube | 0.5 ml | ● green | transparent | no | 500 / 2,000 |
| 450537 | MiniCollect® Tube | 1 ml | ● green | transparent | no | 500 / 2,000 |
| 480550 | MiniCollect® Complete | 0.5 ml | ● green | paper | yes | 500 / 2,000 |
| 450551 | MiniCollect® Complete | 1 ml | ● green | transparent | no | 500 / 2,000 |



LH Lithium Heparin Separator

MiniCollect® LH Lithium Heparin Separator Tubes also contain a separating gel. During centrifugation, the separating gel migrates upwards and acts as a barrier between the cells and the plasma.

Nominal volume: 0.8 ml

| Item no. | Model | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|---------------|-------------|---------|--------------------|
| 450535 | MiniCollect® Tube | ● light green | transparent | no | 500 / 2,000 |
| 450550 | MiniCollect® Complete | ● light green | transparent | no | 500 / 2,000 |
| 450560 | MiniCollect® Complete | ● light green | paper | no | 500 / 2,000 |



/ You can find more information about this product in our web-shop.



MINICOLLECT® EDTA TUBES

MiniCollect® EDTA Tubes are used for the determination of the following haematological parameters: WBC, RBC, HGB, HCT, MCV, MCH, MCHC, platelets, RDW, lymphocytes, neutrophils, monocytes, eosinophils and basophils.

EDTA Tubes from Greiner Bio-One are available in two versions: K3EDTA and K2EDTA.

The additive potassium EDTA (ethylenediaminetetraacetic acid) contained in the tube interferes with calcium and thus blockades the coagulation cascade.

**K2E K2EDTA**

MiniCollect® K2E K2EDTA tubes contain di-potassium K2EDTA and are available with 0.25 to 0.5 ml fill volume. K2EDTA tubes are available as standard MiniCollect® tubes or as MiniCollect® Complete tubes in pre-assembled carrier tubes.

Volume range: 0.25 - 0.5 ml

| Item no. | Model | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|------------|-------------|---------|--------------------|
| 450532 | MiniCollect® Tube | ● lavender | transparent | no | 500 / 2,000 |
| 450547 | MiniCollect® Complete | ● lavender | transparent | no | 500 / 2,000 |

**K3E K3EDTA**

MiniCollect® K3E K3EDTA tubes contain tri-potassium K3EDTA and are available in 0.25 to 0.5 ml and 1 ml volumes. K3EDTA tubes are available as standard MiniCollect® tubes or as MiniCollect® Complete tubes in pre-assembled carrier tubes.

| Item no. | Model | Nominal volume | Volume range | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|----------------|---------------|------------|-------------|---------|--------------------|
| 450530 | MiniCollect® Tube | | 0.25 - 0.5 ml | ● lavender | transparent | no | 500 / 2,000 |
| 450531 | MiniCollect® Tube | 1 ml | | ● lavender | transparent | no | 500 / 2,000 |
| 450545 | MiniCollect® Complete | | 0.25 - 0.5 ml | ● lavender | transparent | no | 500 / 2,000 |
| 480546 | MiniCollect® Complete | | 0.25 - 0.5 ml | ● lavender | paper | yes | 500 / 2,000 |
| 450546 | MiniCollect® Complete | 1 ml | | ● lavender | transparent | no | 500 / 2,000 |
| 450566 | MiniCollect® Complete | 1 ml | | ● lavender | paper | no | 500 / 2,000 |



/ You can find more information about this product in our web-shop.



MINICOLLECT® GLUCOSE TUBES

MiniCollect® Glucose Tubes are used to determine glucose and lactate.

Glucose tubes from Greiner Bio-One contain the additive

sodium fluoride/potassium oxalate.

The spray-dried additive in the MiniCollect® Glucose Tubes ensures easy mixing of blood and additive.



FX Sodium Fluoride / Potassium Oxalate

These MiniCollect® tubes are available with 0.25 ml and 0.5 ml filling volume. The glucose tubes are available as standard MiniCollect® tubes or as MiniCollect® Complete tubes in pre-assembled carrier tubes. The Complete version is only available with 0.25 ml filling volume.

| Item no. | Model | Nominal volume | Cap colour | Label | Barcode | Qty. inner / outer |
|----------|-----------------------|----------------|------------|-------------|---------|--------------------|
| 450540 | MiniCollect® Tube | 0.25 ml | ● grey | transparent | no | 500 / 2,000 |
| 450541 | MiniCollect® Tube | 0.5 ml | ● grey | transparent | no | 500 / 2,000 |
| 450552 | MiniCollect® Complete | 0.25 ml | ● grey | transparent | no | 500 / 2,000 |
| 450562 | MiniCollect® Complete | 0.25 ml | ● grey | paper | no | 500 / 2,000 |
| 480549 | MiniCollect® Complete | 0.25 ml | ● grey | paper | yes | 500 / 2,000 |



One of the most effective ways to protect yourself against needlestick injuries is to use safety products in your daily work. We offer a wide range of safety products so that the most suitable products can be selected for each market and customer.

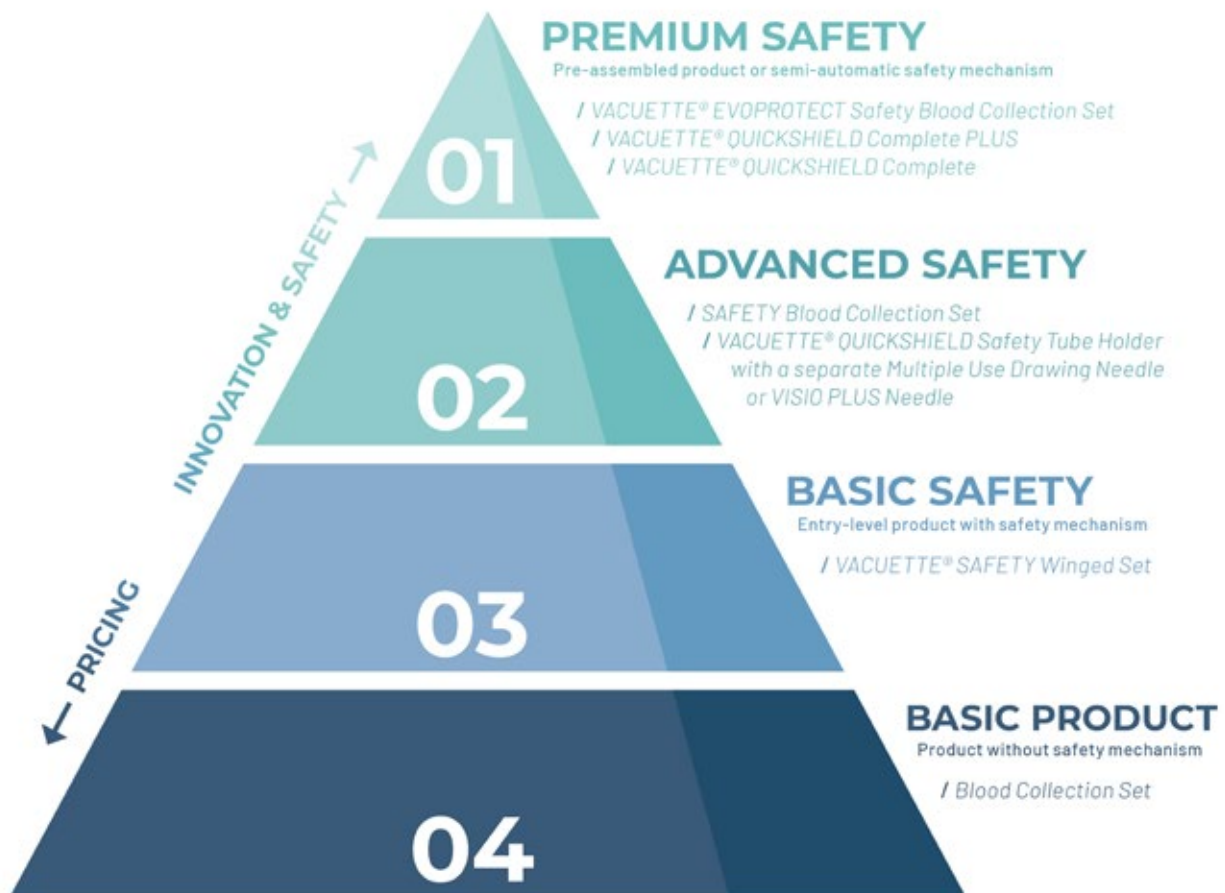
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AN END TO NEEDLESTICK INJURIES

A large number of all occupationally acquired infectious diseases in the health sector are due to needlestick injuries. Needlestick injuries pose by far the highest risk of infection. More than 50 % of all registered cases affect nursing staff, followed by doctors and laboratory staff.

However, this should not lead to the conclusion that needlestick injuries are an unavoidable occupational hazard. By using VACUETTE® safety products, this risk can be virtually eliminated. Furthermore, with VACUETTE® safety products you are working in compliance with EU directives (EU 2010/32).





In our range you will find the right product for every safety level and your individual needs.

From products without a safety mechanism to premium safety products, we offer you the product for your individual needs. On the following pages you will get an overview of our products to protect yourself in the best possible way against needlestick injuries.



Standard venipuncture.

For daily blood collection, or normal vein conditions, we recommend the use of our VACUETTE® QUICKSHIELD Complete PLUS.

VACUETTE® QUICKSHIELD Complete PLUS



Difficult vein conditions.

All our safety blood collection sets are also suitable for patients with difficult venous conditions.

VACUETTE® EVOPROTECT or SAFETY Blood Collection Set or VACUETTE® SAFETY Winged Set (21G oder 23G)



Blood cultures.

For the collection of blood cultures we can recommend our SAFETY Blood Collection Set with pre-assembled blood culture holder.

SAFETY Blood Collection Set with Blood Culture Holder (21G or 23G)

THREE TYPES OF LANCETS

for both young and
elderly patients

available with
needle or blade

ergonomic
design
for easy
handling

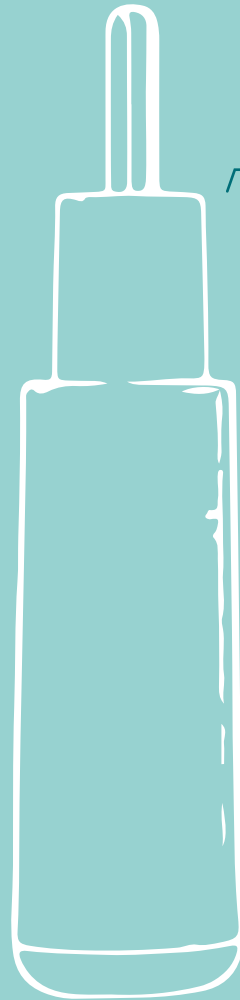
button
activated
safety lancet



contact
activated
safety lancet

available with
needle or blade

ergonomic
design
for
easy handling





The blade/needle is automatically retracted after the puncture and is safely enclosed within the plastic housing.

WIDE RANGE OF SAFETY LANCETS

The MiniCollect® lancets are available with a wide range of puncture depths and blade sizes / needle gauges to ensure that the puncture wound can be kept as small as possible.

The safety mechanism ensures that the blade/needle is automatically retracted after the puncture and is safely enclosed within the plastic hous-

ing. In particular when dealing with our youngest patients it is imperative that the procedure be as gentle as possible to avoid causing unnecessary anxiety.

The safety mechanism means that the blade/needle is hidden from view, allowing the blood collection to take place in a more relaxed atmosphere for all concerned.



The safety lancets are available with a variety of puncture depths and blade sizes/needle strengths to keep the puncture wound as small as possible.



/ You can also find out more about our safety products in our Shop.



VACUETTE® QUICKSHIELD

The safety tube holders of the QUICKSHIELD product family are provided with a mechanism that safely keeps the needle in place after activation and thus protects against needlestick injuries.

The VACUETTE® QUICKSHIELD Safety Tube Holder from Greiner Bio-One can optionally be used with VACUETTE® Multiple Use Drawing Needles or with VACUETTE® VISIO PLUS Needles. With our VACUETTE® QUICKSHIELD and VACUETTE® QUICKSHIELD Complete PLUS, the needles are already pre-as-

sembled. The protective shield is attached directly to the holder. By activating the protective shield with one hand and with the help of a stable support surface or the finger or thumb, the product is convincing due to its simple handling with far-reaching protection against needlestick injuries and infection.

Without changing the collection technique, the VACUETTE® QUICKSHIELD Safety Tube Holder offers protection against needlestick injuries. The ergonomic design of the holder offers the fingers a better grip during puncture.

- / No change in the blood collection technique
- / More flexibility in terms of user and patient specific requirements due to the rotating protective shield
- / Activation of the protective shield can be felt as well as heard by an audible "click"



VACUETTE® QUICKSHIELD
Safety Tube Holder

The Safety Tube Holder with rotating safety shield is suitable for routine blood collection due to its particularly easy handling. The tube holder can be used with either VACUETTE® Multiple Use Drawing Needles or VACUETTE® VISIO PLUS Needles.

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450230 | 50 / 1,000 |



VACUETTE® QUICKSHIELD
Complete

VACUETTE® QUICKSHIELD Complete is available as a combination product with a pre-assembled multiple use drawing needle. The individually packaged product is ready for immediate use without any further manual assembly steps.

| Item no. | Colour code | Needle size | Needle length | Needle length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|--------------------|
| 450238V1 | ● green | 21 G | 1" | 25 mm | 30 / 360 |
| 450237V1 | ● green | 21 G | 1.5" | 38 mm | 30 / 360 |



VACUETTE® QUICKSHIELD

Complete PLUS

VACUETTE® QUICKSHIELD Complete PLUS is available as a combination product with a pre-assembled VISIO PLUS Needle. The transparent viewing window enables visual puncture control. The product is ready for immediate use without any further processing steps.

| Item no. | Colour code | Needle size | Needle length | Needle length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|--------------------|
| 450235V1 | ● green | 21 G | 1 " | 25 mm | 30 / 360 |
| 450239V1 | ● green | 21 G | 1.5 " | 38 mm | 30 / 360 |
| 450226V1 | ● black | 22 G | 1 " | 25 mm | 30 / 360 |
| 450228V1 | ● black | 22 G | 1.5 " | 38 mm | 30 / 360 |



/ You can also find out more about our safety products in our Shop.



VACUETTE® EVOPROTECT

EVOPROTECT is the next evolution of safety in blood collection.

The semi-automatic spring mechanism protects the user from the risk of needlestick injuries and makes the daily task of blood collection easier. Because we believe that every needlestick is one too many.

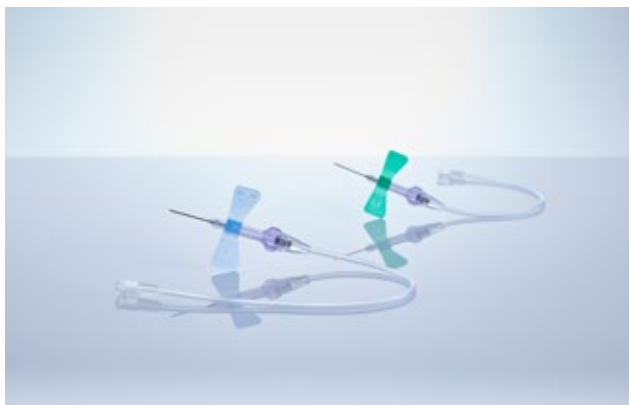
The VACUETTE® EVOPROTECT is ergonomically designed and intuitive to use. It consists of a winged needle with a safety mechanism, which is suitable for one-handed use due to its special design. By activating the safety mechanism when

the needle is still in the vein, needlestick injuries are largely eliminated.

A clearly audible click confirms that the safety mechanism is successfully activated. The needle is then automatically retracted and, at the same time, safely and irreversibly enclosed in the safety shield.

The extra-thin walls of the 21G and 23G needles have a positive effect on flow rate and thus the duration of blood collection/infusion. The product may be used for blood collection followed by a short term infusion for up to 4 hours.

- / The material and surface design of the wings provide a simple, safe grip and optimal hold during the puncture
- / A viewing window between the needle and the tube shows whether the venipuncture was successful
- / The tubing is particularly flexible

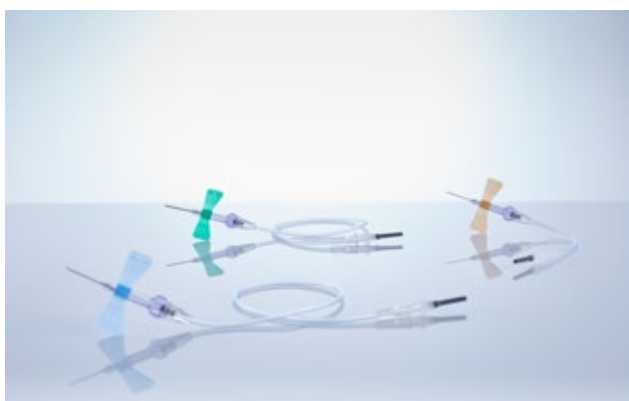


VACUETTE® EVOPROTECT

SAFETY Blood Collection/Infusion Set

This version of the VACUETTE® EVOPROTECT Safety Blood Collection Set is specifically designed for infusion, but may also be used for blood collection. The extra thin wall thicknesses and thus increased flow rates of the 21G and 23G cannulas enable rapid infusion.

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450120 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 60 / 1,080 |
| 450121 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 60 / 1,080 |



VACUETTE® EVOPROTECT

SAFETY Blood Collection Set + Luer Adapter

VACUETTE® EVOPROTECT is ergonomically designed and intuitive to use. The Luer connection allows the safety product to be used with a holder such as our standard holder or blood culture holder.

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450127 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 60 / 1,080 |
| 450128 | ● green | 21 G | 19 mm | 12 " | 30 cm | 60 / 1,080 |
| 450129 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 60 / 1,080 |
| 450130 | ● blue | 23 G | 19 mm | 12 " | 30 cm | 60 / 1,080 |
| 450132 | ● orange | 25 G | 19 mm | 12 " | 30 cm | 60 / 1,080 |



VACUETTE® EVOPROTECT
SAFETY Blood Collection Set + Holder

VACUETTE® EVOPROTECT is ergonomically designed and intuitive to use. The safety product is also available with a pre-assembled tube holder, so that you can take the blood sample without any additional previous handling.

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450122 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 30 / 540 |
| 450123 | ● green | 21 G | 19 mm | 12 " | 30 cm | 30 / 540 |
| 450125 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 30 / 540 |
| 450126 | ● blue | 23 G | 19 mm | 12 " | 30 cm | 30 / 540 |



- / You can find more information about this product in our web-shop.



SAFETY BLOOD COLLECTION SET

The SAFETY Blood Collection Set was developed especially for patients with difficult vein conditions, but is also suitable for any other blood collection situation, as it offers the patient a particularly gentle collection comfort.

The device offers a high level of safety as the protective mechanism is activated while the needle is still inside the vein. The correct activation by the user is indicated by a clearly audible click. The safety blood collection set thus provides the best pos-

sible protection against needlestick injuries. The visual control of the puncture through a transparent viewing window also increases the puncture safety. The product can be used for blood collection or for infusions for up to five hours.

The SAFETY Blood Collection Set is a sterile single-use winged needle set connected to a flexible tube, with or without a Luer adapter or Luer adapter with holder. The product is ergonomically and individually packed, making it easy to open and causing little waste.

- / A viewing window between the needle and the tube shows whether the venipuncture was successful
- / Tube with different lengths offers more flexibility in blood collection
- / Simple activation of the safety mechanism



SAFETY Blood Collection/Infusion Set

This version of the product can be used for blood collection by assembling it with, for example, a HOLDEX® or VACUETTE® SAFELINK, or for short-term infusion for up to 5 hours instead.

Safety mechanism: manual activation

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450091V1 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 90 / 1.080 |
| 450191V1 | ● green | 21 G | 19 mm | 12 " | 30 cm | 90 / 1.080 |
| 450092V1 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 90 / 1.080 |
| 450090V1 | ● orange | 25 G | 19 mm | 7.5 " | 19 cm | 90 / 1.080 |



SAFETY Blood Collection Set + Luer Adapter

This version of the SBC set has a Luer adapter and can be used with a holder such as our standard tube holder or blood culture holder.

Safety mechanism: manual activation

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450083V1 | ● green | 21 G | 19 mm | 4 " | 10 cm | 90 / 1.080 |
| 450081V1 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 90 / 1.080 |
| 450095V1 | ● green | 21 G | 19 mm | 12 " | 30 cm | 90 / 1.080 |
| 450084V1 | ● blue | 23 G | 19 mm | 4 " | 10 cm | 90 / 1.080 |
| 450082V1 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 90 / 1.080 |
| 450096V1 | ● blue | 23 G | 19 mm | 12 " | 30 cm | 90 / 1.080 |
| 450099V1 | ● orange | 25 G | 19 mm | 12 " | 30 cm | 90 / 1.080 |



SAFETY Blood Collection Set + Holder

This version of the SBC set is manufactured with a pre-assembled tube holder and therefore allows an immediate start of the blood collection without assembling with further components.

Safety mechanism: manual activation

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450087V1 | ● green | 21 G | 19 mm | 4" | 10 cm | 35 / 420 |
| 450085V1 | ● green | 21 G | 19 mm | 7.5" | 19 cm | 35 / 420 |
| 450160V1 | ● green | 21 G | 19 mm | 12" | 30 cm | 35 / 420 |
| 450088V1 | ● blue | 23 G | 19 mm | 4" | 10 cm | 35 / 420 |
| 450086V1 | ● blue | 23 G | 19 mm | 7.5" | 19 cm | 35 / 420 |
| 450161V1 | ● blue | 23 G | 19 mm | 12" | 30 cm | 35 / 420 |



SAFETY Blood Collection Set + Blood Culture Holder

This version of the SBC set is manufactured with a pre-assembled blood culture holder. The product is suitable for blood collection with common blood culture bottles and subsequently with VACUETTE® Blood Collection Tubes if required.

Safety mechanism: manual activation

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450182 | ● green | 21 G | 19 mm | 7.5" | 19 cm | 24 / 240 |
| 450184 | ● green | 21 G | 19 mm | 12" | 30 cm | 24 / 240 |
| 450183 | ● blue | 23 G | 19 mm | 7.5" | 19 cm | 24 / 240 |
| 450185 | ● blue | 23 G | 19 mm | 12" | 30 cm | 24 / 240 |



/ You can find more information about this product in our web-shop.



MINICOLLECT® SAFETY LANCETS

Gentle and careful for young & elderly patients

The pressure activated MiniCollect® Safety Lancets as well as the contact activated MiniCollect® Lancelino Safety Lancets offer a wide range of different puncture depths and thicknesses of blades / needles to keep the puncture wound as small as possible. Due to the safety mechanism, the blade or needle is automatically retracted after each puncture and safely enclosed in the plas-

tic housing.

MiniCollect® PIXIE is a safety lancet especially for heel incision. First, the safety tab is pressed down to release the locking mechanism. This is followed by positioning the device on the patient's heel and triggering the incision by pressing the release button on the side. MiniCollect® PIXIE also has a safety mechanism and is available in three different strengths for the different developmental stages of the infant.

- / Safe and hygienic capillary blood collection
- / More precision for easy sample collection
- / Application for glucose tests



MiniCollect®

Lancelino Safety Lancets with Blade

The MiniCollect® Lancelino Safety Lancet with blade is activated simply by pressing the puncture site. Due to the round contact surface a precise placement is possible. The product with blade is ideal for the collection of larger blood volumes.

Safety mechanism: automatic activation

| Item no. | Colour code | Blade size | Penetration depth | Qty. inner / outer |
|----------|-------------|------------|-------------------|--------------------|
| 450524 | ● yellow | 0.8 mm | 2 mm | 200 / 2,000 |



MiniCollect®

Lancelino Safety Lancets with Needle

The MiniCollect® Lancelino Safety Lancet with needle is activated simply by pressing the puncture site. Due to the round contact surface a precise placement is possible. The product with needle is perfectly suited for the collection of smaller capillary blood volumes.

Safety mechanism: automatic activation

| Item no. | Colour code | Needle size | Penetration depth | Qty. inner / outer |
|----------|-------------|-------------|-------------------|--------------------|
| 450521 | ● lavender | 25 G | 1.5 mm | 200 / 2,000 |
| 450522 | ● blue | 21 G | 1.8 mm | 200 / 2,000 |
| 450523 | ● green | 21 G | 2.4 mm | 200 / 2,000 |



MiniCollect® Safety Lancets with Blade

MiniCollect® Safety Lancets enable safe and hygienic capillary blood collection. The blade only releases when the release button is pressed. The product with blade is suitable for the collection of small to large capillary blood volumes.

Safety mechanism: automatic activation

| Item no. | Colour code | Blade size | Penetration depth | Qty. inner / outer |
|----------|-------------|------------|-------------------|--------------------|
| 450427 | ● pink | 1.5 mm | 1 mm | 200 / 2,000 |
| 450428 | ● green | 1.5 mm | 1.5 mm | 200 / 2,000 |
| 450429 | ● blue | 1.5 mm | 2 mm | 200 / 2,000 |

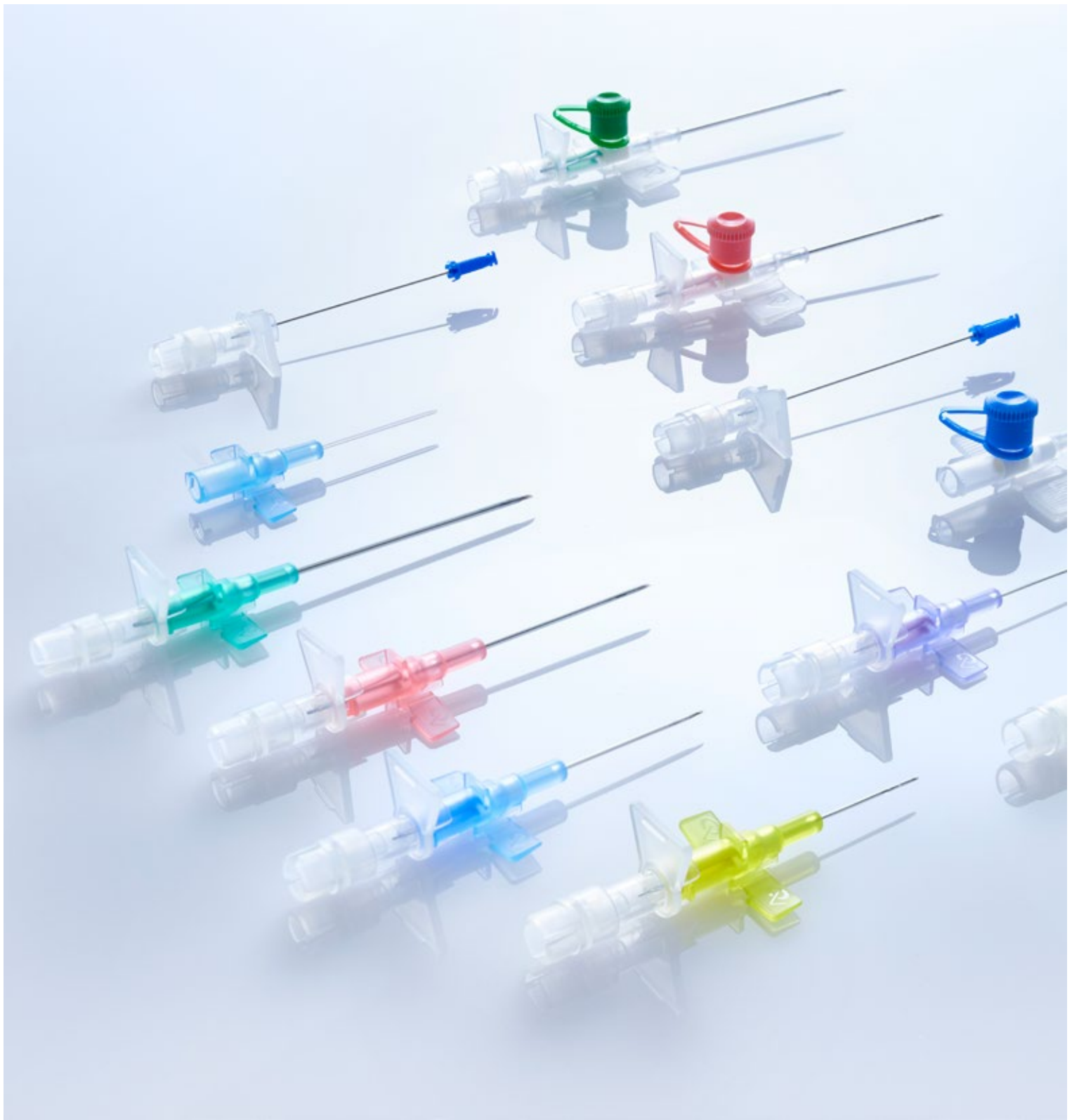


MiniCollect® Safety Lancets with Needle

MiniCollect® Safety Lancets enable safe and hygienic capillary blood collection. The needle only releases when the release button is pressed. The product with needle is best suited for the collection of single blood drops.

Safety mechanism: automatic activation

| Item no. | Colour code | Needle size | Penetration depth | Qty. inner / outer |
|----------|-------------|-------------|-------------------|--------------------|
| 450438 | ● lavender | 28 G | 1.25 mm | 200 / 2,000 |
| 450439 | ● orange | 23 G | 2.25 mm | 200 / 2,000 |



Our IV catheters have excellent insertion properties and are user-friendly, safe, sharp and with a consistent quality, so you can focus less on worrying about needlestick injuries and more on giving the best care to your patients.

IV CATHETERS

| | | |
|---|--|-----|
| / | CLiP® Automatic Safety IV Catheter | 110 |
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/ You can also find out more about our safety catheters at www.stick-to-safety.com.



CLiP® AUTOMATIC SAFETY IV CATHETER

CLiP Automatic Safety IV Catheter enables a safe and successful insertion.

Our IV catheters are designed with the healthcare professional's safety and working environment in mind. Our focus is to provide products that are user-friendly, safe, sharp and with a consistent quality. CLiP® safety IV catheters are

available in many variations to meet demanding physical conditions and different clinical needs. CLiP® Neo is ideal for the smallest patients - newborns and infants - or elderly people. It was developed especially for small and fragile veins. CLiP® Winged and CLiP® Ported are available in seven Gauge sizes, two different material and many different lengths.

- / Automatic safety
- / Excellent insertion properties
- / Comprehensive product portfolio
- / Small environmental footprint



CLiP® Neo Safety IV Catheter

CLiP® Neo is an automatic safety IV catheter designed for small and fragile veins found in the neonatal, paediatric or elderly patient groups. The product is available in 24 and 26 Gauges to cater for demanding physical conditions. The optimized needle notch provides instant blood response.



| Item no. | Catheter material | Needle size | Catheter dimension | Colour code | Catheter flowrate | Qty. inner / outer |
|----------|-------------------|-------------|--------------------|-------------|-------------------|--------------------|
| NW241901 | FEP | 24 G | 0.7 x 19 | ● yellow | 22 | 500 / 1,000 |
| NW261901 | FEP | 26 G | 0.6 x 19 | ● violet | 15 | 500 / 1,000 |



CLiP® Winged Safety IV Catheter

CLiP® Winged is an automatic safety IV catheter available in a comprehensive range (14-24 Gauge). All products are available in two materials. CLiP® Winged is suitable for high pressure injections (up to 305 psi) and has wing holder to enable multiple gripping alternatives.

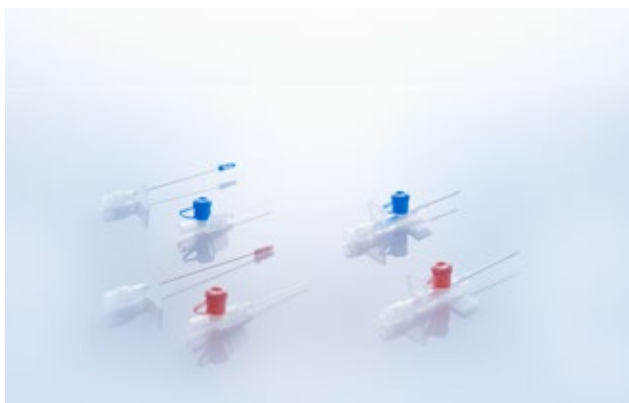


| Item no. | Catheter material | Needle size | Catheter dimension | Colour code | Catheter flowrate | Qty. inner / outer |
|----------|-------------------|-------------|--------------------|-------------|-------------------|--------------------|
| VW144511 | PUR | 14 G | 2.0 x 45 | ● orange | 290 | 500 / 1,000 |
| VW164511 | PUR | 16 G | 1.7 x 45 | ● grey | 200 | 500 / 1,000 |
| VW174511 | PUR | 17 G | 1.5 x 45 | ○ white | 140 | 500 / 1,000 |
| VW183211 | PUR | 18 G | 1.2 x 32 | ● green | 110 | 500 / 1,000 |
| VW184511 | PUR | 18 G | 1.2 x 45 | ● green | 100 | 500 / 1,000 |
| VW203211 | PUR | 20 G | 1.0 x 32 | ● pink | 64 | 500 / 1,000 |
| VW222511 | PUR | 22 G | 0.8 x 25 | ● blue | 38 | 500 / 1,000 |
| VW241911 | PUR | 24 G | 0.7 x 19 | ● yellow | 22 | 500 / 1,000 |
| VW144501 | FEP | 14 G | 2.0 x 45 | ● orange | 290 | 500 / 1,000 |

IV catheters

CLiP® Automatic Safety IV Catheter

| Item no. | Catheter material | Needle size | Catheter dimension | Colour code | Catheter flowrate | Qty. inner / outer |
|----------|-------------------|-------------|--------------------|-------------|-------------------|--------------------|
| VW164501 | FEP | 16 G | 1.7 x 45 | ● grey | 200 | 500 / 1,000 |
| VW174501 | FEP | 17 G | 1.5 x 45 | ○ white | 140 | 500 / 1,000 |
| VW183201 | FEP | 18 G | 1.2 x 32 | ● green | 110 | 500 / 1,000 |
| VW184501 | FEP | 18 G | 1.2 x 45 | ● green | 100 | 500 / 1,000 |
| VW203201 | FEP | 20 G | 1.0 x 32 | ● pink | 64 | 500 / 1,000 |
| VW222501 | FEP | 22 G | 0.8 x 25 | ● blue | 38 | 500 / 1,000 |

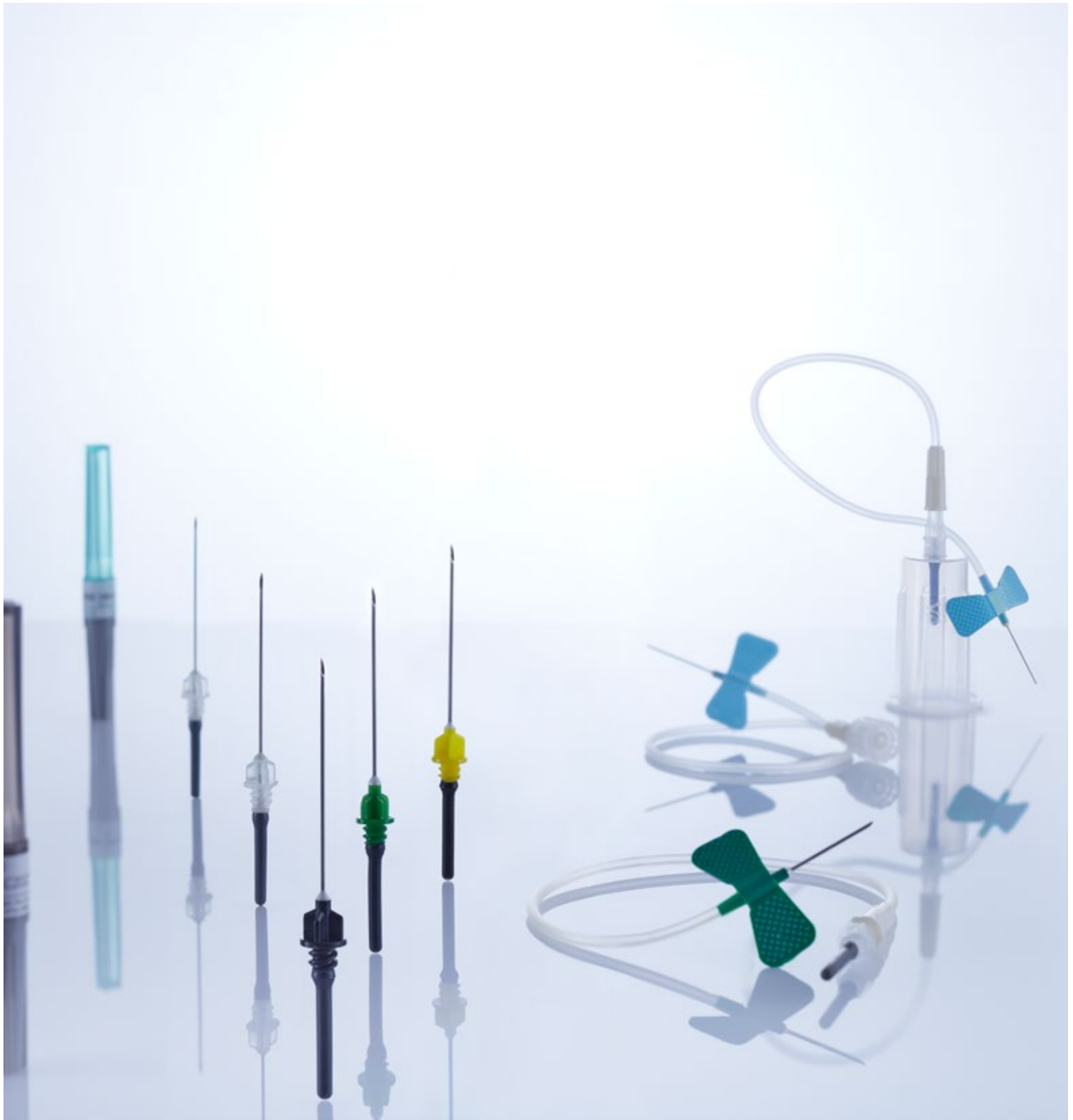


CLiP® Ported Automatic Safety IV Catheter

CLiP® Ported is an automatic safety IV catheter with injection port. The product is available in a comprehensive range to meet demanding physical conditions and different clinical needs.



| Item no. | Catheter material | Needle size | Catheter dimension | Colour code | Catheter flowrate | Qty. inner / outer |
|----------|-------------------|-------------|--------------------|-------------|-------------------|--------------------|
| VP144511 | PUR | 14 G | 2.0 x 45 | ● orange | 290 | 500 / 1,000 |
| VP164511 | PUR | 16 G | 1.7 x 45 | ● grey | 200 | 500 / 1,000 |
| VP174511 | PUR | 17 G | 1.5 x 45 | ○ white | 140 | 500 / 1,000 |
| VP183211 | PUR | 18 G | 1.2 x 32 | ● green | 110 | 500 / 1,000 |
| VP184511 | PUR | 18 G | 1.2 x 45 | ● green | 100 | 500 / 1,000 |
| VP203211 | PUR | 20 G | 1.0 x 32 | ● pink | 64 | 500 / 1,000 |
| VP222511 | PUR | 22 G | 0.8 x 25 | ● blue | 38 | 500 / 1,000 |
| VP241911 | PUR | 24 G | 0.7 x 19 | ● yellow | 22 | 500 / 1,000 |
| VP144501 | FEP | 14 G | 2.0 x 45 | ● orange | 290 | 500 / 1,000 |
| VP164501 | FEP | 16 G | 1.7 x 45 | ● grey | 200 | 500 / 1,000 |
| VP174501 | FEP | 17 G | 1.5 x 45 | ○ white | 140 | 500 / 1,000 |
| VP183201 | FEP | 18 G | 1.2 x 32 | ● green | 110 | 500 / 1,000 |
| VP184501 | FEP | 18 G | 1.2 x 45 | ● green | 100 | 500 / 1,000 |
| VP202501 | FEP | 20 G | 1.0 x 25 | ● pink | 68 | 500 / 1,000 |
| VP203201 | FEP | 20 G | 1.0 x 32 | ● pink | 64 | 500 / 1,000 |
| VP222501 | FEP | 22 G | 0.8 x 25 | ● blue | 38 | 500 / 1,000 |
| VP241901 | FEP | 24 G | 0.7 x 19 | ● yellow | 22 | 500 / 1,000 |



Greiner Bio-One offers a variety of blood collection needles and blood collection sets for your individual needs. The products are mainly used for routine blood collection and are intended for single use only.

SHARPS

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| Blood Collection Set + Luer Adapter | 119 |
| Blood Collection Set + Holder | 120 |



- / We also offer blood collection needles for veterinary use. Please refer to our Website.
- / You can find more information about this product in our web-shop.



BLOOD COLLECTION NEEDLES

At Greiner Bio-One you will find a wide range of blood collection needles for human use but also for veterinary use.

Each product offers special properties and features that support you in your daily routine work. Blood collection needles

are intended for single use only. Our range includes Multiple Use Drawing Needles and Single Sample Needles as well as VACUETTE® VISIO PLUS Needles with optical puncture control. A variety of options are available in terms of dimension and needle length.

- / Sterile
- / Colour-coded needle dimensions
- / Available in different lengths
- / VISIO PLUS Needle with optical puncture control



VACUETTE®
VISIO PLUS Needles

This needle is equipped with a transparent plastic part in the middle, which serves as a viewing window. If the venipuncture is successful, this plastic part turns red due to the onset of blood flow.






| Item no. | Colour code | Needle size | Needle length | Needle length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|--------------------|
| 450042 | ● green | 21 G | 1" | 25 mm | 2,000 / 6,000 |
| 450043 | ● black | 22 G | 1" | 25 mm | 2,000 / 6,000 |
| 450040 | ● green | 21 G | 1.5" | 38 mm | 2,000 / 6,000 |
| 450041 | ● black | 22 G | 1.5" | 38 mm | 2,000 / 6,000 |



VACUETTE®
Multiple Use Drawing Needles

Blood Collection Needles are predominantly used in routine blood collection and are exclusively single-use. The colour of the needle protective cap simplifies visual recognition of the individual needle gauges.






| Item no. | Colour code | Needle size | Needle length | Needle length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|--------------------|
| 450071 | ● black | 22 G | 1" | 25 mm | 2,000 / 6,000 |
| 450072 | ● green | 21 G | 1" | 25 mm | 2,000 / 6,000 |
| 450073 | ● yellow | 20 G | 1" | 25 mm | 2,000 / 6,000 |
| 450075 | ● black | 22 G | 1.5" | 38 mm | 2,000 / 6,000 |
| 450076 | ● green | 21 G | 1.5" | 38 mm | 2,000 / 6,000 |
| 450077 | ● yellow | 20 G | 1.5" | 38 mm | 2,000 / 6,000 |



/ You can find more information about this product in our web-shop.



BLOOD COLLECTION SETS

Blood collection sets, also known as winged needles or butterfly, are a popular product for blood collection and are available in various types.

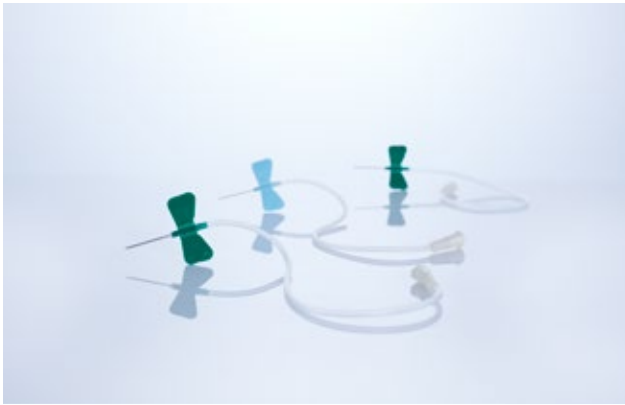
These products are primarily for use on patients with difficult vein conditions. Blood Collection Sets are available with dif-

ferent tubing lengths and needle gauges.

The sets are available pre-assembled with Luer Adapter or Luer Adapter and Holder.

Blood collection sets can be used for blood collection or as an infusion set for a short-term infusion for up to 5 hours.

- / Blood Collection/Infusion Set
- / Blood Collection Set + Luer Adapter
- / Blood Collection Set + Holder



Blood Collection/Infusion Set

This product version is intended for single use and specifically for infusion. Alternatively, the blood collection/infusion set can be used for blood collection by combining it with other components.






| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450059 | ● green | 21 G | 19 mm | 4" | 10 cm | 50 / 1,000 |
| 450153 | ● green | 21 G | 19 mm | 7.5" | 19 cm | 50 / 1,000 |
| 450155 | ● blue | 23 G | 19 mm | 7.5" | 19 cm | 50 / 1,000 |



Blood Collection Set + Luer Adapter

The Blood Collection/Infusion Set is a sterile single-use winged needle connected to a flexible tube. This product version can be used with a holder such as our standard tube holder or blood culture holder.






| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450064 | ● green | 21 G | 19 mm | 4" | 10 cm | 50 / 1,000 |
| 450065 | ● green | 21 G | 19 mm | 12" | 30 cm | 50 / 1,000 |
| 450066 | ● green | 21 G | 19 mm | 7.5" | 19 cm | 50 / 1,000 |
| 450089 | ● blue | 23 G | 19 mm | 7.5" | 19 cm | 50 / 1,000 |
| 450159 | ● blue | 23 G | 19 mm | 12" | 30 cm | 50 / 1,000 |



| | | | |
|----|---------|---------------|------------------------------------|
| CE | STERILE | non-pyrogenic | NOT MADE with natural rubber latex |
|----|---------|---------------|------------------------------------|

Blood Collection Set + Holder

The Blood Collection/Infusion Set is a sterile single-use winged needle connected to a flexible tube. This version is manufactured with a pre-assembled holder, enabling an immediate start of the blood collection without assembling with further components.

| Item no. | Colour code | Needle size | Needle length | Tubing length | Tubing length | Qty. inner / outer |
|----------|-------------|-------------|---------------|---------------|---------------|--------------------|
| 450371 | ● green | 21 G | 19 mm | 7.5 " | 19 cm | 24 / 240 |
| 450373 | ● blue | 23 G | 19 mm | 7.5 " | 19 cm | 24 / 240 |



During the development of all accessories, special attention is paid to ensuring that the products absolutely meet the requirements of the end users. The product range includes various tube holders, Luer adapters, tourniquets, ID snap rings and much more.

BLOOD COLLECTION ACCESSORIES

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/ You can find more information about this product in our web-shop.



TUBE HOLDER

Simple handling and safety are of the highest importance during daily routine procedures.

In the development of tube holders, special attention is paid to ensuring that the products meet the requirements of the users. Tube holders should be used ex-

clusively with VACUETTE® Multiple Use Drawing Needles or VACUETTE® VISIO PLUS Needles, as both components are designed for optimal compatibility with one another. The use of these products with needles from other manufacturers is the responsibility of the user.

- / Standard Tube Holder
- / Speedy Quick Release Holder
- / HOLDEX® Single-Use Holders
- / SAFELINK
- / Blood Transfer Unit
- / Blood Culture Holder



Standard Tube Holder

The standard tube holder should be used in the daily blood collection routine. It should be used exclusively with VACUETTE® Multiple Use Drawing Needles or VACUETTE® VISIO PLUS Needles, as both components are designed for optimal compatibility with one another.

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450209 | 100 / 2,000 |



Speedy Quick Release Holder

The Speedy Quick Release Holder enables safe and reliable ejection of the used blood collection needle into a suitable sharps container, tested for use up 100 times. Nevertheless, Greiner Bio-One recommends single-use devices.

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450212 | 10 / 1,000 |



HOLDEX® Single-Use Holders

The HOLDEX® single-use plastic holder features an off-centre luer connector. This special design of the holder provides a flatter angle for venipuncture. The luer connector of the HOLDEX® single-use holders allows quick and easy connection with blood collection accessories with female luer connector, whilst the practical plastic needle of the Plastic Cannula HOLDEX® enables safe safe sample collection from needleless ports with rubber membrane.

| Item no. | Description | Qty. inner / outer |
|----------|---|--------------------|
| 450241 | HOLDEX® Single-Use Holder PP, single-packed, not made with natural rubber latex | 100 / 800 |
| 450263 | HOLDEX® Single-Use Holder PP, single-packed | 100 / 800 |
| 450216 | Plastic Cannula HOLDEX®, single-packed | 1 / 1,000 |



VACUETTE® SAFELINK

The innovative product allows easy and quick blood sampling when used with medical devices that have a standardized female luer lock connection. VACUETTE® SAFELINK can be combined with all standardized female luer lock connections for blood sampling.

Description: Holder with male luer lock, single-packed

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450210 | 100 / 800 |



CE

IVD

STERILE

VACUETTE® Blood Transfer Unit

The blood transfer unit (BTU) is for the safe, needle-less transfer of samples from a syringe into an evacuated blood collection tube. The female Luer connection allows for safe sample transfer from standardized syringes.

Description: PP, single-packed

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450225 | 100 / 800 |



CE

NOT MADE
with natural
rubber latex**VACUETTE® Blood Culture Holder**

The blood culture holder is a non-sterile single use device designed for filling commonly used blood culture bottles, in addition to VACUETTE® blood collection tubes.

Description: VACUETTE® Blood Culture Holder, non-sterile

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450181 | 40 / 320 |



/ You can find more information about this product in our web-shop.



LUER ADAPTER

The Luer adapter is a standardized one-size-connection system for needles or catheters, for example.

The Luer adapter is manufactured with a standardized Luer part which allows for quick and

easy assembly with the chosen component device.

Luer adapters have a male Luer and are suitable for use with products like Safety Blood Collection Sets and Luer needle devices with a female Luer-connector.

- / Easy to connect
- / Luer Adapter with male Luer
- / Compatible with, for example, SAFETY Blood Collection Sets or Luer Needles



CE

STERILE

 non-
pyrogenic

 NOT MADE
with natural
rubber latex
VACUETTE® Luer Adapter

The VACUETTE® Luer Adapter is for use in venous blood collection with attached winged needle or luer needle. The product is a single-use device and is fitted with a safety valve at one end.

| Item no. | Colour code | Needle size | Qty. inner / outer |
|----------|--------------|-------------|--------------------|
| 450070 | ● royal blue | 20 G | 2,000 / 6,000 |



/ You can find more information about this product in our web-shop.



VACUETTE® TOURNIQUETS

VACUETTE® tourniquets round off the Greiner Bio-One product range for successful blood collection.

Greiner Bio-One has a choice of latex-free single-use or reusable tourniquets. The VACUETTE® Tourniquet can be used several times and features a buckle enabling easy one-handed adjustment and release. Also available

in a version especially for children with attractive, colourful designs.

The VACUETTE® Disposable Tourniquet is for single-use only and comes perforated on a roll in a practical dispenser box.

There is also a suitable product for your smallest patients. The VACUETTE® Tourniquet is available in very special designs as a version for children.

- / Latex-free
- / Easy handling
- / Single-use and multiple-use tourniquets
- / Special designs for children's tourniquets



NOT MADE
with natural
rubber latex

VACUETTE® Tourniquets

The VACUETTE® Tourniquet is designed to help find a venipuncture site and is characterized by one-handed use with a quick release belt. This product is intended for multiple use. Also available in special designs for children.

Length: 500 mm

| Item no. | Description | Qty. inner / outer |
|----------|---------------------------|--------------------|
| 840050 | non-sterile | 1 / 100 |
| 840051 | for children, non-sterile | - / 100 |



NOT MADE
with natural
rubber latex

VACUETTE® Disposable Tourniquets

The disposable tourniquets from Greiner Bio-One are characterized by easy handling. The VACUETTE® disposable tourniquet is latex free, soft on the skin and intended for single-use only.

Description: VACUETTE® Disposable Tourniquet, synthetic rubber, non-sterile, Length: 480 mm

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 840053 | 500 / 2,500 |



/ You can find more information about this product in our web-shop.



VACUETTE® ID SNAP RINGS

VACUETTE® ID Snap Rings are a practical accessory product.

With the help of the ID Snap Rings, tubes can be individually differentiated at first glance, for

example for special analysis purposes in standard processes. The VACUETTE® ID Snap Rings fit all VACUETTE® 13mm tube caps as well as all 16mm tube caps.

- / Available in various colours
- / For easy, individual identification of 13mm and 16mm tubes



VACUETTE® ID Snap Rings

VACUETTE® ID Snap Rings are available in all five colours and fit all VACUETTE® 13 mm and 16 mm tubes. With the Snap Rings, you can easily and quickly mark tubes individually.

| Item no. | Product colour | Qty. inner / outer |
|----------|----------------|--------------------|
| 458711 | ● orange | 500 / 4,000 |
| 458712 | ● green | 500 / 4,000 |
| 458713 | ● pink | 500 / 4,000 |
| 458714 | ● light blue | 500 / 4,000 |
| 458715 | ● grey | 500 / 4,000 |



/ You can find more information about this product in our web-shop.



BLOOD COLLECTION TRAY

With the Compact Blood Collection Tray you are optimally equipped for blood collection.

The tray is used to store all materials and products required for blood collection, so that

everything is always at hand. The blood collection tray is lightweight and easy to clean.

The tray is suitable for our sharps disposal boxes from 0.6 to 3 litres (see also chapter "Disposal").

- / Perfectly organized with the blood collection tray
- / Lightweight
- / Easy to clean
- / Materials and products always at hand
- / Compatible with sharps disposal boxes from 0.6 to 3 litres

**Blood Collection Tray**

With the Blood Collection Tray you are perfectly organized for blood collection and always have your materials and products at hand. The tray is easy to clean, lightweight and compatible with sharps disposal boxes from 0.6 to 3 litres.

Description: white, for 0.6 / 1 / 1.8 / 3 litre Sharps Disposal Containers

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 450343 | 1 / 22 |



- / Practical accessory product for our MiniCollect® tubes, see also chapter MiniCollect® blood collection tubes.
- / You can find more information about this product in our web-shop.



MINICOLLECT®

ACCESSORIES TUBES

MiniCollect® is the ideal system for the collection, transport and processing of capillary blood. When our carrier tube meets MiniCollect®, it is the perfect combination.

MiniCollect® tubes can be threaded into a PREMIUM carrier tube. This combination corresponds to the dimensions of a standard 13 x 75mm tube.

This means that it is not necessary to change the settings on the analyzer for many device types. Capillary and venous blood samples can be processed and analyzed in the same tube dimension.

In addition to our MiniCollect® carrier tubes, the Greiner Bio-One range also includes extra caps for the MiniCollect® tubes.

- / Available as transparent or amber (light protection) carrier tube
- / Processing and analysis of capillary and venous blood samples in the same tube dimension
- / PREMIUM Tubes
- / Extra caps for MiniCollect® tubes

**MiniCollect® Carrier Tube**

MiniCollect® tubes can be threaded into a PREMIUM carrier tube. This combination corresponds to the dimensions of a standard 13 x 75mm tube. The carrier tubes are available in transparent and amber.

| Item no. | Product colour | Thread type | Qty. inner / outer |
|----------|----------------|-------------|--------------------|
| 450417 | ○ clear | PREMIUM | 100 / 500 |
| 450418 | ● amber | PREMIUM | 100 / 500 |



Needlestick injuries are a particular risk during the disposal of sharp or pointed objects. To reduce the risk for the user to a minimum, only containers specifically for this purpose should be used. Furthermore, the safety mechanism of the safety product should be activated prior to disposal.

DISPOSAL

| | |
|----------------------------------|-----|
| / Disposal Containers | 140 |
| Minicompact Disposal Boxes | 141 |
| Biocompact Disposal Boxes | 141 |
| Biogrip Disposal Boxes | 142 |



/ You can find more information about this product in our web-shop.



DISPOSAL CONTAINERS

Disposal containers are part of our product line and enable the safe disposal of medical consumables. All containers are of penetration-proof plastic and feature a temporary and permanent closure.

Blood collection accessories

as well as all other pointed and sharp objects must be disposed of in sharps-proof boxes. All disposal containers from Greiner Bio-One have a large opening for the disposal of sharp and pointed objects and are available in sizes from 0.6 litres up to 50 litres.

- / Penetration-proof plastic
- / Temporary and irreversible closure
- / Comprehensive product range in different sizes



Minicompact Disposal Boxes

Minicompact disposal boxes are available in 0.6 litre and 1.0 litre sizes. The container is suitable for the disposal of contaminated pointed, sharp and biohazardous materials. The product is puncture resistant.

| Item no. | Product colour | Nominal volume | Qty. inner / outer |
|----------|----------------|----------------|--------------------|
| 450330 | ● yellow | 0.6 l | 1 / 150 |
| 450331 | ● yellow | 1 l | 1 / 150 |



Biocompact Disposal Boxes

Biocompact disposal boxes are available in sizes between 1.8 litres and 10 litres. The container is suitable for the disposal of contaminated pointed, sharp and biohazardous materials. The product is puncture resistant.

| Item no. | Product colour | Nominal volume | Qty. inner / outer |
|----------|----------------|----------------|--------------------|
| 450332 | ● yellow | 1.8 l | 1 / 30 |
| 450333 | ● yellow | 3 l | 1 / 30 |
| 450334 | ● yellow | 5 l | 1 / 30 |
| 450335 | ● yellow | 10 l | 1 / 20 |



Biogrip Disposal Boxes

Biogrip disposal boxes are available in 30 litre and 50 litre sizes. The container is suitable for the disposal of contaminated pointed, sharp and biohazardous materials. The product is puncture resistant.

| Item no. | Product colour | Nominal volume | Qty. inner / outer |
|----------|----------------|----------------|--------------------|
| 450338 | ● yellow | 30 l | - /1 |
| 450339 | ● yellow | 50 l | - /1 |



Adequate and proper sample transport helps to keep the samples cool and to transport them safely. This is extremely important and a precondition for getting correct analysis results. The products of the VACUETTE® Transport Line enable the safe transport of biological substances (UN 3373) of the category B – from collection to analysis in the laboratory.

SAMPLE TRANSPORT

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- / You can also find suitable transport bags under accessories VACUETTE® transport line.
- / You can find more information about this product in our web-shop.



VACUETTE® TRANSPORT LINE

Better safe than sorry. Sample transport has never been easier.

With the VACUETTE® Transport Line, your valuable samples are transported safely and kept cool. The range includes transport boxes and containers for your special sample transport requirements.

The combination of primary, secondary and outer packaging (3rd packaging) from our VACUETTE® transport line cor-

responds to ADR/RID (packaging instructions P650), IATA-DG, ICAO-TI and IMDG-Code.

It's not all just about regulatory compliance and sample quality. The design of our transport solutions also ensures workflow efficiency and user comfort. Quick and easy loading and unloading of samples, low weight along with extreme robustness all contribute to reducing the challenges of everyday routine for healthcare professionals.

- / Safe sample transport
- / Tested and certified by an independent, accredited institute
- / Large variety of accessories



VACUETTE® Transport Boxes

The VACUETTE® transport boxes made of polypropylene (PP) are stackable and suitable for transporting up to 40 tubes. The box is liquid-tight and has a click closure for fast and convenient opening and closing. The foam insert is suitable for tube diameters of 9-16 mm.

| Item no. | Description | Qty. inner / outer |
|----------|---|--------------------|
| 472001 | VACUETTE® Transport Box (VTB), incl. Foam Insert for 40 Tubes, with Transport Carton HK0190 | 1 / 10 |
| 472040 | VACUETTE® Transport Box (VTB), incl. Foam Insert for 40 Tubes | 1 / 10 |
| 472010 | Foam Insert for VACUETTE® Transport Box (VTB), for 40 Tubes (all sizes) | - /168 |
| 472016 | Cooler Pack for VACUETTE® Transport Box (VTB) | - /104 |
| 472011 | Rack for Blood Collection Tubes, 10 positions, autoclavable | 1 / 100 |
| 472015 | Absorbent Pad for VTB / VTC | - /2,500 |



VACUETTE® Transport Containers

Our VACUETTE® Transport Container is a handy container made of polypropylene (PP) for transporting up to 12 tubes. The container is closed with a screw cap and is liquid-tight. The foam insert is suitable for tube diameters of 9-16 mm.

| Item no. | Description | Height | Width | Qty. inner / outer |
|----------|--|----------|--------|--------------------|
| 800105 | VACUETTE® Transport Container (VTC), incl. Foam Insert for 12 Tubes, with Transport Carton HK0259 | 128.7 mm | 113 mm | 1 / 12 |
| 800110 | VACUETTE® Transport Container (VTC), incl. Foam Insert for 12 Tubes, without Transport Carton HK0259 | 128.7 mm | 113 mm | 1 / 12 |
| 800101 | Foam insert for VACUETTE® Transport Container (VTC), for 12 tubes | 70 mm | 107 mm | - /336 |
| 800102 | Container volume 60 ml with absorbent pad and screw cap, without symbol | 127 mm | 28 mm | - /300 |
| 472017 | Cooler Pack for VACUETTE® Transport Container (VTC) | 12 mm | 107 mm | - /150 |



- / Test reports can be downloaded from the download center on our website: www.gbo.com
- / You can find more information about this product in our web-shop.



VACUETTE®

TRANSPORT LINE ACCESSORIES

Our extensive range of accessory products optimally rounds off the VACUETTE® transport line.

In addition to our transport boxes and our transport container, we also provide a wide range of isothermal bags as an alternative to transport cartons, in which you can transport trans-

port boxes or containers.

The VACUETTE® transport line also includes cooling packs, cooling pads, one foam insert each for the transport box and the transport container and inserts as well as labels for the outer packaging.

Greiner Bio-One offers you all you need for safe sample transport.

- / **Safe sample transport**
- / **Large variety of accessories**
- / **Cooling options**
- / **Racks, foam insert, absorbent inlays**



Transport Bags

The Isotherm transport bags are available in different sizes for the transport of several boxes or containers. The transport bags are robust, light weight and help to keep the temperature low due to the thermally insulating outer material.

| Item no. | Description | Height | Length | Width | Product colour | Qty. inner / outer |
|----------|--|--------|--------|--------|----------------|--------------------|
| 472020 | for 1 piece VACUETTE® Transport Box (VTB), small | 250 mm | 300 mm | 170 mm | ● royal blue | 1 / 16 |
| 472030 | for 2 pieces VACUETTE® Transport Boxes (VTB), medium | 250 mm | 320 mm | 300 mm | ● royal blue | 1 / 8 |
| 472023 | for 3 pieces VACUETTE® Transport Boxes (VTB), medium | 250 mm | 480 mm | 300 mm | ● royal blue | 1 / 4 |
| 472024 | for 4 pieces VACUETTE® Transport Boxes (VTB), big | 250 mm | 640 mm | 300 mm | ● royal blue | 1 / 4 |
| 472022 | for 1 piece VACUETTE® Transport Container (VTC), small | 160 mm | 145 mm | | ● royal blue | 1 / 50 |



At Greiner Bio-One, you will find numerous products and accessories for general laboratory requirements in top quality. Our product range includes Snap Caps, VACUETTE® SECONDARY tubes, carrier tubes and caps for MiniCollect®, multipurpose beakers and much more.

GENERAL LABORATORY EQUIPMENT

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/ You can find more information about this product in our web-shop.



SNAP CAPS

Snap Caps from Greiner Bio-One are mainly used to: recap open sample collection tubes.

The Snap Caps are caps, availa-

ble in a variety of different colours and can be used to recap 13mm non-ridged and PREMIUM PET tubes, both VACUETTE® and Simplex BC. Not suitable for transport.

- / Available in various colours
- / For VACUETTE® Tubes with 13mm diameter
- / Made of polyethylene (PE)
- / Not suitable for transport



Snap Caps

Snap Caps from Greiner Bio-One are available in many different colours and are used to recap open sample collection tubes. The product is suitable for VACUETTE® tubes with a diameter of 13 mm.

Cap design: pull cap

| Item no. | Product colour | Qty. inner / outer |
|----------|----------------|--------------------|
| 371516 | ○ white | 1,000 / 5,000 |
| 371517 | ● green | 1,000 / 5,000 |
| 371518 | ● yellow | 1,000 / 5,000 |
| 371519 | ● royal blue | 1,000 / 5,000 |
| 371522 | ● red | 1,000 / 5,000 |
| 371523 | ● lavender | 1,000 / 5,000 |
| 371527 | ● pink | 1,000 / 5,000 |



/ VACUETTE® ESR Tubes can be found in the chapter VACUETTE® Blood Collection Tubes under Blood Sedimentation Rate

/ You can find more information about this product in our web-shop.



MANUAL ESR SYSTEM

Greiner Bio-One offers you an extensive range of products for manual ESR Systems as well as various accessories.

Greiner Bio-One offers two different versions of the manual ESR system.

The open sedimentation system, consisting of an ESR tube made of PET plastic, a graduated pipette and an ESR rack.

Alternatively, there is also a closed system. This consists of an ESR rack (with graduation) and a special ESR plastic tube.

/ ESR rack with or without graduation



ESR Racks

The manual ESR system is available as closed and open system. Greiner Bio-One offers ESR Racks with and without graduation.



| Item no. | Description | Product colour | Qty. inner / outer |
|----------|---|----------------|--------------------|
| 836075 | ESR Rack with graduation, for 729070 / 729090 | ● blue-white | 1 / 8 |
| 836077 | ESR Rack with graduation, for 729073 / 729093 | ● blue-white | 1 / 8 |



- / VACUETTE® Secondary Tubes can be easily closed with our Snap Caps.
- / You can find more information about this product in our web-shop.



VACUETTE®

SECONDARY TUBES

VACUETTE® SECONDARY Tubes support laboratory automation with their versatile application.

Laboratory automation continues to progress and consequently sample throughput is on the rise. In order to encourage efficient procedures in the laboratory, Greiner Bio-One has developed the VACUETTE® SECONDARY Tubes. The greatest advantage of this product line is its versatility.

The non-ridged version of the SIMPLEX tubes is already packed in alignment so they can be transferred directly to the storage container (plastic or metal box) of the pre-analytical sample processing system. SIMPLEX tubes are manufactured from PET.

MULTIPLEX tubes are available in sealed plastic bags for manual application. The PREMIUM tubes are non-sterile and are available in PET or PP, with or without caps.

- / Aliquoting
- / Pooling
- / Storage and/or transport
- / Centrifugation
- / Freezing or heating



IVD

VACUETTE® SECONDARY Tubes**SIMPLEX**

The non-ridged version of the SIMPLEX tubes is already packed in alignment so they can be transferred directly to the storage container (plastic or metal box) of the pre-analytical sample processing system. SIMPLEX tubes are manufactured from PET.

Cap design: pull cap

| Item no. | Description | Qty. inner / outer |
|----------|--|--------------------|
| 459020 | RD PET, 13x75 mm without cap, non-ridged | 496 / 1,984 |
| 459021 | BC PET, 13x75 mm without cap, non-ridged | 496 / 1,984 |

/ 459020: designed for Roche PVT instrumentation (cobas p612)

/ 459021: designed for Beckman Coulter (Olympus) instrumentation (AutoMates 1250 + 2550)

/ VACUETTE® SECONDARY Tubes SIMPLEX are non-sterile and can be used at temperatures from -80 °C up to +50 °C.



IVD

VACUETTE® SECONDARY Tubes**MULTIPLEX**

MULTIPLEX tubes are available in sealed plastic bags for manual application. The PREMIUM tubes are non-sterile and are available in PET or PP, with or without caps.

Cap design: safety screw cap

| Item no. | Description | Qty. inner / outer |
|----------|---|--------------------|
| 459000 | PP, 13x75 mm with white screw closure, PREMIUM | 500 / 2,000 |
| 459001 | PP, 13x75 mm with orange screw closure, PREMIUM | 500 / 2,000 |
| 459010 | PP, 13x75 mm without cap, PREMIUM | 500 / 2,000 |
| 459011 | PET, 13x75 mm without cap, PREMIUM | 500 / 2,000 |

/ The PET tubes can be used at temperatures between -80 °C and +50 °C, the PP tubes from -80 °C up to +121 °C.

/ In combination with screw caps, the MULTIPLEX tubes fulfill the IATA guidelines (95 kPa) for secure sample transport and are compliant with the CLSI Standard ATU001-A.

- / Practical accessory product for our MiniCollect® tubes, see also chapter MiniCollect® blood collection tubes.
- / You can find more information about this product in our web-shop.



MINICOLLECT® ACCESSORIES TUBES

- / Available as transparent or amber (light protection) carrier tube
- / Processing and analysis of capillary and venous blood samples in the same tube dimension
- / PREMIUM Tubes
- / Extra caps for MiniCollect® tubes

MiniCollect® is the ideal system for the collection, transport and processing of capillary blood. When our carrier tube meets MiniCollect®, it is the perfect combination.

MiniCollect® tubes can be threaded into a PREMIUM carrier tube. This combination corresponds to the dimensions of a standard 13 x 75mm tube.

This means that it is not necessary to change the settings on the analyzer for many device types. Capillary and venous blood samples can be processed and analyzed in the same tube dimension.

In addition to our MiniCollect® carrier tubes, the Greiner Bio-One range also includes extra caps for the MiniCollect® tubes.



MiniCollect® Carrier Tube

MiniCollect® tubes can be threaded into a PREMIUM carrier tube. This combination corresponds to the dimensions of a standard 13 x 75mm tube. The carrier tubes are available in transparent and amber.

| Item no. | Product colour | Thread type | Qty. inner / outer |
|----------|----------------|-------------|--------------------|
| 450417 | ○ clear | PREMIUM | 100 / 500 |
| 450418 | ● amber | PREMIUM | 100 / 500 |



**MiniCollect®
Extra Cap**

The accessories for MiniCollect® tubes include spare caps to enable quick and easy recapping of MiniCollect® blood collection tubes after analysis.

Cap design: pull cap

| Item no. | Product colour | Qty. inner / outer |
|----------|----------------|--------------------|
| 370267B | ○ white | - / 9,008 |



VeinViewer® packs the latest advances in superior vascular imaging into a handheld, mobile package. VeinViewer® can help deliver faster venipuncture procedures on your difficult patients through greatly improved first stick success. It gives you revolutionary HD views in realtime, so you have the best view of vasculature procedures pre-, during and post-access. MaxDepth allows a view of peripheral veins up to 10mm deep and blood patterns up to 15mm beneath the surface of the skin and CathCompass™ is an integrated reference graphic to help choose the right iV catheter size.

DEVICES

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| VeinViewer® Vision2 | 163 |
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/ You can find more information about this product in our web-shop.



VEINVIEWER®

With the near infrared light technology of VeinViewer® you benefit before, during and after venipuncture. The device makes it possible to see through the patient's skin and identify vessels. The Cath-Compass™ feature provides an integrated reference graphic for IV catheter sizes projected onto the skin.

The VeinViewer® uses harmless near-infrared (NIR) light which is directed towards the patient's skin. Haemoglobin in the blood absorbs the NIR and

the surrounding tissue reflects it back to the VeinViewer® device, where the data is processed into an image, colour is added and the image sent back to the skin to provide a real time visualization of the blood vessels and patterns up to 10mm below the skin. HD technology with digital full field help provide the clinician with clear, sharp imaging to support routine healthcare work. VeinViewer® is available as a portable device VeinViewer® Flex or as a mobile device with an arm with a range of up to 1.35 metres as VeinViewer® Vision2.

- / Improved first stick success
- / Improved patient satisfaction
- / Improved safety



VeinViewer® Flex

VeinViewer® Flex is a hand-carried device which is also suitable for use in emergency situations. The product can be made static by using the flexible arm provided for use anywhere, especially if space is limited. It is easy to use and impresses with quality, durability and maximum mobility.

Description: Contains 2 pcs. Lithium Ion batteries

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 890001 | - / 1 |

/ Only available on selected markets



VeinViewer® Vision2

VeinViewer® Vision2 is a mobile imaging unit with an arm reaching up to 1.35 metres. It is attached to a robust trolley for easy transportation between beds or phlebotomy chairs.

Description: Contains 1 pc. Lithium Ion battery

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 890004 | - / 1 |

/ Only available on selected markets



VeinViewer® Accessories

Greiner Bio-One also offers suitable accessories for VeinViewer® devices.

| Item no. | Description | Qty. inner / outer |
|----------|--|--------------------|
| 890011 | Charging Station for Rechargeable Battery for VeinViewer® Flex | 1 / 1 |
| 890011A | Adapter for Charging Station Rechargeable Battery for VeinViewer® Flex | 1 / 1 |
| 890010 | Spare Rechargeable Battery for VeinViewer® Flex and Vision 2 | 1 / 1 |



Urine, as a metabolic byproduct, can tell a lot about a person's health status and any changes observed may indicate a certain medical condition. The VACUETTE® Urine Collection System enables a closed, sterile urine collection that in turn will maintain the sample quality and guarantee the efficiency of the testing procedure. The product line includes tubes, cups, sets and various accessories.

URINE COLLECTION SYSTEM

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| Urine Cups | 174 |
| 24h Urine Containers | 175 |



/ You can find more information about this product in our web-shop.



VACUETTE® URINE TUBES

VACUETTE® Urine Tubes are used for collection, transportation and/or analysis. They are sterile, leak-proof and virtually unbreakable.

VACUETTE® Urine Tubes are available with either a round or conical base. Round-based tubes are used for chemical urine tests, while tubes with a conical base are used for microscopic examinations of urine sedimentation.

Our tubes are also available with

or without preservatives. In the case of the tubes with preservative, VACUETTE® Urine CCM tubes help stabilize the sample, which is important when this one cannot be analyzed within 2 hours of collection. The sample collected in it should be inverted 6-8 times following collection in order to achieve a homogenous mixing.

All VACUETTE® Urine Tubes are also available with a pre-barcode label.

- / Round base or conical base
- / Without additive
- / With preservative (CCM)
- / Available pre-barcode



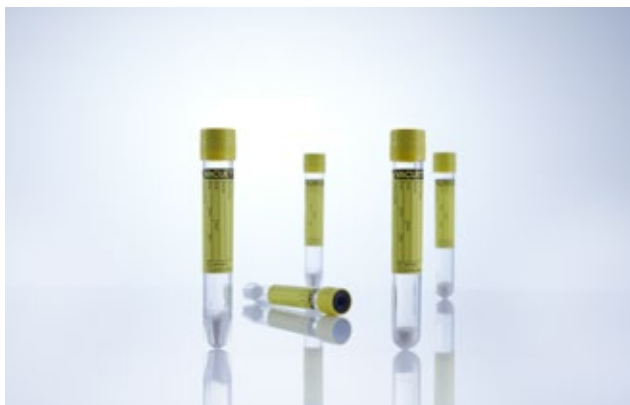
IVD

STERILE

VACUETTE®**Z Urine Tubes No Additive**

Z Urine No Additive Tubes are used for the collection, transport, processing and testing of urine specimens. It is recommended to perform the analysis within a short time after collection.

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Bottom shape | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|--------------|-------------------|---------|--------------------|
| 454141 | 3 ml | ● yellow | ● yellow | PREMIUM | 13 x 75 | round | paper | no | 50 / 1,200 |
| 456007 | 6 ml | ● yellow | ● yellow | PREMIUM | 13 x 100 | round | paper | no | 50 / 1,200 |
| 476081 | 6 ml | ● yellow | ● yellow | PREMIUM | 13 x 100 | round | transparent | no | 50 / 1,200 |
| 456065 | 6 ml | ● yellow | ● yellow | non-ridged | 13 x 100 | round | paper | no | 50 / 1,200 |
| 485523 | 7 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | round | paper | yes | 50 / 1,200 |
| 455227 | 7 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | round | paper | no | 50 / 1,200 |
| 455225 | 8 ml | ● yellow | ● black | non-ridged | 16 x 100 | round | paper | no | 50 / 1,200 |
| 455028 | 9 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | conical | paper | no | 50 / 1,200 |
| 485507 | 9 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | conical | paper | yes | 50 / 1,200 |
| 495028 | 9 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | conical | BiBarcode (paper) | yes | 50 / 1,200 |
| 485510 | 10 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | round | paper | yes | 50 / 1,200 |
| 455007 | 10 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | round | paper | no | 50 / 1,200 |
| 495007 | 10 ml | ● yellow | ● yellow | non-ridged | 16 x 100 | round | BiBarcode (paper) | yes | 50 / 1,200 |



VACUETTE®

Urine CCM Tubes

The VACUETTE® Urine CCM Tubes contain a powdered stabilizer that keeps the bacteria and yeasts in the sample stable at room temperature (20 - 25°C) for up to 48 hours. The CCM tube can thus win time for carrying out the analysis.



IVD

STERILE

| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Bottom shape | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|--------------|-------------------|---------|--------------------|
| 454486 | 4 ml | ● yellow | ● black | non-ridged | 13 x 75 | round | paper | no | 50 / 1,200 |
| 456284 | 6 ml | ● yellow | ● black | non-ridged | 13 x 100 | round | paper | no | 50 / 1,200 |
| 496510 | 6 ml | ● yellow | ● black | non-ridged | 13 x 100 | round | BiBarcode (paper) | yes | 50 / 1,200 |
| 455243 | 9 ml | ● yellow | ● black | non-ridged | 16 x 100 | conical | paper | no | 50 / 1,200 |
| 455052 | 10 ml | ● yellow | ● black | non-ridged | 16 x 100 | round | paper | no | 50 / 1,200 |
| 485511 | 10 ml | ● yellow | ● black | non-ridged | 16 x 100 | round | paper | yes | 50 / 1,200 |



- / You can find more information about this product in our web-shop.



URINE SETS

Urine tubes and the Urine Transfer Device from Greiner Bio-One are also available in a practical set.

VACUETTE® Urine Tubes are available in a set with the Urine Transfer Device to provide more convenience for daily routine work. With the urine sets from Greiner Bio-One, you have all the products you need at hand at all

times.

The set is available with round bottom tubes or conical bottom tubes. You can also choose between a set with tubes without additives or a set with tubes with preservative (CCM).

The Urine Transfer Device included in the set allows you to transfer the sample into the tubes easily and safely.

- / VACUETTE® Urine Tubes or VACUETTE® Urine CCM Tubes
- / Round base or conical base
- / Urine Transfer Device



Urine Sets

The VACUETTE® Urine Tube is also available in a practical set: VACUETTE® Urine Tube + Urine Transfer Device. The set is available with both the round bottom tube and the pointed bottom tube.

Description: Urine Set 16x100 (VACUETTE® Urine CCM Tube Item.no. 455028 + Urine Transfer Device Item.no. 450751) single-packed, Nominal volume: 9 ml, Bottom shape: conical

| Item no. | Qty. inner / outer |
|----------|--------------------|
| 453070 | - /300 |



Urine CCM Sets

The VACUETTE® CCM Urine Tube is also available in a practical set: VACUETTE® CCM Urine Tube + Urine Transfer Device. The set is available with both the round bottom tube and the pointed bottom tube.

| Item no. | Description | Nominal volume | Bottom shape | Qty. inner / outer |
|----------|---|----------------|--------------|--------------------|
| 453031 | Urine CCM Set 13x75 (VACUETTE® Urine CCM Tube Item. no. 454486 + Urine Transfer Device Item.no. 450751) single-packed | 4 ml | round | 1 / 300 |
| 453032 | Urine CCM Set 16x100 (VACUETTE® Urine CCM Tube Item. no. 455243 + Urine Transfer Device Item.no. 450751) single-packed | 9 ml | conical | - /300 |
| 453034 | Urine CCM Set 16x100 (VACUETTE® Urine CCM Tube Item. no. 455052 + Urine Transfer Device Item.no. 450751) single-packed | 10 ml | round | - /300 |
| 483070 | Urine CCM Set 16x100 (VACUETTE® Urine CCM Tube Item. no. 485511 + Urine Transfer Device Item.no. 450751) with barcode label | 10 ml | round | - /300 |



/ You can find more information about this product in our web-shop.



ACCESSORIES URINE COLLECTION

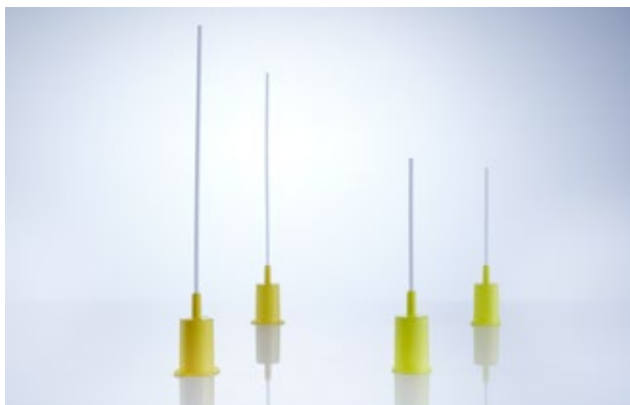
The Greiner Bio-One Urine Line is rounded off by a comprehensive range of accessories.

In addition to the VACUETTE® Urine Tubes and sets, Greiner Bio-One also includes urine beakers in its range. Urine beakers are available with integrated

transfer device to ensure clean sample transfer.

The range of accessories also includes 24 Hours Urine Containers with or without integrated transfer device as well as the Urine Transfer Device itself in the long or short version – according to your needs.

- / Wide range of accessory products
- / Urine beakers, sterile or non-sterile
- / 24 Hours Urine Container
- / Products available with or without integrated transfer device
- / Urine Transfer Device



Urine Transfer Devices

The Urine Transfer Device allows easy and hygienic taking of sample material from a collection container. The product is available in two lengths.

| Item no. | Description | Qty. inner / outer |
|----------|-----------------------------------|--------------------|
| 450251 | short | 50 / 600 |
| 450252 | long | 50 / 600 |
| 450253V1 | short, single-packed, sterile | - /400 |
| 450264 | short, single-packed, non-sterile | - /400 |



Urine Cups

Most urine cups from Greiner Bio-One come with a transfer device already integrated in the cap. This features gives you the advantage of a closed system, ensuring a clean and hygienic sample transfer into a tube.

| Item no. | Description | Cap colour | Qty. inner / outer |
|----------|----------------------------------|------------|--------------------|
| 724322 | 100 ml, bulk-packed, non-sterile | ● yellow | - /300 |
| 724321 | 100 ml, bulk-packed, sterile | ● yellow | - /300 |



IVD

24h Urine Containers

The 24h urine collection container is available as a 2.7 litre version or as VACUETTE® URI-PLUS with a 3 litre volume. VACUETTE® URI-PLUS has an integrated transfer device for even more hygienic sample collection.

Graduation: yes

| Item no. | Description | Product colour | Cap colour | Cap design | Qty. inner / outer |
|----------|---------------------|----------------|------------|---|--------------------|
| 724315 | 24h urine container | ● brown | ○ white | screw cap | - /34 |
| 724316 | VACUETTE® URI-PLUS | ● brown | ● blue | screw cap with integrated transfer device | - /36 |



Greiner Bio-One's product range for molecular biology and virology covers tubes for storage of the sample and transport to its laboratory destination.

MOLECULAR BIOLOGY

| | |
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/ You can find more information about this product in our web-shop.



VACUETTE®

VIRUS STABILIZATION TUBE

In the VACUETTE® virus stabilization tube from Greiner Bio-One, viruses are safely contained and can be used for the detection of SARS CoV-2, Influenza A and Influenza B.

With the VACUETTE® virus stabilization tube, Greiner Bio-One has been able to make a significant contribution to virus detection since the outbreak of the

COVID 19 pandemic in 2020. The product supports the safe transport as well as the storage of viral sample material. In combination with the products of the VACUETTE® transport line, the samples (such as nasopharyngeal and oropharyngeal swabs) arrive safely enclosed at their respective destination in the laboratory.

/ For the detection of SARS CoV-2, Influenza A and Influenza B



VACUETTE®
Virus Stabilization Tube

VACUETTE® virus stabilization tubes are PET tubes without vacuum and sterile inside. They contain a phosphate-buffered saline solution in various volumes. The tube is intended for storage and transport of viral sample material.



| Item no. | Nominal volume | Cap colour | Ring colour | Thread type | Tube size | Label | Barcode | Qty. inner / outer |
|----------|----------------|------------|-------------|-------------|-----------|-------|---------|--------------------|
| 456162 | 2 ml | ● red | ○ white | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |
| 456161 | 3 ml | ● red | ○ white | PREMIUM | 13 x 100 | paper | no | 50 / 1,200 |

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