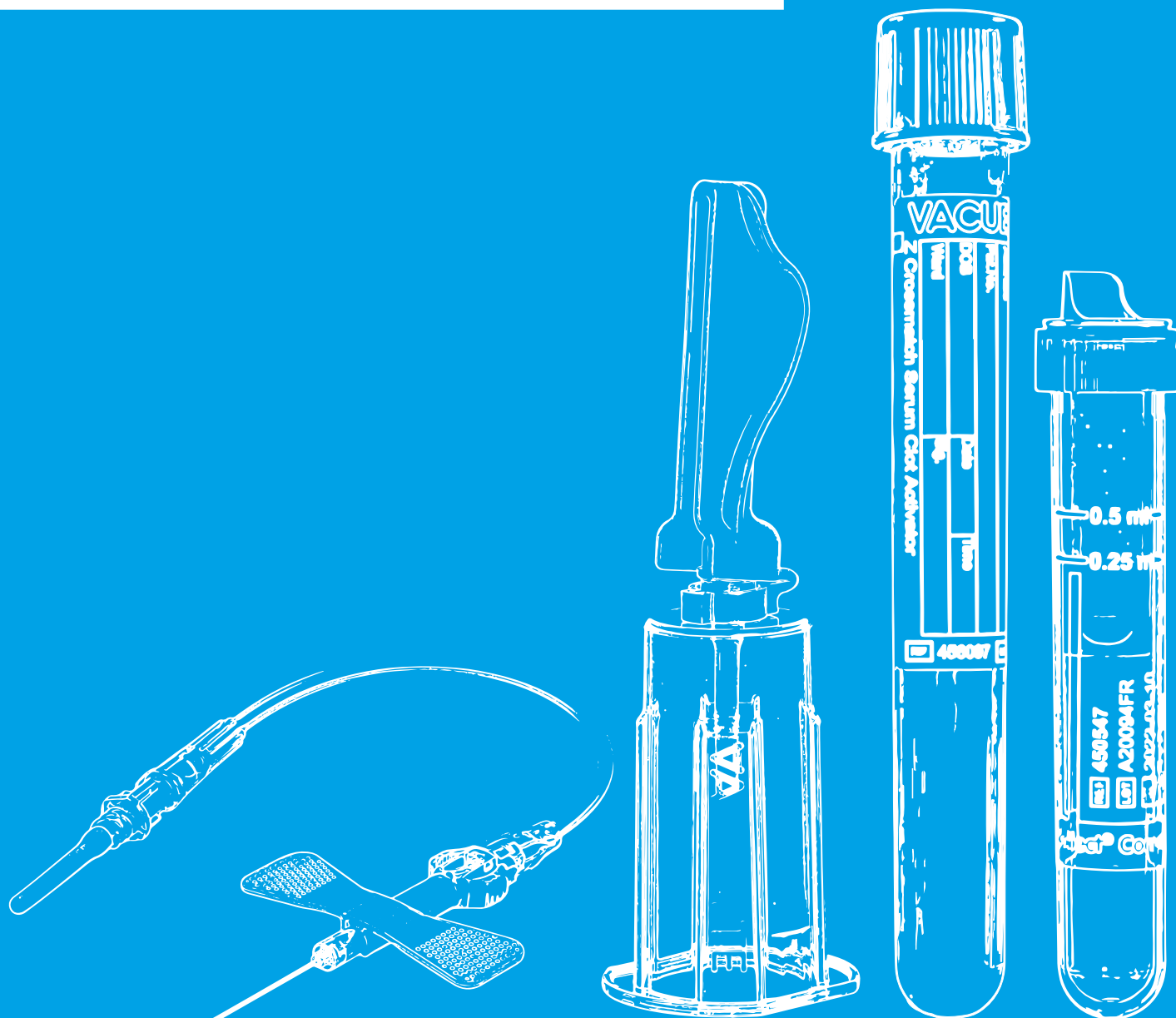


making a difference

# PREANALYTICS CATALOGUE



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.

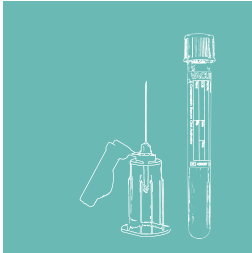
It is the passion and dedication of our people that make  
the difference. With a straightforward approach our  
global team continuously strives for excellence and  
closely collaborates with our customers.

**We empower people to make a difference in health.**

# CONTENTS



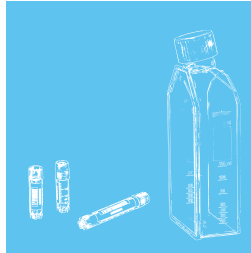
# 10



## **PREANALYTICS**

Preanalytical specimen collection systems and safety solutions

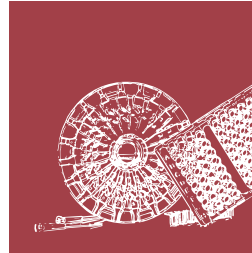
# 12



## **BIOSCIENCE**

Making a difference in research and science

# 14



## **OEM**

Tailor made solutions

# 16



## **CUSTOMER REQUESTS**

At your doorstep, across the world

# 18



## **SUSTAINABILITY**

Sustainability means global responsibility

# 20



## **QUALITY**

Products with highest demands in quality

# 192



## **APPENDIX**

Numerial Index

# PRODUCTS



**shop.gbo.com**

Purchase online

## 25

### **VACUETTE® BLOOD COLLECTION TUBES**

---

VACUETTE® Coagulation Tubes	30
VACUETTE® Serum Tubes	33
VACUETTE® Heparin Tubes	37
VACUETTE® EDTA Tubes	41
VACUETTE® No Additive Tubes	45
VACUETTE® Discard Tube	47
VACUETTE® Glucose Tubes	49
VACUETTE® Blood Grouping Tubes	52
VACUETTE® Trace Element Tubes	55
VACUETTE® Blood Sedimentation Rate Tubes	57
VACUETTE® Homocysteine Tubes	60
VACUETTE® Crossmatch Tubes	62

## 65

### **MINICOLLECT® BLOOD COLLECTION TUBES**

---

MiniCollect® Coagulation Tubes	70
MiniCollect® Serum Tubes	72
MiniCollect® Heparin Tubes	74
MiniCollect® EDTA Tubes	76
MiniCollect® Glucose Tubes	78

## 81

### **SAFETY PRODUCTS**

---

VACUETTE® QUICKSHIELD	86
VACUETTE® EVOPROTECT	89
SAFETY Blood Collection Set	92
VACUETTE® Safety Winged Set	95
MiniCollect® Safety Lancets	98

## 103

### VASCULAR CATHETERS

CLiP® Safety I.V. Catheter	104
SWiTCH Safety Arterial Catheter	107

## 111

### SHARPS

Blood Collection Needles	112
Blood Collection Sets	115

## 119

### BLOOD COLLECTION ACCESSORIES

Tube Holders	120
Luer Adapter	124
VACUETTE® Tourniquets	126
VACUETTE® ID Snap Rings	128
Blood Collection Tray	130

## 133

### DISPOSAL

Disposal Containers	134
---------------------	-----

## 139

### SAMPLE TRANSPORT

VACUETTE® Transport Line	140
VACUETTE® Transport Line Accessories	142



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Purchase online

## 145

### GENERAL LABORATORY EQUIPMENT

Snap Caps	146
Manual ESR System	148
VacuDrop	150
VACUETTE® SECONDARY Tubes	152
MiniCollect® Accessories Tubes	154
Multipurpose Beaker	156

## 159

### DEVICES

VeinViewer®	160
VACUETTE® Decapper	163
Automatic ESR System	165
VACUETTE® MultiMixer	168

## 171

### URINE COLLECTION SYSTEM

VACUETTE® Urine Tubes	172
Urine Sets	175
Accessories Urine Collection	177

## 181

### SALIVA COLLECTION AND QUANTIFICATION SYSTEM

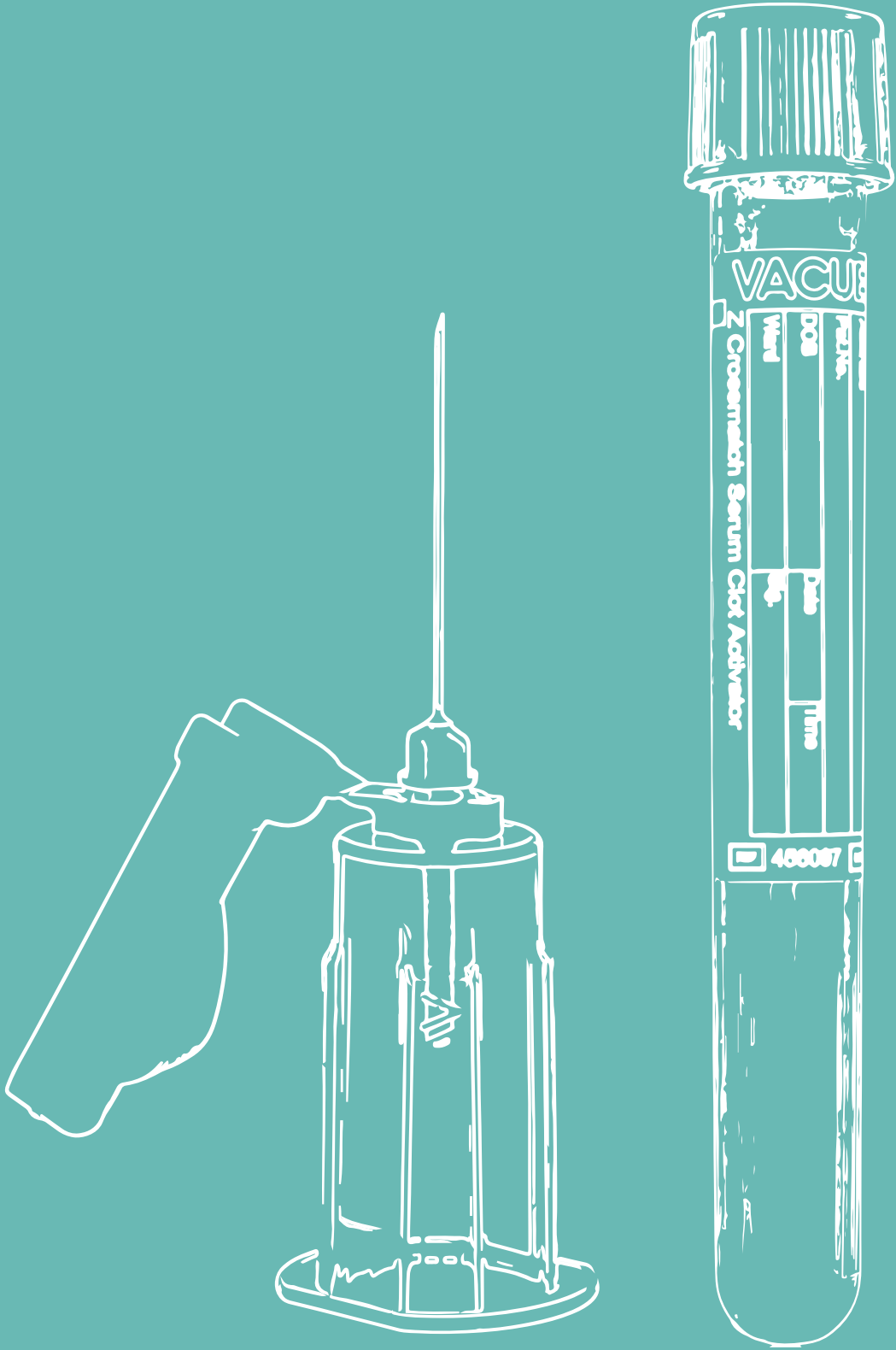
Saliva Collection System	182
Quantification System	185

## 189

### MOLECULAR BIOLOGY

VACUETTE® Virus Stabilization Tube	190
------------------------------------	-----

# PREANALYTICS



## PREANALYTICAL SPECIMEN COLLECTION SYSTEMS AND SAFETY SOLUTIONS

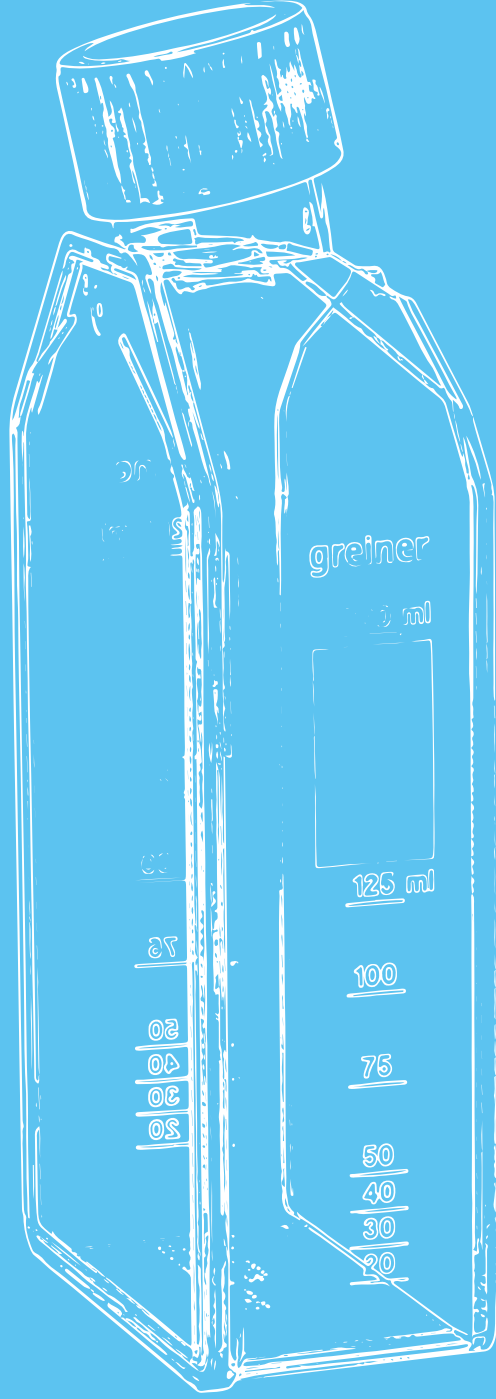
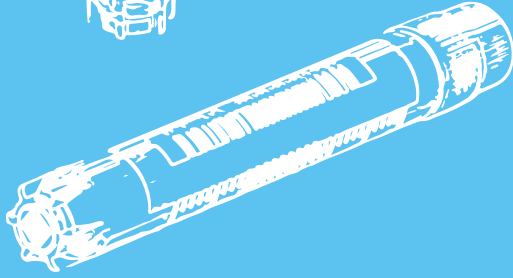
Greiner Bio-One was the first company in the world to successfully launch a blood collection system made out of virtually unbreakable PET plastic including a safety cap. Many components of the VACUETTE® System have often been copied, but never reached our high quality standards. As a trendsetter in the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

# BIO SCIENCE





## 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.

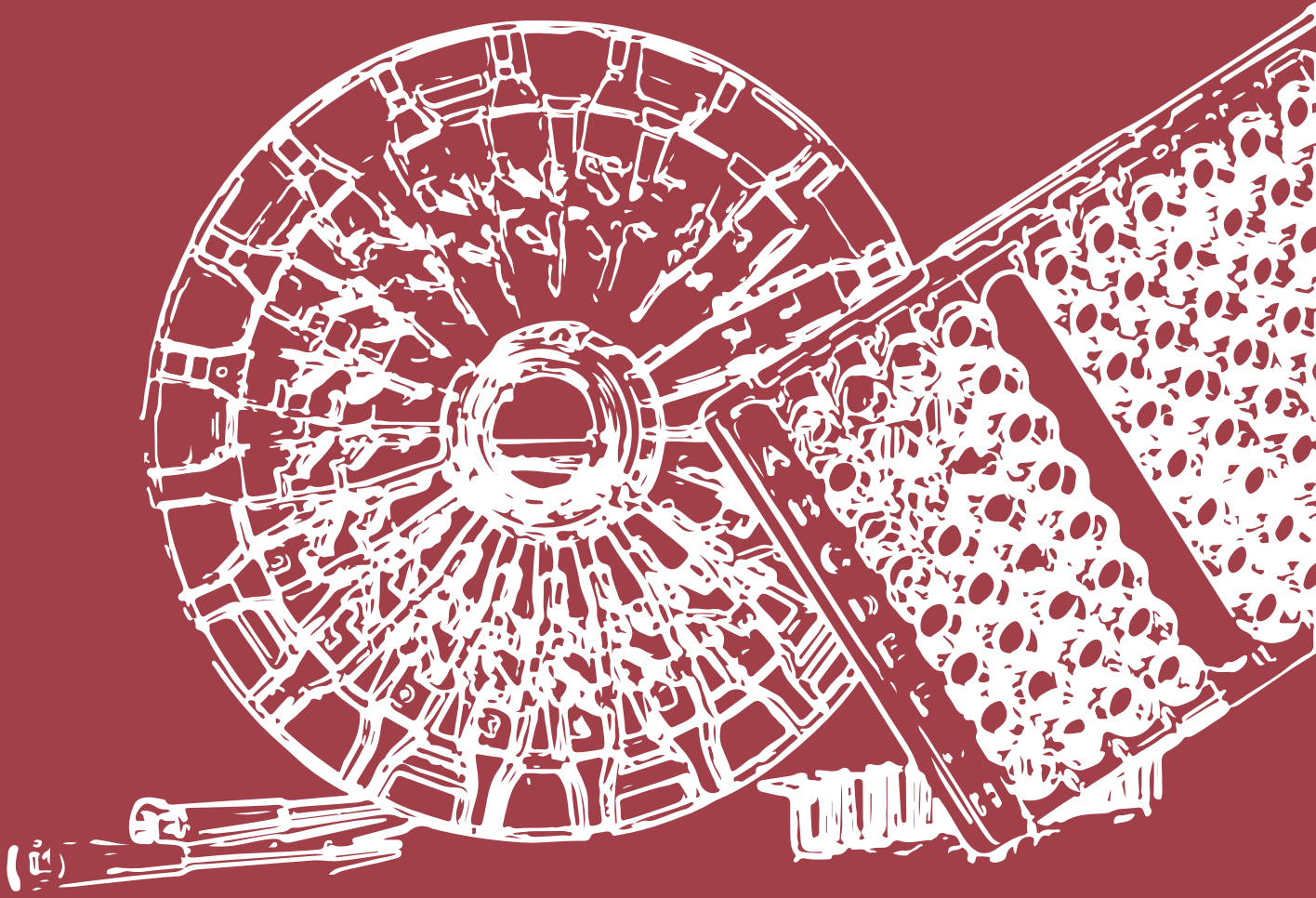
In addition, we have been developing and producing microplates for high-throughput screening for more than 50 years, ena-

bling industry and research to carry out fast and most 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

# 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**







## OUR CUSTOMERS' WISHES

are at the core  
of our actions

## AT YOUR DOORSTEP, ACROSS THE WORLD

As a global player and single source supplier, Greiner Bio-One produces in modern production facilities on 4 continents - with a quality management system in place worldwide and a global procurement policy. This ensures customer-oriented production activities, high capacity, global warehousing and fast delivery.

With more than 2000 employees at several international produc-

tion locations and distribution partners, we are represented directly in more than 100 countries. We have specialists working in sales, who have comprehensive expert competence. This ensures onsite customer care, quick deliveries and uncomplicated service.

Furthermore, an online shop, a download site, a technical hotline as well as an FAQ database are available to our customers.



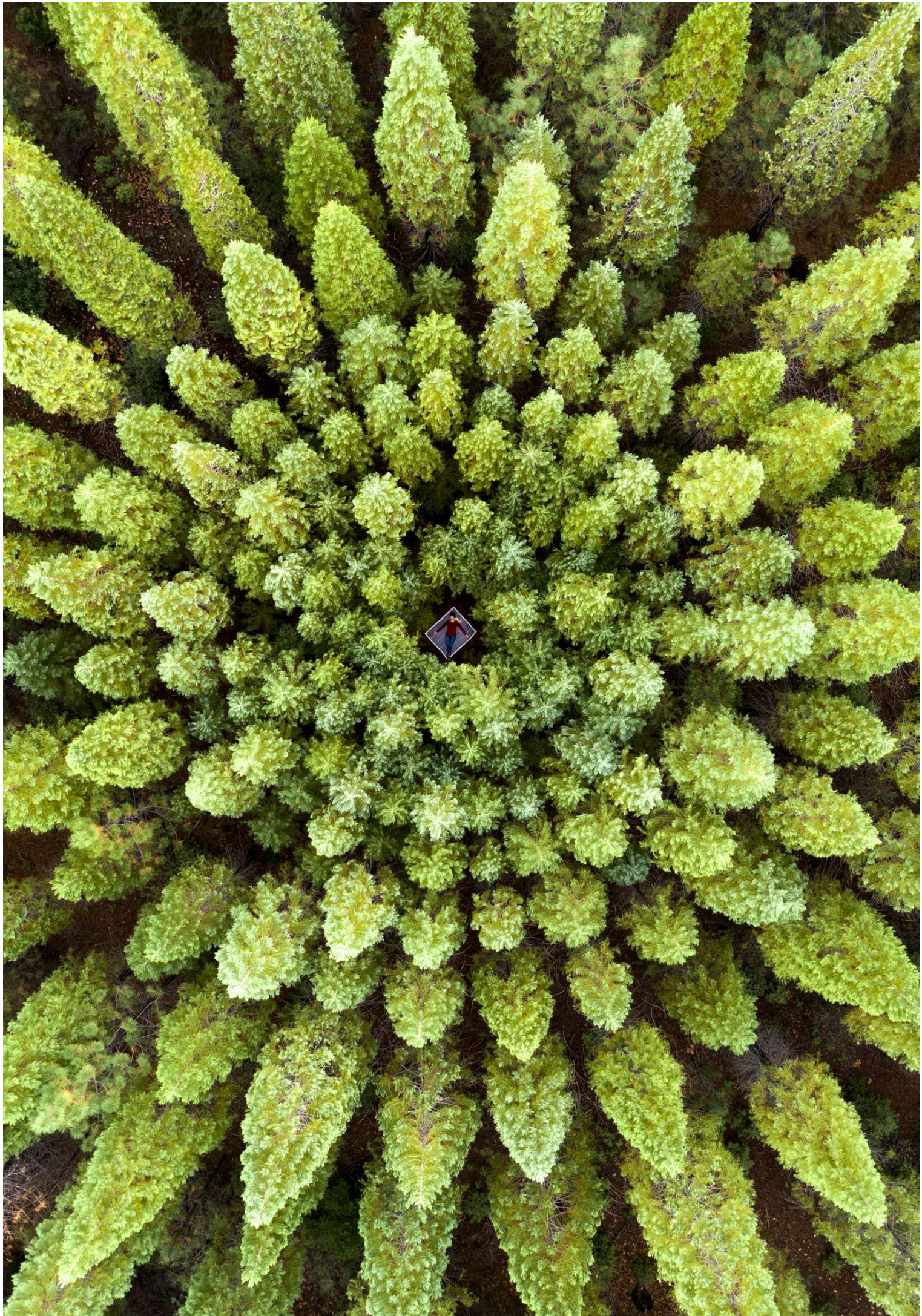
### VERSATILE IN SERVICE & CONSULTING

- / Professionally competent and personal consultation
- / E-Learning platform & webinars
- / Product trainings & training videos
- / Sample packs



Our focus is on market requirements when developing innovative products and competent services.







## THE GREEN SPIRIT

is a guiding principle for us and influences our daily work and processes.

## SUSTAINABILITY MEANS GLOBAL RESPONSIBILITY

Sustainability is more than just a trend. Sustainable action is the fundamental precondition for a future worth living. As a supplier of high-quality plastic products, we, like all other companies, strive to develop sustainable solutions that provide answers to the global challenges of our time.

The overall strategy of Greiner AG "Blue Plan" is based on three core areas. It focuses on climate protection, the recycling industry and people. As a division of

Greiner AG, Greiner Bio-One also deals intensively with these topics.

As a manufacturer of high-tech medical devices made out of plastic, our long-term goal is to take ecological, economic and social aspects into account in equal measure. Special emphasis is placed not only on excellent medical care and high-quality products, but also on energy efficiency and sustainability as a plastics processor.



### OUR SUPPLIERS ARE ALSO COMMITTED TO OUR CODE OF CONDUCT

- / Social policies and principles
- / Ecological policies and principles
- / Ethical policies and principles



In recent years, numerous energy efficiency projects have been successfully implemented. New potentials are constantly being identified.





## PRODUCTS WITH HIGHEST DEMANDS IN QUALITY

A global approach to quality, which includes the latest production technologies, strict control of production conditions and incoming materials, as well as the qualification and development of personnel, ensures continuous improvement of both our products and our processes. Highly qualified and well trained employees put the quality standards into practice. Quality con-

trols and inspections are carried out by the quality control department as well as production staff in the form of in-process checks. To ensure that these checks are carried out professionally, staff members are trained regularly. High-tech production technology as well as first-rate control and inspection devices ensure the highest quality standards.

- / Control of incoming goods
- / In-process production controls
- / Laboratory testing
- / Final or sterility controls

# QUALITY ASSURANCE AND QUALITY CONTROL

Our customers' trust in us over the past 50 years certifies our high quality and our dedication to further improvement. High quality is an important criterion in the manufacturing of our products. For this purpose, our quality control system monitors the physical, chemical and biological functionality of our

products. Quality control starts with the incoming raw material, is continued in production processes and ends with the dispatch of the finished product. Strict controls, conducted according to the legal provisions and specific standards, accompany the product.



## **ISO 9001 and EN ISO 13485**

Greiner Bio-One has been certified according to ISO 9001 since 1994 through the continuing high standard of our production processes, quality controls and organization. Since 2004 Greiner Bio-One has additionally been certified according to EN ISO 13485 to fulfil the high international requirements for manufacturers of Medical Devices.



## **CE Marking and F.D.A. Clearance**

Medical devices and IVDs bear the CE mark. Furthermore, every item that is distributed in the United States is cleared by the US Food and Drug Administration (US FDA).



## **Sterilization**

The sterilization of our products is carried out according to the latest and most energy-saving technology standards. Products labelled as sterile are sterilized in their final packaging either by irradiation (ISO 11137) or ethylene oxide (ISO 11135).

## CONSISTENT FURTHER DEVELOPMENT OF MODERN TECHNOLOGIES AND PROCESSES

One of Greiner Bio-One's core competences is innovation. Over the course of the years, the company has become established as leader for knowledge and expertise, consistently building on this reputation.

The production techniques are constantly subject to optimization in cooperation with qualified partner companies, ensuring

that Greiner Bio-One remains worldwide technology leader in this segment.

Our products are manufactured at high-tech production facilities to the highest quality standards in six locations on four continents, providing short delivery times all over the world.

Quality controls and inspections are carried out by the quality control department as well as production personnel in the form of in-process checks. To ensure that these checks are carried out professionally, staff are trained regularly.



**Download a quality certificate for most products from our website.**

Each product is retraceable to the production period, machine operators and tools, all the way back to the raw materials used.



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 .....	30	/ VACUETTE® Glucose Tubes .....	49
9NC Coagulation Sodium Citrate 3.2 % .....	31	FX Sodium Fluoride / Potassium Oxalate .....	50
9NC Coagulation sodium citrate 3.8 % .....	32	FE Sodium Fluoride / K3EDTA .....	50
CTAD .....	32	FC Mix .....	51
/ VACUETTE® Serum Tubes .....	33	/ VACUETTE® Blood Grouping Tubes.....	52
CAT Serum Clot Activator .....	34	ACD-A .....	53
CAT Serum Separator Clot Activator .....	35	ACD-B .....	53
CAT Serum Fast Separator .....	36	CPDA .....	54
/ VACUETTE® Heparin Tubes .....	37	/ VACUETTE® Trace Element Tubes .....	55
LH Lithium Heparin .....	38	NH Trace Elements Sodium Heparin .....	56
LH Lithium Heparin Separator .....	39	/ VACUETTE® Blood Sedimentation Rate	
NH Sodium Heparin .....	40	Tubes.....	57
/ VACUETTE® EDTA Tubes .....	41	4NC ESR Sodium Citrate 3,2 % PP .....	58
K2E K2EDTA .....	42	4NC ESR Sodium Citrate 3,2 % Glass .....	58
K2E K2EDTA Separator .....	43	4NC ESR Sodium Citrate 3,2 % PET .....	59
K3E K3EDTA .....	43	/ VACUETTE® Homocysteine Tubes .....	60
/ VACUETTE® No Additive Tubes.....	45	Homocysteine .....	61
Z No Additive .....	46	/ VACUETTE® Crossmatch Tubes.....	62
/ VACUETTE® Discard Tube .....	47	CAT Crossmatch Serum Clot Activator .....	63
Z Discard .....	48	K3E Crossmatch K3EDTA .....	63

## 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 resealing 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 article number is  
encoded in a barcode  
(GS1 DataMatrix)  
together with  
manufacturer-relevant  
information such as  
time and place of  
production, batch  
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 already 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, simple 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 BAR CODE  
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 correct draw volume.



IVD

STERILE

### 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	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  $\text{SiO}_2$ ) 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	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
484502	3.5 ml	red	yellow	non-ridged	13 x 75	paper	yes	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	yes	50 / 1,200
455010	9 ml	red	yellow	non-ridged	16 x 100	paper	no	50 / 1,200

## VACUETTE® Blood Collection Tubes

VACUETTE® Serum Tubes

Item no.	Nominal volume	Cap colour	Ring colour	Thread type	Tube size	Label	Barcode	Qty. inner / outer
455034	9 ml	● gold	● gold	non-ridged	16 x 100	paper	no	50 / 1,200
455059	9 ml	● red	● yellow	non-ridged	16 x 100	transparent	no	50 / 1,200
485509	9 ml	● red	● yellow	non-ridged	16 x 100	paper	yes	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
454591	3.5 ml	● orange	● yellow	non-ridged	13 x 75	paper	no	50 / 1,200
456310	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.



STERILE

### 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.

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
456084	6 ml	● green	● black	PREMIUM	13 x 100	paper	no	50 / 1,200
486508	6 ml	● green	● black	PREMIUM	13 x 100	paper	yes	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
484488	4 ml	● green	● black	non-ridged	13 x 75	paper	yes	100 / 600
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.



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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

## VACUETTE® Blood Collection Tubes

VACUETTE® Heparin Tubes



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### 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
455051	9 ml	● green	● green	non-ridged	16 x 100	paper	no	50 / 1,200
485505	9 ml	● green	● black	non-ridged	16 x 100	paper	yes	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.



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### 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
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
484506	4 ml	● pink	● black	non-ridged	13 x 75	paper	yes	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	yes	50 / 1,200



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### 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



STERILE

### 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

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
494509	4 ml	● pink	● black	PREMIUM	13 x 75	BiBarcode	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
484500	2 ml	● lavender	○ white	non-ridged	13 x 75	paper	yes	50 / 1,200
494508	2 ml	● lavender	○ white	non-ridged	13 x 75	BiBarcode	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
484501	3 ml	● lavender	● black	non-ridged	13 x 75	paper	yes	50 / 1,200
454021	4 ml	● lavender	● black	non-ridged	13 x 75	paper	no	50 / 1,200
484408	4 ml	● lavender	● black	non-ridged	13 x 75	paper	yes	100 / 600
484529	4.5 ml	● lavender	● black	non-ridged	13 x 75	paper	yes	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	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
485512	9 ml	● orange	● 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 additive in the tube.



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### 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.

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	yes	50 / 1,200
456001	6 ml	○ white	● black	PREMIUM	13 x 100	paper	no	50 / 1,200
454256	3 ml	● gold	● gold	non-ridged	13 x 75	paper	no	50 / 1,200
454241	3 ml	○ white	● black	non-ridged	13 x 75	paper	no	50 / 1,200
494511	3 ml	● gold	● gold	non-ridged	13 x 75	BiBarcode	yes	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 could influence critical valid test parameters. This is especially significant when using a VACUETTE® coagulation tube.



**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
456062	6 ml	● grey	● black	PREMIUM	13 x 100	paper	no	50 / 1,200
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



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**FC Mix**

FC Mix tubes contain buffered  $\text{Na}_2\text{EDTA}$ , 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
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.





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**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



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**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



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### 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



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### 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. The tubes are sterile inside.



#### 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
769093	1.6 ml	● black	9 x 120	paper	yes	50 / 800
729090	2.9 ml	● black	9 x 120	paper	no	50 / 800



#### 4NC ESR Sodium Citrate 3,2 % PET

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



Item no.	Nominal volume	Cap colour	Ring colour	Thread type	Tube size	Label	Barcode	Qty. inner / outer
454073	2 ml	● black	● black	PREMIUM	13 x 75	paper	no	50 / 1,200
484516	2 ml	● black	● black	PREMIUM	13 x 75	paper	yes	50 / 1,200



/ 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.





### 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 web-shop.



## **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.



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**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



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**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**

/ MiniCollect® Coagulation Tubes .....	70
9NC Coagulation Sodium Citrate 3.2 % .....	71
/ MiniCollect® Serum Tubes .....	72
CAT Serum Clot Activator .....	73
CAT Serum Separator Clot Activator .....	73
/ MiniCollect® Heparin Tubes .....	74
LH Lithium Heparin .....	75
LH Lithium Heparin Separator .....	75
/ MiniCollect® EDTA Tubes .....	76
K2E K2EDTA .....	77
K3E K3EDTA .....	77
/ MiniCollect® Glucose Tubes .....	78
FX Sodium Fluoride / Potassium Oxalate .....	79

## 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 automated  
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 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 whole 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  $\text{SiO}_2$ ) 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.

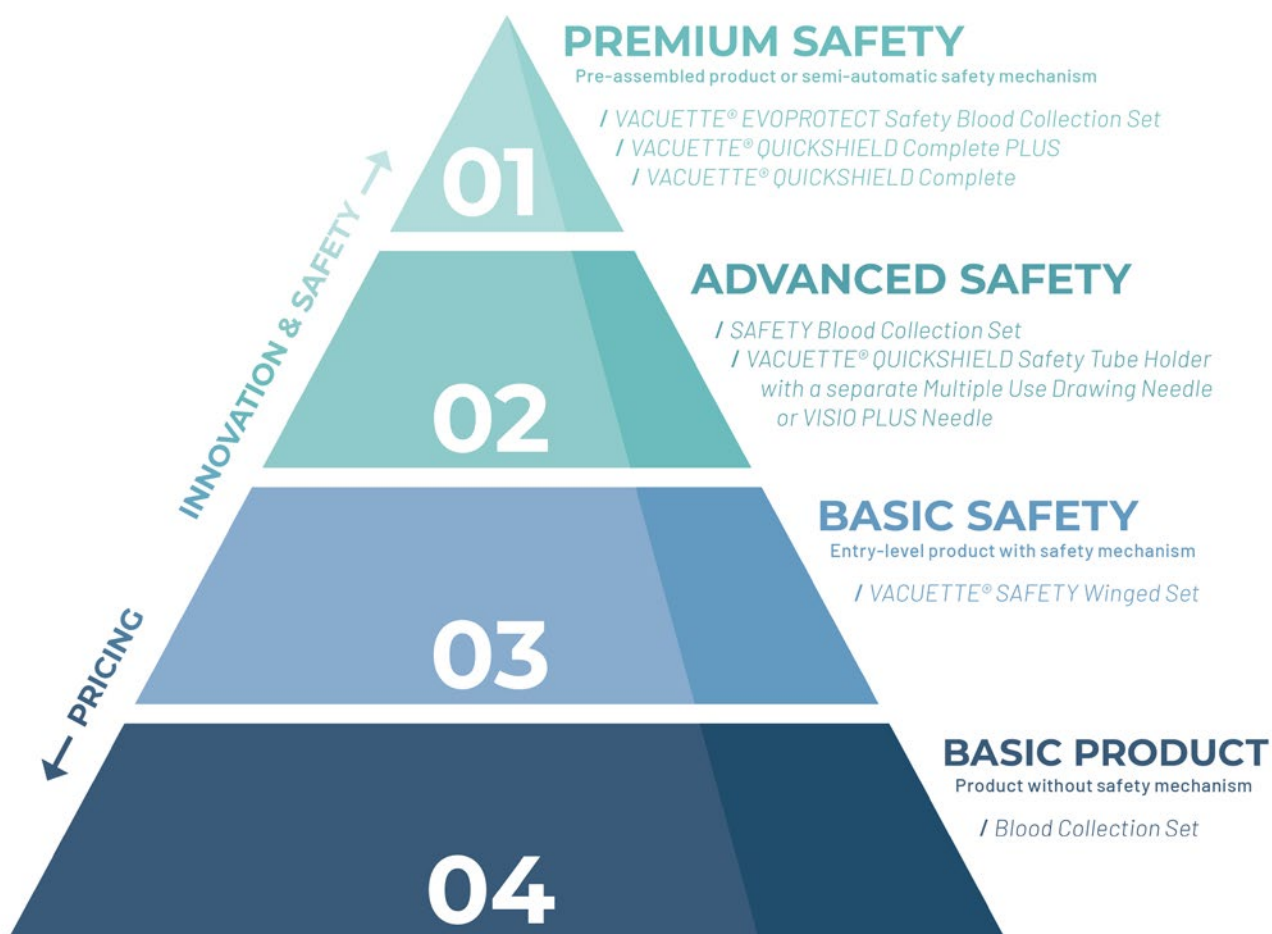
## SAFETY PRODUCTS

/ VACUETTE® QUICKSHIELD .....	86	/ VACUETTE® Safety Winged Set .....	95
VACUETTE® QUICKSHIELD		VACUETTE® SAFETY Winged Set	
Safety Tube Holder .....	87	Blood Collection/Infusion .....	96
VACUETTE® QUICKSHIELD Complete .....	87	VACUETTE® SAFETY Winged Set	
VACUETTE® QUICKSHIELD Complete PLUS .....	88	+ Luer Adapter .....	96
		VACUETTE® SAFETY Winged Set + Holder .....	97
/ VACUETTE® EVOPROTECT .....	89		
VACUETTE® EVOPROTECT SAFETY		/ MiniCollect® Safety Lancets .....	98
Blood Collection/Infusion Set .....	90	Lancelino Safety Lancets with Blade .....	99
VACUETTE® EVOPROTECT SAFETY		Lancelino Safety Lancets with Needle .....	99
Blood Collection Set + Luer Adapter .....	90	Safety Lancets with Blade .....	100
VACUETTE® EVOPROTECT SAFETY		Safety Lancets with Needle .....	100
Blood Collection Set + Holder .....	91	MiniCollect® PIXIE Heel Incision	
		Safety Lancet .....	101
/ SAFETY Blood Collection Set .....	92		
SAFETY Blood Collection/Infusion Set .....	93		
SAFETY Blood Collection Set			
+ Luer Adapter .....	93		
SAFETY Blood Collection Set + Holder .....	94		
SAFETY Blood Collection Set			
+ Blood Culture Holder .....	94		

## 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 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

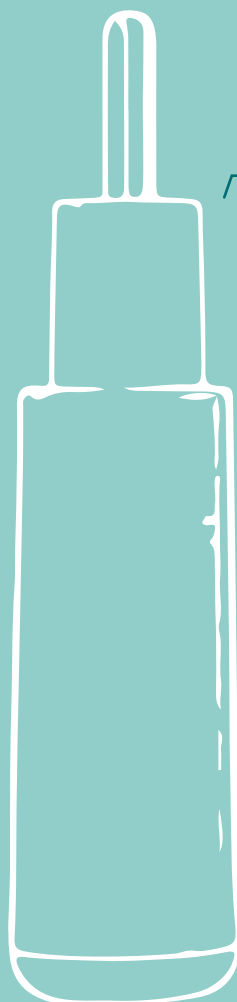
button  
activated  
safety lancet



contact  
activated  
safety lancet

available with  
needle or blade

ergonomic  
design for  
easy handling



non-detachable  
safety tab

especially for  
premature  
and new-born  
babies



ergonomic design  
and non-slip texture





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 at [www.power4safety.com](http://www.power4safety.com).



## 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, cannulas are already pre-as-

sembled. The protective shield is attached directly to the holder. By activating the protective shield with one hand 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 at [www.power4safety.com](http://www.power4safety.com).



## **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.

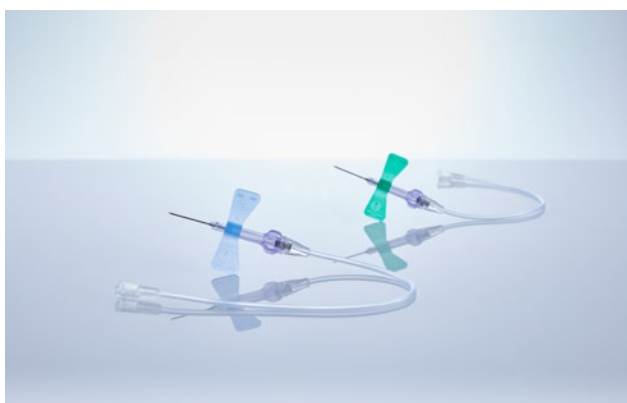
The VACUETTE® EVOPROTECT is ergonomically designed and intuitive to use. It consists of a winged needle with a safety mechanism, which is suitable for one-handed use due to its special design. By activating

the safety mechanism when the needle is still in the vein, needle stick 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

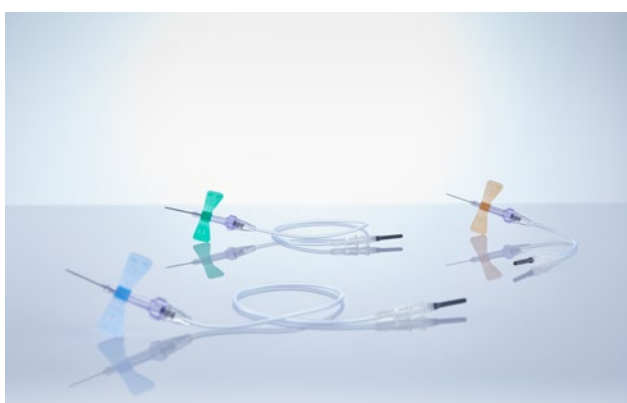


### VACUETTE® EVOPROTECT

#### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450120	● green	21 G	19 mm	extra thin wall	7.5 "	19 cm	60 / 1,080
450121	● blue	23 G	19 mm	extra thin wall	7.5 "	19 cm	60 / 1,080

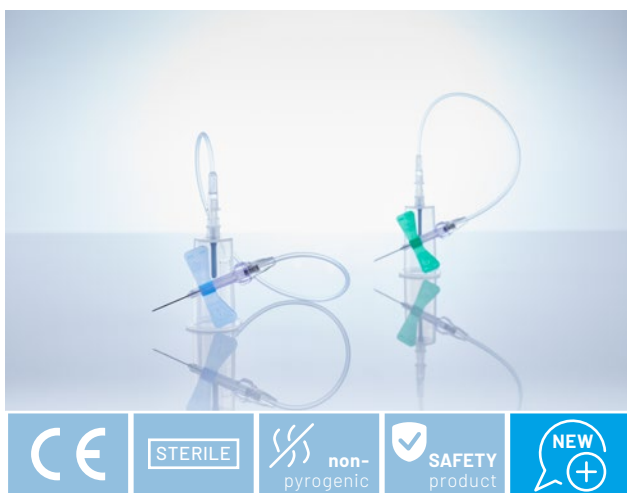


### VACUETTE® EVOPROTECT

#### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450127	● green	21 G	19 mm	extra thin wall	7.5 "	19 cm	60 / 1,080
450128	● green	21 G	19 mm	extra thin wall	12 "	30 cm	60 / 1,080
450129	● blue	23 G	19 mm	extra thin wall	7.5 "	19 cm	60 / 1,080
450130	● blue	23 G	19 mm	extra thin wall	23 "	30 cm	60 / 1,080
450132	● orange	25 G	19 mm	thin wall	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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450122	● green	21 G	19 mm	extra thin wall	7.5 "	19 cm	30 / 540
450123	● green	21 G	19 mm	extra thin wall	12 "	30 cm	30 / 540
450125	● blue	23 G	19 mm	extra thin wall	7.5 "	19 cm	30 / 540
450126	● blue	23 G	19 mm	extra thin wall	12 "	30 cm	30 / 540





/ You can also find out more about our safety products at [www.power4safety.com](http://www.power4safety.com).



## SAFETY BLOOD COLLECTION SET

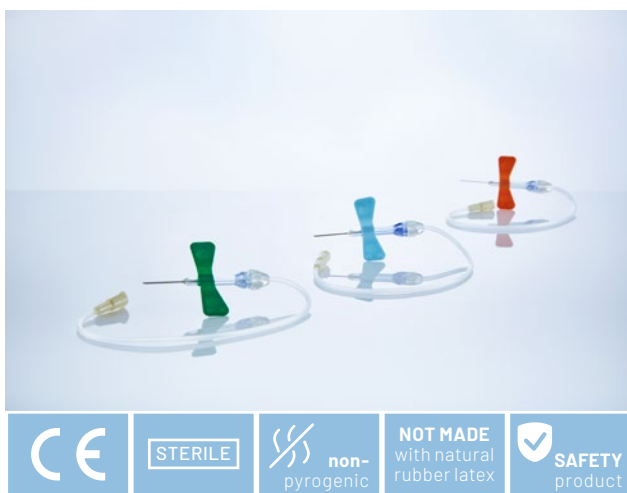
**The SAFETY Blood Collection Set was developed especially for patients with difficult vein conditions, but is also suitable for any other blood collection situation, as it offers the patient a particularly gentle collection comfort.**

The product offers a high level of safety by manually activating the protective mechanism 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 possible 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450091	● green	21 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000
450191	● green	21 G	19 mm	thin wall	12 "	30 cm	50 / 1,000
450092	● blue	23 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000
450090	● orange	25 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000



### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450083	● green	21 G	19 mm	thin wall	4 "	10 cm	50 / 1,000
450081	● green	21 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000
450095	● green	21 G	19 mm	thin wall	12 "	30 cm	50 / 1,000
450084	● blue	23 G	19 mm	thin wall	4 "	10 cm	50 / 1,000
450082	● blue	23 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000
450096	● blue	23 G	19 mm	thin wall	12 "	30 cm	50 / 1,000
450099	● orange	25 G	19 mm	thin wall	12 "	30 cm	50 / 1,000



### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450087	● green	21 G	19 mm	thin wall	4 "	10 cm	24 / 240
450085	● green	21 G	19 mm	thin wall	7.5 "	19 cm	24 / 240
450160	● green	21 G	19 mm	thin wall	12 "	30 cm	24 / 240
450088	● blue	23 G	19 mm	thin wall	4 "	10 cm	24 / 240
450086	● blue	23 G	19 mm	thin wall	7.5 "	19 cm	24 / 240
450161	● blue	23 G	19 mm	thin wall	12 "	30 cm	24 / 240



### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450182	● green	21 G	19 mm	thin wall	7.5 "	19 cm	24 / 240
450183	● blue	23 G	19 mm	thin wall	7.5 "	19 cm	24 / 240
450184	● green	21 G	19 mm	thin wall	12 "	30 cm	24 / 240
450185	● blue	23 G	19 mm	thin wall	12 "	30 cm	24 / 240



- / You can also find out more about our safety products at [www.power4safety.com](http://www.power4safety.com).



## **VACUETTE®** SAFETY WINGED SET

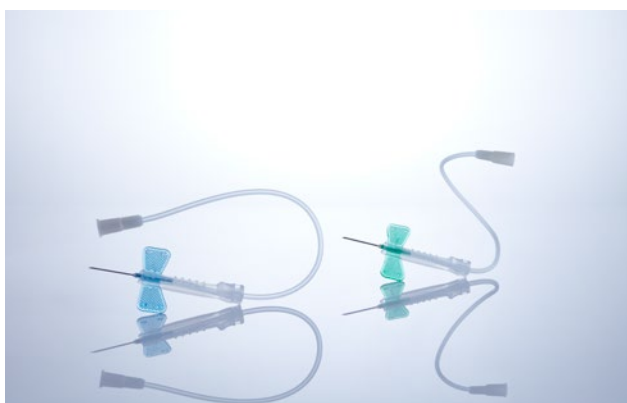
**The VACUETTE® SAFETY Winged Set is the ideal starter product when it comes to minimizing needlestick injuries.**

The VACUETTE® SAFETY Winged Set is a sterile blood collection set with plastic wings. The set consists of a stainless steel cannula, colour-coded wings according to needle size, a flexible tube, the Luer adapter and a plastic safety housing. The safety product without holder is also suitable for single use for short-term infusion of intravenous fluids.

- / Flexible wings promise good grip on the patient's skin and a comfortable puncture
- / The transparent design of the product ensures a good visualization of the blood flow
- / The needle is thin-walled and beneficial for blood flow

Each product is provided with a safety mechanism to reduce the risk of needlestick injuries. When blood collection is complete, the needle is carefully withdrawn from the patient's vein and the safety mechanism is activated immediately afterwards.

The audible click indicates that the needle is securely and irreversibly locked in the protective plastic housing. In the activated position, the safety mechanism protects against accidental needle sticks.



### VACUETTE® SAFETY

#### Winged Set Blood Collection/Infusion

This product is a sterile safety blood collection set equipped with plastic wings and is manufactured without Luer adapter and holder. It can be used for a short-term infusion, but may also be used alternatively for a blood collection.

*Safety mechanism: manual activation*

Item no.	Colour code	Needle size	Needle length	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
451091	● green	21 G	19 mm	thin wall	7"	18 cm	50 / 200
451092	● blue	23 G	19 mm	thin wall	7"	18 cm	50 / 200

/ Minimum order quantities and longer lead times may apply for this product.



### VACUETTE® SAFETY

#### Winged Set + Luer Adapter

This safety blood collection set is equipped with pre-assembled Luer adapter. It is suitable for blood collection after attaching a holder, but may also be used instead for short-term infusion after removing the Luer adapter.

*Safety mechanism: manual activation*

Item no.	Colour code	Needle size	Needle length	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
451081	● green	21 G	19 mm	thin wall	7"	18 cm	50 / 200
451082	● blue	23 G	19 mm	thin wall	7"	18 cm	50 / 200
451090	● orange	25 G	19 mm	thin wall	7"	18 cm	50 / 200
451095	● green	21 G	19 mm	thin wall	12"	30 cm	50 / 200
451096	● blue	23 G	19 mm	thin wall	12"	30 cm	50 / 200
451099	● orange	25 G	19 mm	thin wall	12"	30 cm	50 / 200

/ Minimum order quantities and longer lead times may apply for this product.



### VACUETTE®

### SAFETY Winged Set + Holder

This safety blood collection set is equipped with pre-assembled Luer adapter and holder. It is intended for one blood collection procedure. It allows immediate start of blood collection without assembly with other components.

*Safety mechanism: manual activation*

Item no.	Colour code	Needle size	Needle length	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
451085	● green	21 G	19 mm	thin wall	7 "	18 cm	25 / 200
451086	● blue	23 G	19 mm	thin wall	7 "	18 cm	25 / 200
451160	● green	21 G	19 mm	thin wall	12 "	30 cm	25 / 200
451161	● blue	23 G	19 mm	thin wall	12 "	30 cm	25 / 200

/ Minimum order quantities and longer lead times may apply for this product.



/ 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 plastic 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





### 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



### 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
450520	● light green	30 G	1.2 mm	200 / 2,000
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



### 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



### 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



### MiniCollect® PIXIE Heel Incision Safety Lancet

MiniCollect® PIXIE is a safety incision lancet for the heel. Despite its low penetration depth, PIXIE gently ensures maximum blood flow. The device is optimally suited for premature and newborn babies. The three lancet types differ in penetration depth and incision length.

*Safety mechanism: automatic activation*

Item no.	Colour code	Penetration depth	Incision length	Qty. inner / outer
450525	● light green	0.65 mm	1.4 mm	50 / 200
450526	● orange	0.85 mm	1.75 mm	50 / 200
450527	● yellow	1 mm	2.5 mm	50 / 200



Our I.V. and arterial catheters have very good puncture properties and are user-friendly and safe. Users need not worry about needlestick injuries and can concentrate on providing the best possible care for their patients.

## VASCULAR CATHETERS

/ CLiP® Safety I.V. Catheter.....	104
CLiP® Neo Automatic Safety I.V. Catheter .....	105
CLiP® Winged Automatic Safety I.V. Catheter .....	105
CLiP® Ported Automatic Safety I.V. Catheter .....	106
/ SWiTCH Safety Arterial Catheter.....	107
SWiTCH Automatic Safety Arterial Catheter.....	108



/ You can also find out more about our safety catheters at [www.stick-to-safety.com](http://www.stick-to-safety.com).



## **CLIP® SAFETY** **I.V. CATHETER**

**The CLiP® Safety I.V. Catheter enables a safe and successful puncture.**

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

available in many sizes and variations. The CLiP® Neo is ideal for the smallest patients - newborns and infants - or elderly people. It was developed especially for thin veins.

CLiP® Winged and CLiP® Ported are available in a variety of sizes, lengths and materials to provide you with the best conditions for your individual needs. CLiP® Winged has additional wings.

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



### CLiP® Neo Automatic Safety I.V. Catheter

CLiP® Neo is an automatic safety I.V. catheter designed for small veins found in the neonatal, paediatric or elderly patient groups. The product is available in 24 and 26 gauges to cater for individual requirements.

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



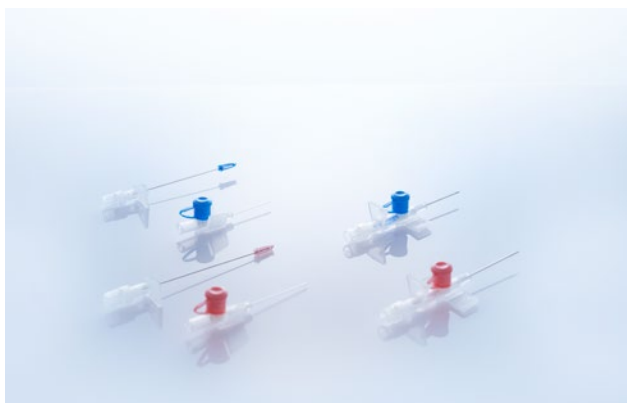
### CLiP® Winged Automatic Safety I.V. Catheter

CLiP® Winged is an automatic safety I.V. catheter available in a comprehensive range. The products have been developed with the user and patient in mind - configured to provide excellent insertion properties.

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



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 I.V. Catheter

CLiP® Ported is an automatic safety I.V. 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	50 / 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



- / You can also find out more about our safety catheters at [www.stick-to-safety.com](http://www.stick-to-safety.com).



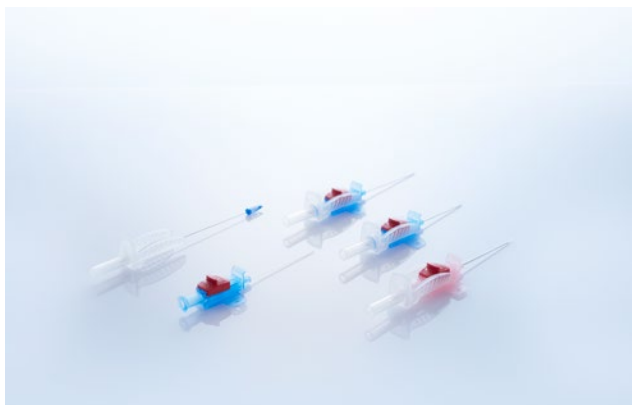
- / Automatic safety mechanism to prevent needlestick injuries
- / Flow switch for user-controlled blood flow
- / Optimized flashback chamber for quick blood response and placement control
- / Carefully selected lengths and gauge sizes for a higher first-attempt success rate
- / Stabilization wings for secure fixation

## **SWITCH SAFETY** **ARTERIAL CATHETER**

**SWiTCH enables a safe and successful puncture.**

SWiTCH is a needle-protected arterial catheter with flow switch. The product is available in a carefully selected num-

ber of gauge sizes and lengths to cater to demanding physical conditions and different clinical needs. SWiTCH has been developed with the user and patient in mind and its use contributes to a safe and successful insertion.

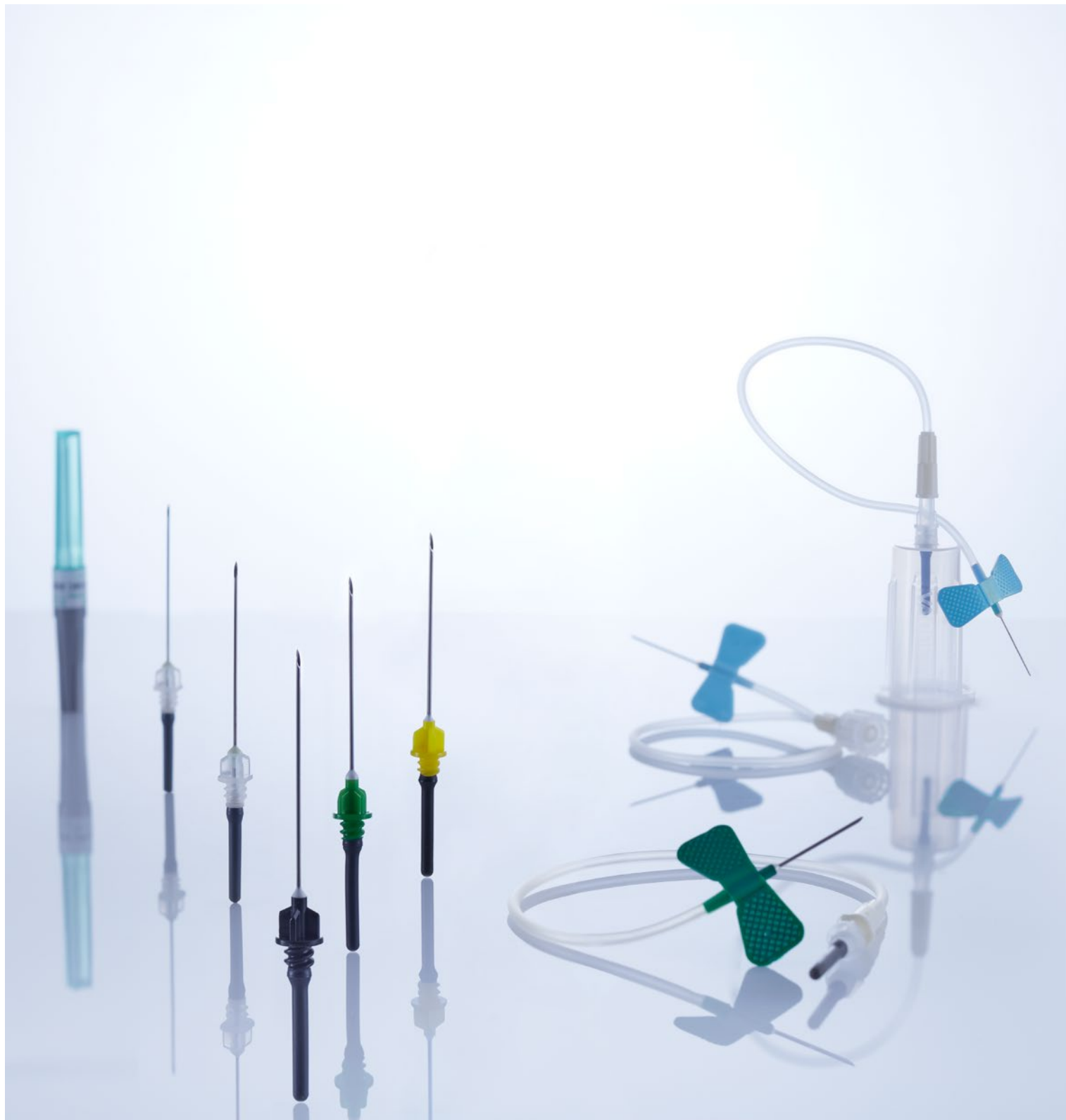


#### SWiTCH Automatic Safety Arterial Catheter

SWiTCH is a needle-protected arterial catheter with flow switch. SWiTCH is available in a carefully selected number of gauge sizes and lengths to cater to demanding physical conditions and different clinical needs.

Item no.	Catheter material	Needle size	Catheter dimension	Colour code	Catheter flowrate	Qty. inner / outer
SW204511	PUR	20 G	1.1 x 45	● pink	49	25 / 250
SW223511	PUR	22 G	0.9 x 35	● blue	27	25 / 250
SW224511	PUR	22 G	0.9 x 45	● blue	27	25 / 250
SW204501	FEP	20 G	1.1 x 45	● pink	49	25 / 250
SW223501	FEP	22 G	0.9 x 35	● blue	27	25 / 250
SW224501	FEP	22 G	0.9 x 45	● blue	27	25 / 250





Greiner Bio-One offers a variety of blood collection cannulas 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

/ Blood Collection Needles .....	112
VACUETTE® VISIO PLUS Needles.....	113
VACUETTE® Multiple Use Drawing Needles.....	113
/ Blood Collection Sets .....	115
Blood Collection/Infusion Set .....	116
Blood Collection Set + Luer Adapter .....	116
Blood Collection Set + Holder .....	117



- / 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. All cannulas are available in various dimensions and different lengths.

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





### VACUETTE® VISIO PLUS Needles

This cannula 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
450040	● green	21 G	1.5 "	38 mm	2,000 / 6,000
450041	● black	22 G	1.5 "	38 mm	2,000 / 6,000
450042	● green	21 G	1 "	25 mm	2,000 / 6,000
450043	● black	22 G	1 "	25 mm	2,000 / 6,000



### VACUETTE® Multiple Use Drawing Needles

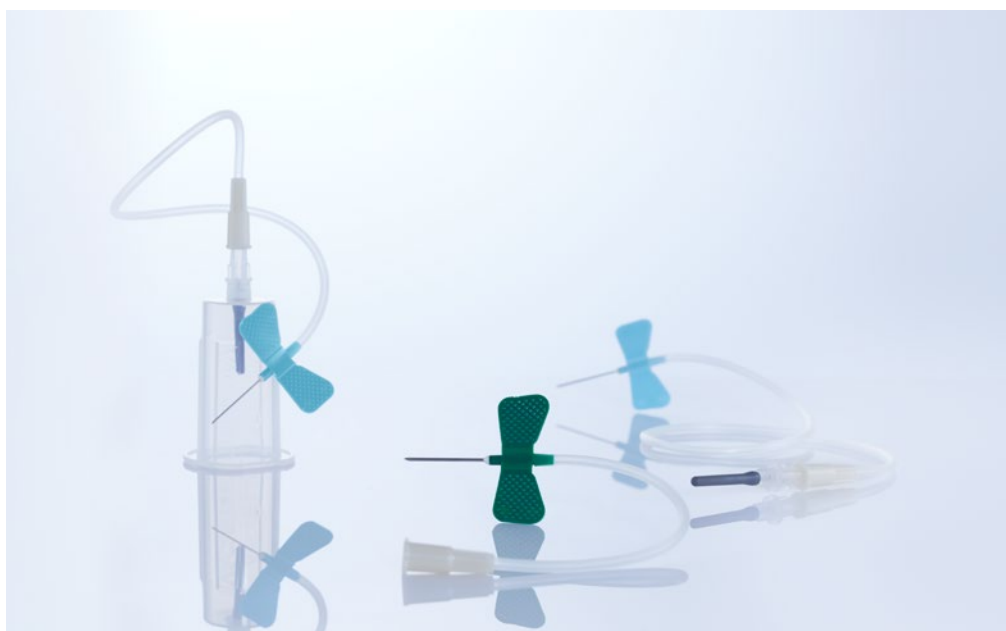
Blood Collection Needles are predominantly used in routine blood collection and are exclusively single use. The colour of the needle protective cap simplifies visual recognition of the individual needle gauges.

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
451071	● black	22 G	1 "	25 mm	100 / 1,000

Item no.	Colour code	Needle size	Needle length	Needle length	Qty. inner / outer
451072	● green	21 G	1 "	25 mm	100 / 1,000
451073	● yellow	20 G	1 "	25 mm	100 / 1,000
451075	● black	22 G	1.5 "	38 mm	100 / 6.000



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



## BLOOD COLLECTION SETS

Blood collection sets, also known as winged cannula 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 Collec-

tion Sets are available with different 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450059	● green	21 G	19 mm	thin wall	4 "	10 cm	50 / 1,000
450153	● green	21 G	19 mm	thin wall	7.5 "	19 cm	50 / 1,000
450155	● blue	23 G	19 mm	thin wall	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 a blood culture holder.

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



### 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	Needle wall type	Tubing length	Tubing length	Qty. inner / outer
450371	● green	21 G	19 mm	thin wall	7.5 "	19 cm	24 / 240
450373	● blue	23 G	19 mm	thin wall	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

/ Tube Holders .....	120
Standard Tube Holders .....	121
Speedy Quick Release Holder .....	121
HOLDEX® Single-Use Holders .....	122
VACUETTE® SAFELINK .....	122
VACUETTE® Blood Transfer Unit .....	123
VACUETTE® Blood Culture Holder .....	123
/ Luer Adapter .....	124
VACUETTE® Luer Adapter .....	125
/ VACUETTE® Tourniquets.....	126
VACUETTE® Tourniquets .....	127
VACUETTE® Disposable Tourniquets .....	127
/ VACUETTE® ID Snap Rings .....	128
VACUETTE® ID Snap Rings Starter Kit.....	129
VACUETTE® ID Snap Rings .....	129
/ Blood Collection Tray .....	130
Blood Collection Tray .....	131





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



## TUBE HOLDERS

**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

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



### Standard Tube Holders

Holders are used in the daily blood collection routine. Tube Holders 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
450201	10 / 1,200
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.

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



STERILE

### 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 allows quick and easy connection with blood collection accessories with female luer connector.

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



STERILE

NOT MADE  
with natural  
rubber latex

### 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



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

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. Also available in a sterile pre-assembled version.

Item no.	Description	Qty. inner / outer
450181	VACUETTE® Blood Culture Holder, non-sterile	40 / 320
450197	VACUETTE® Blood Culture Holder + Luer Adapter 20G, single-packed, sterile	24 / 240



/ 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 a quick and

easy to assemble 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 needles with a female Luer-connector.

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



STERILE

non-  
pyrogenicNOT MADE  
with natural  
rubber latex**VACUETTE® Luer Adapter**

The VACUETTE® Luer Adapter is for use in venous blood collection with attached butterfly 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	Needle wall type	Qty. inner / outer
450070	● royal blue	20 G	regular wall	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 offers a wide range of products for tourniquets, which also includes the popular Super-T disposable tourniquet. Super-T is super simple, super practical and super hygienic. This tourniquet is intended for single use.

In addition, there is the VACUETTE® Tourniquet, which can be used several times. Like the VACUETTE® Super-T, the tourniquet is latex-free, since a latex allergy can have serious consequences (for the patient or user).

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. VACUETTE® Super-T is made of almost tear-proof silicone and lies soft and elastic on the patient's arm. VACUETTE® Disposable Tourniquets are also intended for single use.

Item no.	Description	Length	Qty. inner / outer
840053	VACUETTE® Disposable Tourniquet, synthetic rubber, non-sterile	480 mm	500 / 2,500
840056	VACUETTE® Super-T Disposable Tourniquet	450 mm	80 / 160



/ 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****Starter Kit**

VACUETTE® ID Snap Rings are available as a starter kit with 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.

*Description: contains all 5 colours (orange, green, pink, blue, grey) + rack*

Item no.	Qty. inner / outer
458710	1,000 / 5,000

**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



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 .....	134
Minicompact Disposal Boxes .....	135
Biocompact Disposal Boxes .....	135
Biogrip Disposal Boxes .....	136





/ 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 dangerous objects. 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 dangerous objects. 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 / 30



#### 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 dangerous objects. 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

/ VACUETTE® Transport Line.....	140
VACUETTE® Transport Boxes .....	141
VACUETTE® Transport Containers .....	141
/ VACUETTE® Transport Line	
Accessories.....	142
Transport Bags .....	143



- / 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 cooled. 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.

But not only regulatory compliance and sample quality are ensured by using our transport solutions, also work efficiency and user comfort were consequently realized by the innovative product design: Quick and easy loading and unloading with samples, low weight and extreme robustness makes everyday life easier for health-care 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](http://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 transport 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 stickers 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, 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

/ Snap Caps .....	146
Snap Caps .....	147
/ Manual ESR System .....	148
ESR Pipettes .....	149
ESR Racks .....	149
/ VacuDrop .....	150
VacuDrop .....	151
/ VACUETTE® SECONDARY Tubes.....	152
VACUETTE® SECONDARY Tubes SIMPLEX .....	153
VACUETTE® SECONDARY Tubes MULTIPLEX .....	153
/ MiniCollect® Accessories Tubes .....	154
MiniCollect® Carrier Tube .....	155
Extra Cap.....	155
/ Multipurpose Beaker .....	156
Multipurpose Beaker .....	157
Screw Caps .....	157



/ 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.**

Snap Caps are simple pull-off caps and available in many dif-

ferent colours. They are used to recap VACUETTE® Tubes with 13 mm diameter.

Thanks to the rubber material and their fit, the Snap Caps are easy to push on or pull off the tube.

- / Available in various colours
- / For VACUETTE® Tubes with 13mm diameter
- / Made of polyethylene (PE)



### 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

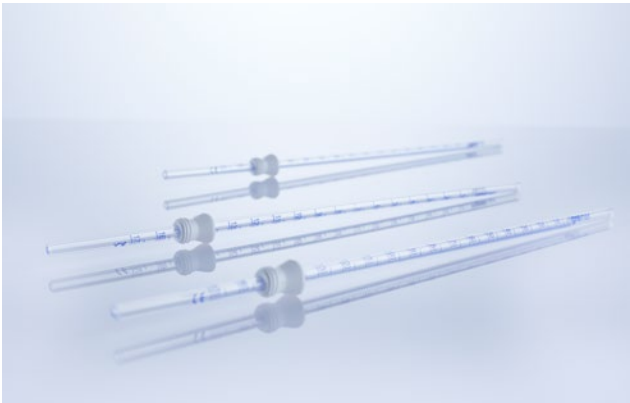
Greiner Bio-One offers you an extensive range of products for manual ESR Systems as well as various accessories.

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.

- / Graduated ESR pipette with rubber adapter
- / ESR rack with or without graduation

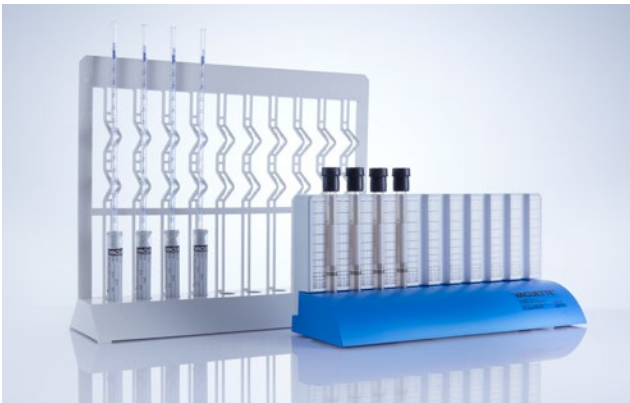


**ESR Pipettes**

Greiner Bio-One offers disposable graduated ESR pipettes with rubber adapter for the manual measurement of the erythrocyte sedimentation rate.

Description: ESR pipette with adapter, graduated, 200 mm for 454073, Graduation: yes

Item no.	Qty. inner / outer
727111	200 / 800



**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
836072	ESR Rack without graduation, for 454073	○ white	1 / 5
836075	ESR Rack with graduation, for 729070 / 729090	● blue-white	1 / 8
836077	ESR Rack with graduation, for 729073 / 729093	● blue-white	1 / 8





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



## VACUDROP

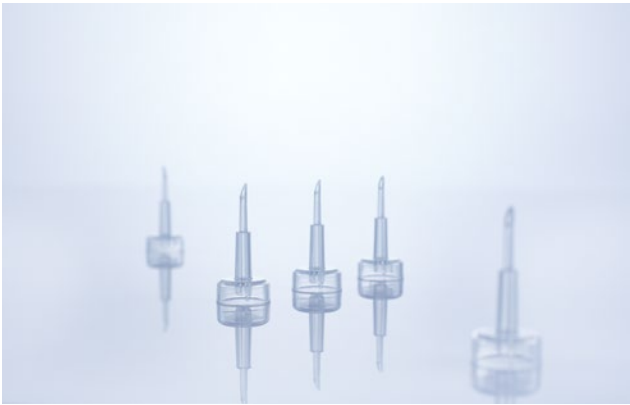
**VacuDrop enables the hygienic transfer of an EDTA blood droplet.**

VacuDrop is a non-sterile plastic spike used to obtain drops of blood. The product is to be used in combination with VACUETTE®

EDTA Blood Collection Tubes and ensures hygienic handling of blood samples.

With VacuDrop, the blood collection tube does not need to be opened. The cap can be pierced with the plastic spike and the sample taken.

- / Easy handling
- / Hygienic transfer of samples
- / No need to open the tubes



**VacuDrop**

The VacuDrop from Greiner Bio-One is easy to handle and is used for hygienic transfer of samples. With VacuDrop, it is not necessary to open the tube beforehand. The tube cap can be pierced with the pointed plastic spike to obtain drops of blood.

Item no.	Qty. inner / outer
458815	300 / 3,000



- / 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 improve 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



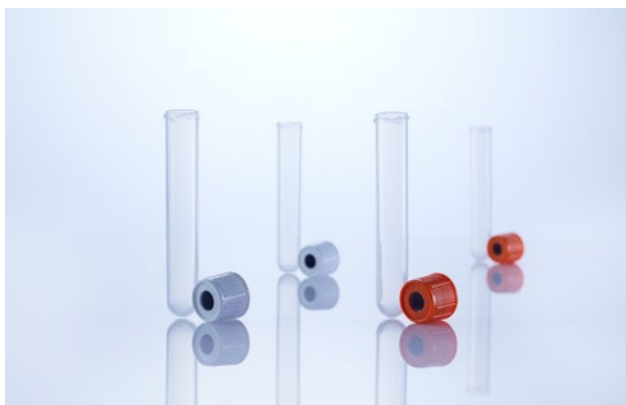
### VACUETTE® SECONDARY Tubes SIMPLEX

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.



### 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 AUT001-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

**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



### Extra Cap

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

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



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



## MULTIPURPOSE BEAKER

**The Multipurpose Beaker of Greiner Bio-One is a hygienic all-rounder and offers you a variety of advantages.**

The Greiner Bio-One multipurpose beaker is manufactured from polypropylene. The beaker

features an integrity seal, which ensures integrity and sterility of the interior. It is no longer necessary to individually pack each beaker.

The beaker is leak-proof, unbreakable and resistant against many chemical influences.

- / Integrity seal guarantees sterility
- / Timesaving – no individual packaging
- / Sterile
- / Leak-proof
- / Unbreakable
- / Resistant against many chemical influences



### Multipurpose Beaker

The multi-purpose cup from Greiner Bio-One is available in two different versions: with ring screw cap or without lid. All cups are graduated, unbreakable and resistant to chemical influences.

Graduation: yes, Ø: 61 mm, Height: 71 mm, Nominal volume: 100 ml

Item no.	Description	Cap colour	Cap design	Qty. inner / outer
724401	beaker, bottom part			720 / 720
724402	Multipurpose Beaker	○ natural	screw cap	300 / 300
724461	Multipurpose Beaker	○ natural	screw cap	1 / 300
724473	Multipurpose Beaker	○ natural	screw cap	300 / 300

/ Item No., lot number and expiry date are printed on the base of the beaker to provide additional information and improve traceability



### Screw Caps

The ring screw cap for the Greiner Bio-One multi-purpose cup is available in white (61 mm) and red (60 mm).

Description: screw cap

Item no.	Product colour	Qty. inner / outer
724173	● red	720 / 720
724170	○ natural	720 / 720





Our devices include decapping devices for the automated, quick and safe opening of VACUETTE® Blood Collection Tubes or devices such as the automatic ESR system, the VACUETTE® Multimixer or our VeinViewer®, which allows you to look under the skin of your patients and can be of help before, during and after venipuncture.

# DEVICES

/	VeinViewer® .....	160
	VeinViewer® Flex .....	161
	VeinViewer® Vision2 .....	161
	VeinViewer® Accessories .....	162
/	VACUETTE® Decapper .....	163
	VACUETTE® UNICAP Decapper .....	164
	VACUETTE® UNICAP Decapper Accessories ....	164
/	Automatic ESR System .....	165
	Sed Rate Screener .....	166
	Sed Rate Timer .....	166
	Automatic ESR Systems Accessories .....	167
/	VACUETTE® MultiMixer.....	168
	VACUETTE® MultiMixer .....	169
	VACUETTE® MultiMixer Accessories .....	169



/ 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 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



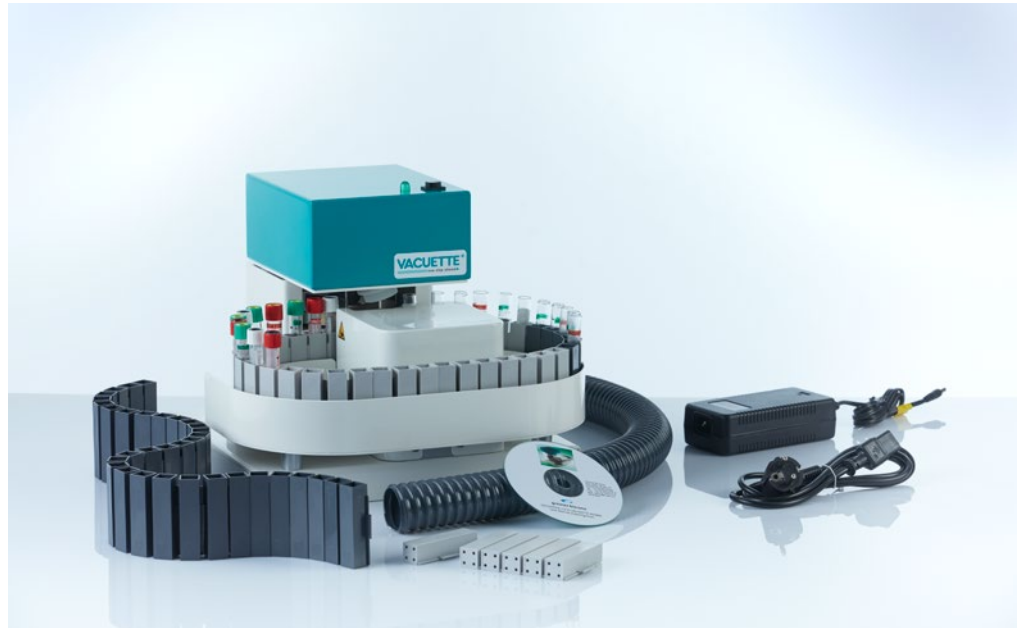
### **VeinViewer® Accessories**

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 /
890011A	Adapter for Charging Station Rechargeable Battery for VeinViewer® Flex	1 /
890010	Spare Rechargeable Battery for VeinViewer® Flex and Vision 2	1 /



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



## **VACUETTE®** DECAPPER

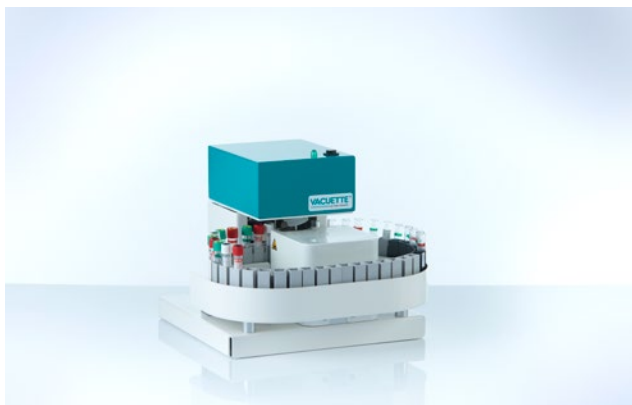
**The VACUETTE® UNICAP Decapper quickly and safely decaps VACUETTE® blood collection tubes.**

- / Quick and safe opening of VACUETTE® Tubes
- / Directly after inserting the tubes into an adapter chain
- / No presorting of the tubes necessary

Tubes just need to be inserted into a "belt" with adapters of the same or different composition. No time-consuming sorting of

tubes before decapping is required, since the UNICAP Decapper can open different types of VACUETTE® tubes in a single operation.

At Greiner Bio-One, in addition to the UNICAP Decapper you will also find accessories such as UNICAP Belt Adapter.



### VACUETTE® UNICAP Decapper

The VACUETTE® UNICAP Decapping Device can decap up to 40 VACUETTE® tubes of the dimensions 13 x 75, 13 x 100 and 16 x 100 mm in one run. The belt can be individually composed of 75 and 100 mm tube length adapter elements.

*Description: with two belt adapters (for 75 mm and 100 mm tubes)*

Item no.	Qty. inner / outer
855904	- /1



### VACUETTE® UNICAP Decapper Accessories

Greiner Bio-One offers two different belts, each consisting of 40 individual tube adapters: One for tube length 75 mm and one for 100 mm.

Item no.	Description	Qty. inner / outer
855907	Belt Adapter for VACUETTE® UNICAP Decapper for 100 mm tubes	- /1
855908	Belt Adapter for VACUETTE® UNICAP Decapper for 75 mm tubes	- /1



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



## AUTOMATIC ESR SYSTEM

- / High performance motor is practically silent
- / Quality control program
- / Remaining analysis time is displayed
- / Closed system for hygienic working
- / ESR results after only 15 Minutes measuring time

Cost effectiveness is an essential aspect of daily routine activities on the ward, in laboratories or in the doctor's office. In order to increase efficiency on a long-term basis, a cost-effective centralization of the erythrocyte sedimentation rate analysis still remains an important step.

The VACUETTE® erythrocyte sedimentation rate analyzers from Greiner Bio-One can help. In combination with the VACUETTE® ESR tubes (9 x 120 mm) made out of virtually un-

breakable plastic, you can save time due to different measuring times and increase the safety standard in your laboratory.

Tubes can be inserted into the instrument at any time during the analysis process. Since the tubes are analysed separately, there are no delays. Before measuring, there is an automatic fill level check.

In addition to the measuring instruments, Greiner Bio-One also offers suitable accessory products such as PP plastic tubes or the barcode scanner.



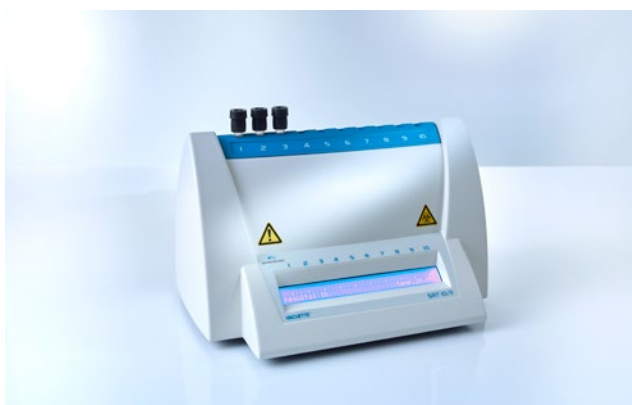


IVD

**Sed Rate Screener**

Sed Rate Screener automatic ESR readers are available in two versions including software: with 100 measuring channels (100 tubes) or with 20 measuring channels (20 tubes). A printer is integrated in the device.

Item no.	Description	Qty. inner / outer
836580	SRS 100/II incl. software (G2S140B0, vers.1.4) automatic ESR reader with integrated printer (for 100 tubes)	- /1
836587	SRS 20/II incl. software (G2P140B0, vers. 1.4) automatic ESR reader with integrated printer (for 20 tubes)	- /1



IVD

**Sed Rate Timer**

Sed Rate Timer automatic ESR reader SRT 10/II is available with 10 measuring channels (10 tubes) including software. This product is best suited for smaller laboratories or medical practices.

*Description: SRT 10/II incl. software (G2M110B0, vers. 1.1) automatic ESR reader (for 10 tubes)*

Item no.	Qty. inner / outer
836592	- /1



### Automatic ESR Systems Accessories

The range of accessories for automatic ESR systems includes a thermal printer, printer paper, a barcode scanner, the ESR control unit and Accused Plus QC control blood for periodic quality checks.

Item no.	Description	Qty. inner / outer
836582	Thermal printer for SRT 10/II, SRS 20/II and SRS 100/II	- /1
836283	Barcode Scanner for SRS 20/II and SRS 100/II	- /1
836585	Thermal paper roll for Thermal printer 836582 and integrated printers 836580 & 836587	5 / 50
836588	ESR Control Unit for SRT 10/II, SRS 20/II and SRS 100/II	- /1
836595	ACCUSED PLUS QC Control Blood for SRS	



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



## VACUETTE® MULTIMIXER

The VACUETTE® MultiMixer is a simple and reliable instrument for mixing of blood or other liquids. Different types of tube can be mixed in a choice of rack adapters.

Our VACUETTE® MultiMixer is a rotation mixer for up to 40 tubes.

The product enables a flexible working procedure thanks to removable tube racks and allows simultaneous mixing of different tube sizes.

Four different mixing programs are available. The mixing time should last at least 5 minutes.

- / Highest precision
- / Acoustic and optical signal
- / Ready for analysis in only 5 minutes

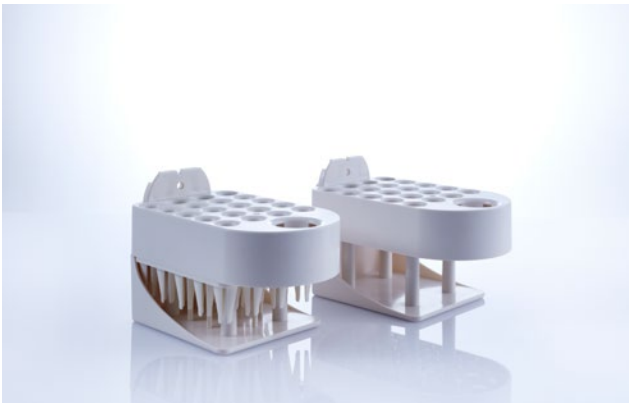


### VACUETTE® MultiMixer

The VACUETTE® MultiMixer is a simple and reliable instrument for mixing of blood or other liquids. The microprocessor of the product controls different programs and speeds of mixing to ensure accuracy and reproducibility of results.

*Description: for VACUETTE® Tubes, Racks not included*

Item no.	Qty. inner / outer
836577	- /1



### VACUETTE® MultiMixer Accessories

Greiner Bio-One offers racks for the VACUETTE® MultiMixer for 9 mm and 13 mm VACUETTE® Tubes.

Item no.	Description	Qty. inner / outer
836578	Rack for VACUETTE® 20-Pos. MultiMixer, for 9 mm VACUETTE® Tubes	- /1
836579	Rack for VACUETTE® 20-Pos. MultiMixer, for 13 mm VACUETTE® Tubes	- /1



Urine, like blood, is a potentially infectious sample material. 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, beakers, sets and various accessories.

## URINE COLLECTION SYSTEM

/	VACUETTE® Urine Tubes .....	172
	VACUETTE® Z Urine Tubes No Additive .....	173
	VACUETTE® Urine CCM Tubes .....	174
/	Urine Sets .....	175
	Urine Sets .....	176
	Urine CCM Sets .....	176
/	Accessories Urine Collection .....	177
	Urine Transfer Devices .....	178
	Urine Beakers .....	178
	24h Urine Containers .....	179



/ 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 CCM or without preservatives. The preservative helps stabilize the sample, which is important when the sample cannot be analysed within 2 hours of collection.

VACUETTE® Urine CCM Tubes

should be inverted 6-8 times following collection in order to achieve homogenous mixing. Urine Tubes can be ordered with either a round base or a conical base. Round-based tubes are used for chemical urine tests, whilst tubes with a conical base are used for microscopic examinations of urine sedimentation.

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 as collection and/or transport tubes in chemical urine analysis, urine test strips, for microbiological studies and urine microscopy. 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	Bar-code	Qty. inner / outer
485510	10 ml	● yellow	● yellow	non-ridged	16 x 100	round	paper	yes	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
455227	7 ml	● yellow	● yellow	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	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	yes	50 / 1,200





IVD

STERILE

### VACUETTE®

#### Urine CCM Tubes

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

Item no.	Nominal volume	Cap colour	Ring colour	Thread type	Tube size	Bottom shape	Label	Bar-code	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	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



IVD

### 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.

Item no.	Description	Nominal volume	Bottom shape	Qty. inner / outer
453070	Urine Set 16x100 (VACUETTE® Tube Z Urine No Additive Item.no. 455028 + Urine Transfer Device Item.no. 450751) single-packed	9 ml	conical	- /300



IVD

### 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	- /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

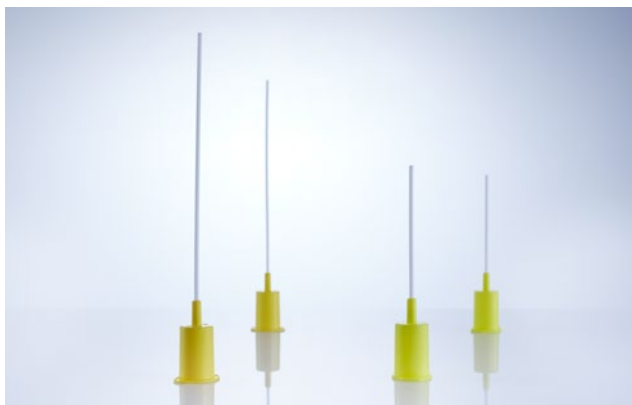
- / Wide range of accessory products
- / Urine beakers, sterile or non-sterile
- / 24 Hours Urine Container
- / Products available with or without integrated transfer device
- / Urine Transfer Device

**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.



IVD

### 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	1 / 400
450264	short, single-packed, non-sterile	1 / 400



IVD

### Urine Beakers

Most urine beakers from Greiner Bio-One come with a transfer device already integrated in the cap of the beaker. This feature gives you the advantage of being able to perform the sample transfer cleanly.

Graduation: yes

Item no.	Description	Cap colour	Cap design	Qty. inner / outer
724310	with integrated Transfer Device, single-packed, sterile	● yellow	screw cap	1 / 200
724311	with integrated Transfer Device, sterile	● yellow	screw cap	5 / 200
724312	with integrated Transfer Device, non-sterile	● yellow	screw cap	- / 300
724320	bulk-packed, sterile	● yellow	ring screw cap	- / 300



### 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



On the basis of a liquid saliva extraction solution, Greiner Bio-One has developed a collection and quantification system, that is suitable for a broad range of applications. The system consists of a saliva extraction solution for the collection, a collection beaker, two evacuated tubes for the laboratory tests and the Saliva Quantification Kit.

# **SALIVA COLLECTION AND QUANTIFICATION SYSTEM**

/	Saliva Collection System .....	182
	Saliva Collection System Self Collection.....	183
	Saliva Collection System Professional Use ....	183
	Saliva Transfer Tube Professional Use .....	184
	Saliva Collection Beaker Professional Use.....	184
/	Quantification System .....	185
	Greiner Bio-One Saliva Quantification Kit .....	186





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



## SALIVA COLLECTION SYSTEM

**The easy collection method and permanent availability make saliva an interesting alternative to other specimen materials such as urine or blood.**

Saliva is particularly suitable, if samples are required quickly, efficiently and non-invasively. The collection and quantification system on the basis of a liquid saliva extraction solution is suit-

able for a broad range of applications, ranging from therapeutic drug monitoring to hormone analytics to drug screening. For saliva collection, Greiner Bio-One offers a system for self-testing as well as one for professional use. The range is completed by the Saliva Quantification Kit, which is used to determine the saliva quantity of the saliva extraction solution photometrically.

- / Saliva collection system for self-collection
- / Saliva collection system for professional use
- / Saliva quantification kit



### Saliva Collection System

#### Self Collection

Self-collection means that the test person can do the saliva collection his/herself without the assistance of any medical personnel. The system as well as the corresponding instructions for use are for self-collection.

*Description: single-packed, for self-testing, consisting of: 881210, 881113 a. 881112*

Item no.	Qty. inner / outer
881001	1 / 24



### Saliva Collection System

#### Professional Use

Doctors or medical personnel additionally have the option of purchasing the following single products to create their own setting for saliva collection.

*Description: bulk-packed, 50 sets, for professional use, consisting of: 881112, 881210 u. 881113*

Item no.	Qty. inner / outer
881002	- / 50



### Saliva Transfer Tube

#### Professional Use

Doctors or medical personnel additionally have the option of purchasing the saliva transfer tube as a single product. The saliva transfer tube is used for quick transfer as well as stabilization of the sample.

Item no.	Nominal volume	Cap colour	Ring colour	Thread type	Tube size	Description	Label	Qty. inner / outer
881112	4 ml	● royal blue	● royal blue	non-ridged	13 x 75	Saliva Extraction Solution pH 4.2	paper	50 / 1,200
881113	3.5 ml	● orange	● orange	PREMIUM	13 x 75	with Sleeve	paper	50 / 1,200
881117	3.5 ml	● orange	● orange	PREMIUM	13 x 75	without Sleeve	paper	50 / 1,200



### Saliva Collection Beaker

#### Professional Use

Doctors or medical personnel additionally have the option of purchasing the saliva collection beaker as a single product. The saliva collection beaker is intended to be used for collection of saliva after rinsing.

*Cap design: screw cap with integrated transfer device*

Item no.	Cap colour	Qty. inner / outer
881210	● orange	1 / 200



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



## QUANTIFICATION SYSTEM

**The Greiner Bio-One Saliva Quantification Kit is an in vitro diagnostic product exclusively intended for determining the saliva content in saliva samples.**

Saliva samples are collected using the Greiner Bio-One Saliva Collection System. It is necessary to know the saliva content, in order to be able to determine the original analyte concentration. Saliva collection using the Greiner Bio-One Saliva Collection System causes individual dilution of the collected saliva sample by rinsing out the mouth cavity with the saliva extraction solution, thus changing the original analyte concentration.

The Greiner Bio-One Saliva Quantification Kit does not permit the direct determination of analytes from saliva. Examinations from saliva, which give information on the composition of saliva, are only possible when used in combination with specific in vitro diagnostic products.

Samples collected with the Greiner Bio-One Saliva Collection System contain the food dye tartrazine as internal standard. Using the saliva calibrator, the internal standard is determined photometrically and the saliva content of the saliva sample is back calculated.

- / Photometric analysis of the saliva portion
- / No direct determination of analytes from saliva possible
- / Saliva calibrator for photometric determination and recalculation of saliva content



**Greiner Bio-One**  
**Saliva Quantification Kit**

With the Saliva Quantification Kit, the saliva quantity is photometrically determined in the saliva extraction solution. The internal standard in the sample is calculated using saliva calibrators and back calculated to the saliva quantity.

Item no.	Qty. inner / outer
881010	1 / 1





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

/	VACUETTE® Virus Stabilization Tube ...	190
	VACUETTE® Virus Stabilization Tube .....	191





/ 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

# APPENDIX

# NUMERIAL INDEX

370267B .....	155	450132.....	90	450438.....	100	451160.....	97	454332.....	31
371516.....	147	450153.....	116	450439.....	100	451161.....	97	454334.....	31
371517.....	147	450155.....	116	450520.....	99	453031.....	176	454381.....	32
371518.....	147	450159.....	116	450521.....	99	453032.....	176	454385.....	32
371519.....	147	450160.....	94	450522.....	99	453034.....	176	454387.....	32
371522.....	147	450161.....	94	450523.....	99	453070.....	176	454410.....	42
371523.....	147	450181.....	123	450524.....	99	454001.....	46	454411.....	42
371527.....	147	450182.....	94	450525.....	101	454008.....	39	454421.....	61
450040.....	113	450183.....	94	450526.....	101	454020.....	42	454486.....	174
450041.....	113	450184.....	94	450527.....	101	454021.....	44	454489.....	39
450042.....	113	450185.....	94	450530.....	77	454023.....	42	454513.....	51
450043.....	113	450191.....	93	450531.....	77	454024.....	42	454514.....	51
450059.....	116	450197.....	123	450532.....	77	454028.....	35	454591.....	36
450064.....	116	450201.....	121	450533.....	73	454036.....	44	455001.....	46
450065.....	116	450209.....	121	450534.....	73	454047.....	42	455007.....	173
450066.....	116	450210.....	122	450535.....	75	454067.....	35	455010.....	35
450070.....	125	450212.....	121	450536.....	75	454071.....	35	455021.....	43
450071.....	113	450216.....	122	450537.....	75	454073.....	59	455028.....	173
450072.....	113	450225.....	123	450539.....	71	454081.....	38	455034.....	36
450073.....	113	450226V1 .....	88	450540.....	79	454083.....	39	455036.....	44
450075.....	113	450228V1 .....	88	450541.....	79	454086.....	43	455040.....	43
450076.....	113	450230.....	87	450545.....	77	454087.....	43	455045.....	42
450077.....	113	450235V1 .....	88	450546.....	77	454088.....	46	455051.....	40
450081.....	93	450237V1 .....	87	450547.....	77	454089.....	38	455052.....	174
450082.....	93	450238V1 .....	87	450548.....	73	454092.....	34	455055.....	53
450083.....	93	450239V1 .....	88	450549.....	73	454096.....	34	455056.....	54
450084.....	93	450241.....	122	450550.....	75	454098.....	34	455057.....	35
450085.....	94	450251.....	178	450551.....	75	454204.....	34	455059.....	36
450086.....	94	450252.....	178	450552.....	79	454209.....	42	455071.....	35
450087.....	94	450253V1 .....	178	450556.....	75	454214.....	35	455083.....	39
450088.....	94	450263.....	122	450562.....	79	454217.....	44	455084.....	38
450089.....	116	450264.....	178	450566.....	77	454221.....	50	455092.....	34
450090.....	93	450330.....	135	450568.....	73	454222.....	44	455094.....	53
450091.....	93	450331.....	135	450569.....	73	454228.....	35	455222.....	38
450092.....	93	450332.....	135	451071.....	113	454235.....	43	455227.....	173
450095.....	93	450333.....	135	451072.....	114	454236.....	34	455229.....	39
450096.....	93	450334.....	135	451073.....	114	454237.....	38	455243.....	174
450099.....	93	450335.....	135	451075.....	114	454241.....	46	455322.....	31
450120.....	90	450338.....	136	451081.....	96	454243.....	35	455382.....	32
450121.....	90	450339.....	136	451082.....	96	454246.....	42	456001.....	46
450122.....	91	450343.....	131	451085.....	97	454256.....	46	456007.....	173
450123.....	91	450371.....	117	451086.....	97	454287.....	44	456010.....	35
450125.....	91	450373.....	117	451090.....	96	454297.....	50	456018.....	35
450126.....	91	450417.....	155	451091.....	96	454319.....	35	456023.....	42
450127.....	90	450418.....	155	451092.....	96	454321.....	31	456036.....	44
450128.....	90	450427.....	100	451095.....	96	454322.....	31	456038.....	44
450129.....	90	450428.....	100	451096.....	96	454325.....	31	456043.....	42
450130.....	90	450429.....	100	451099.....	96	454327.....	31	456048.....	34

456052.....63	472020.....143	484522.....38	724316.....179	890004.....161
456057.....54	472022.....143	484523.....39	724320.....178	890010.....162
456058.....43	472023.....143	484525.....34	724401.....157	890011.....162
456062.....50	472024.....143	484526.....42	724402.....157	890011A.....162
456065.....173	472030.....143	484527.....50	724461.....157	NW241901.....105
456069.....35	472040.....141	484528.....50	724473.....157	NW261901.....105
456071.....35	474036.....44	484529.....44	727111.....149	SW204501.....108
456073.....35	474064.....32	484530.....46	729070.....58	SW204511.....108
456080.....56	474065.....32	484589.....38	729073.....58	SW223501.....108
456083.....39	474084.....38	485222.....38	729090.....58	SW223511.....108
456084.....38	474086.....44	485501.....44	729093.....58	SW224501.....108
456085.....46	474087.....43	485502.....35	769093.....58	SW224511.....108
456087.....39	474092.....34	485505.....40	769094.....58	VP144501.....106
456088.....38	474214.....35	485506.....46	800101.....141	VP144511.....106
456089.....34	474321.....31	485507.....173	800102.....141	VP164501.....106
456092.....34	474327.....31	485509.....36	800105.....141	VP164511.....106
456093.....63	476010.....35	485510.....173	800110.....141	VP174501.....106
456097.....63	476071.....35	485511.....174	836072.....149	VP174511.....106
456161.....191	476081.....173	485512.....44	836075.....149	VP183201.....106
456162.....191	476083.....39	485513.....39	836077.....149	VP183211.....106
456202.....48	476092.....34	485514.....35	836283.....167	VP184501.....106
456211.....43	480539.....71	486500.....35	836577.....169	VP184511.....106
456216.....39	480546.....77	486502.....44	836578.....169	VP202501.....106
456234.....35	480548.....73	486503.....35	836579.....169	VP203201.....106
456275.....56	480549.....79	486504.....34	836580.....166	VP203211.....106
456284.....174	480550.....75	486505.....31	836582.....167	VP222501.....106
456310.....36	483070.....176	486507.....39	836585.....167	VP222511.....106
458710.....129	484408.....44	486508.....38	836587.....166	VP241901.....106
458711.....129	484488.....38	494508.....44	836588.....167	VP241911.....106
458712.....129	484500.....44	494509.....44	836592.....166	VW144501.....105
458713.....129	484501.....44	494510.....46	836595.....167	VW144511.....105
458714.....129	484502.....35	494511.....46	840050.....127	VW164501.....106
458715.....129	484506.....42	494512.....31	840051.....127	VW164511.....105
458815.....151	484507.....42	495007.....173	840053.....127	VW174501.....106
459000.....153	484508.....31	495028.....173	840056.....127	VW174511.....105
459001.....153	484509.....43	495045.....42	855904.....164	VW183201.....106
459010.....153	484510.....44	495071.....35	855907.....164	VW183211.....105
459011.....153	484511.....44	496503.....35	855908.....164	VW184501.....106
459020.....153	484512.....43	496510.....174	881001.....183	VW184511.....105
459021.....153	484513.....35	496511.....44	881002.....183	VW203201.....106
472001.....141	484514.....35	724170.....157	881010.....186	VW203211.....105
472010.....141	484515.....34	724173.....157	881112.....184	VW222501.....106
472011.....141	484516.....59	724310.....178	881113.....184	VW222511.....105
472015.....141	484517.....31	724311.....178	881117.....184	VW241911.....105
472016.....141	484518.....31	724312.....178	881210.....184	
472017.....141	484520.....50	724315.....179	890001.....161	



# making a difference

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FIND THE CONTACT DETAILS OF YOUR  
LOCAL PARTNER ON OUR WEBSITE.



This product information is addressed exclusively to healthcare professionals. Devices of Greiner Bio-One are to be used by properly trained healthcare professionals only in accordance with the relevant Instructions for Use (IFU). For a listing of indications, contraindications, precautions and warnings, please refer to the Instructions for Use which accompanies each product or is available for download from our website at [www.gbo.com](http://www.gbo.com) (Download Center). For more information contact your local Greiner Bio-One sales representative or visit our website.

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