

Your **Power** for Health



VACUETTE® Urine System

The practical solution
for standardized preanalytics

VACUETTE® Urine System

Every urine sample is potentially infectious. By using the closed **VACUETTE®** urine system, hygienic sample collection and laboratory processing can be ensured.

- ✓ **Improved hygiene**

Improved safety for laboratory and hospital personnel through the use of a closed system.
- ✓ **Highly efficient and cost saving**

Collection, transportation, centrifugation, analysis and storage can all be executed in a single sterile tube.
- ✓ **Safe and convenient transport**

VACUETTE® urine tubes are hermetically sealed, sterile, virtually unbreakable and packed in compact racks.
- ✓ **High quality**

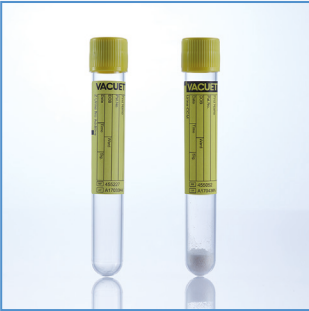
Sterile **VACUETTE®** urine tubes have an exact dosage vacuum and meet highest quality standards.
- ✓ **Contamination risk is minimized**

Contamination is nearly impossible when transferring into a secondary vessel.
- ✓ **Pre-analytical standardization**

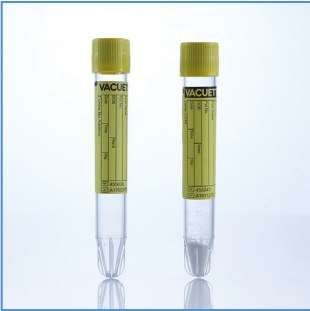
Errors produced as a result of collection, transportation and storage are reduced to a minimum.

System Components

VACUETTE® Urine and Urine CCM Tubes



round base
(sterile)



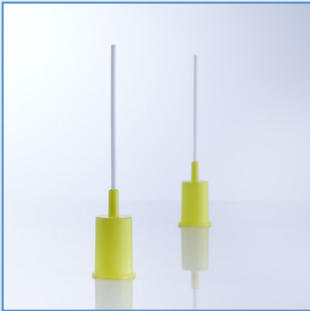
conical base
(sterile)

Urine Cup



with integrated
transfer device
(sterile or non-sterile)

Urine Transfer Device



for the convenient
sample transfer from
the collection vessel

Overview of Tube Types and Areas of Application

VACUETTE® urine tube without additive, round base:

This tube can be used as a collection tube and/or transport container in the following areas of application:

- / **Chemical urine tests***
- / **Urine test strips***

It is recommended that the analysis is carried out as soon as possible after the collection. During the preanalytical phase, the stability of the sample is influenced by storage temperature and time. The cooler the storage temperature, the longer it can be stored. If the specimen cannot be tested within two hours of collection, it should be refrigerated (2-8°C) per CLSI GP16-A3 Guideline.

VACUETTE® urine tube without additive, conical base:

The tubes are used as collection tube and/or transport container in the following area of application:

- / **Urine microscopy***

The time between collection and analysis should not last longer than 2 hours. The recommended examination material for microscopical evaluation of sediment is mid-stream urine.

VACUETTE® Urine CCM tubes with preservative (Count and Culture Mannitol):

The **VACUETTE®** Urine CCM tubes contain a stabilizer in powder form, which keeps the bacterial count in the sample stable at room temperature (20-25°C) for up to 48 hours. The solubility of the additive stabilizes the urine sample quickly and is therefore especially suitable in cases when the analysis takes place later.

This tube can be used as collection and/or transport container in the following area of application:

- / **Microbiological tests**

	Chemical urine analysis	Urine test strips	Microbiological studies	Urine sediment
Urine without preservative, round base	+	+	+*	
Urine without preservative, conical base	+	+	+*	+
Urine CCM			+	

* It is recommended that the analysis be carried out as soon as possible after collection.

Recommendations to guarantee a stable sample quality:

- / In cases where the sample remains in the urine beaker for a longer period of time, it should be carefully and thoroughly mixed, thus homogenizing the sample prior to transferring.
- / Exclusive use of a sterile Urine Cup for urine collection will contribute to less risk of contamination, which could improve sample quality.
- / When using **VACUETTE®** urine tubes with stabilizers, tubes should be inverted several times so as to mix the urine and preservative homogeneously.
- / Recommended centrifugal conditions for conical base tubes: 5 min. / 400 g.

Improved diagnostics with the VACUETTE® Urine CCM Tube

Along with blood, urine is one of the most frequently analyzed specimen materials in the laboratory. Various analytical methods, such as microbiology culture, are used.

Some bacteria are very sensitive to changes in temperature or storage conditions. Therefore if the preanalytical conditions are not ideal, they can be difficult to detect.

A poor quality sample can result in incorrect analytical results and subsequent misdiagnosis. This requires the need to repeat analysis that, in addition to the impact to the patient, is associated with additional time requirements and increased cost.

A common problem is bacterial growth in an unpreserved or unrefrigerated urine sample. If such an unpreserved urine sample is then stored or transported for extended periods of time, continued bacterial growth reduces the quality of the sample.¹



- / Some bacteria divide every 20 minutes at room temperature.
- / If the sample quality is insufficient, pathogenic germs can be overgrown by contaminants.

VACUETTE® Urine CCM Tubes reliably stabilize bacterial counts for up to 48 hours at room temperature.

A urinary tract infection is typically defined as a bacterial count in urine $\geq 10^5$ CFU/ml (colony forming units per ml). A stable urine sample for microbiological analysis is important for an accurate diagnosis. If bacteriological urine examinations cannot be carried out in a timely manner (preferably within 2 hours^{2,3}), the sample has to be stored at 4°C or a preservative has to be added to act as a stabilizer.

The **VACUETTE®** Urine CCM Tube is ideal for samples that have long transportation and/or processing times.

The optimal tube for microbiology

The **VACUETTE®** Urine CCM Tube keeps the bacterial count stable for up to 48 hours at room temperature so that there is no need to refrigerate.

The stabilizer in **VACUETTE®** Urine CCM Tubes (Count and Culture Mannitol Tube) is a combination of components including boric acid, sodium tetraborate, sodium formate and mannitol.

The quick solubility of the stabilizer is a distinguishing feature of the tube. In comparison with other additives, the improved solubility ensures immediate stabilization of the sample.

How significant is improved sample stability in laboratory routine?



Less re-collection



No need for refrigeration



Reliable diagnostics



Improved sample quality

Safety cap

completely leakproof and no splatter when opening

Fill-level mark

precisely defined vacuum for reliable, correct urine to additive ratio

PET plastic

virtually unbreakable specimen container

Count & culture mannitol powder

stabilizer preserves urine samples for microbiological analyses





VACUETTE® Urine Cup with Integrated Transfer Device

Application of Urine Cup with Integrated Transfer Device*

1



If more than one tube will be filled, loosen the lid slightly more than a quarter turn to normalize the pressure inside the cup.

2



Peel back the safety label.

3



Insert the tube and wait until it is completely filled. Remove the tube afterwards.

4



Place the safety label in its original position and re-tighten the lid.

*For further collection devices, see table on page 7 and always refer to the correspondent Instructions for Use on www.gbo.com

VACUETTE® Urine Tubes

Item No.	Nom. Vol.	Cap Colour	Ring Colour	Tube Size	Description	Packaging	
						Inner	Outer
Z Urine No Additive - PREMIUM (Safety Twist Cap)							
456007	6ml	yellow	yellow	13 x 100	Z Urine No Additive, Round Base	50 pcs.	1200 pcs.
Z Urine No Additive - Non-ridged (Pull Cap)							
455007	10ml	yellow	yellow	16 x 100	Z Urine No Additive, Round Base	50 pcs.	1200 pcs.
455028	9ml	yellow	yellow	16 x 100	Z Urine No Additive, Conical Base	50 pcs.	1200 pcs.
Urine CCM - Non-ridged (Pull Cap)							
454486	4ml	yellow	black	13 x 75	Urine CCM, Round Base	50 pcs.	1200 pcs.
455243	9ml	yellow	black	16 x 100	Urine CCM, Conical Base	50 pcs.	1200 pcs.

VACUETTE® Urine Accessories

Item No.	Name	Nom. Vol.	Description	Packaging Inner Outer	
Urine CCM Set (Urine CCM Tubes + Urine Transfer Device)					
453031	Urine CCM Set (13 x 75)	4ml	VACUETTE® Urine CCM Tube + Urine Transfer Device (454486+450751), single-packed, Round Base	1 set	300 sets
453032	Urine CCM Set (16 x 100)	9ml	VACUETTE® Urine CCM Tube + Urine Transfer Device (455243+450751), single-packed, Conical Base	1 set	300 sets
Urine Cup with Integrated Transfer Device					
724321	Urine Cup with Integrated Transfer Device 100 ml, yellow lid, screw cap, bulk-packed, sterile			-	300 pcs.
724322	Urine Cup with Integrated Transfer Devcie 100ml, yellow lid, screw cap, bulk-packed, non-sterile			-	300 pcs.
Urine Transfer Devices					
450251	Urine Transfer Device, short			50 pcs.	600 pcs.

References

1 VACUETTE® Preanalytics Manual p.49-53 Greiner Bio-One 2015
2 CLSI. Urinalysis; Approved Guidline – Third Edition. GP16-A3. Vol 29 No 4.
3 European Urinalysis Guidelines. Scan J Clin Lab Invest 2000. 60:1:1-96.

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