



Eppendorf Conical Tubes 25 mL and SnapTec® 50

Instructions for use

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- 4** Eppendorf Conical Tubes 25 mL and SnapTec® 50
English (EN)

1 Safety

1.1 Intended use

Eppendorf Tubes are single-use micro test tubes made from polypropylene for preparing, mixing, centrifuging, transporting and storing solid and liquid samples and reagents.

The products can be used for training, routine and research laboratories in the areas of life sciences, industry or chemistry. The products are intended to be used for research purposes only. Eppendorf does not provide a warranty for other applications. The products are not suitable for use in diagnostic or therapeutic applications. The products may only be used by skilled personnel who have been trained in the areas mentioned above.

1.2 Safety instructions



WARNING! Risk of damage to health due to toxic, radioactive or aggressive chemicals, as well as infectious liquids and pathogenic germs.

- ▶ Observe the national regulations for handling these substances, the biosafety level of your laboratory, and the manufacturers' Safety Data Sheets and application notes.
- ▶ Wear your personal protective equipment.
- ▶ For comprehensive regulations about handling germs or biological material of risk group II or higher, please refer to the "Laboratory Biosafety Manual" (source: World Health Organization, Laboratory Biosafety Manual, in the currently valid version).



WARNING! Damage to health due to escaping substances.

If the tube lids are not sealed properly or the lip seals are damaged, the tube lids may spring open at increased temperatures.

- ▶ Only use visually perfect and undamaged micro test tubes.
- ▶ Close the tubes properly. Do not damage the sealing lip.
- ▶ Observe the maximum filling volume. When opening the tubes, liquid at the lid may splash out.
- ▶ Make the necessary safety arrangements for transport or storage to prevent material escaping from the tube.
- ▶ Do not use the tubes in liquid nitrogen. The operating temperature ranges from -86°C to +100°C. If the tubes were frozen in liquid nitrogen, the tube lids may spring open during thawing.



WARNING! For mixers or centrifuges: Risk of contamination if the tube mounts are too large (wells, rotor bores, buckets).

Tubes may be destroyed. The tube contents may be accidentally released.

- ▶ Please note height and diameter of the tube. Only use suitable centrifuge inserts or mixer thermoblocks.
- ▶ If required, use the adapters intended for this purpose.



WARNING! Risk of contamination from damaged tubes during centrifugation.

The tubes are subjected to strong forces during centrifugation. If used incorrectly, the tubes may be destroyed. The tube contents may be accidentally released.

- ▶ Close the tube lids before commencing centrifugation. Open tube lids can break off during centrifugation and damage the centrifuge.
- ▶ Observe the maximum permitted centrifugation forces.
- ▶ Read the operating manual of the centrifuge used.
- ▶ Please note that organic solvents can reduce the mechanical resistance of the tubes. In case of doubt, contact Eppendorf Application Support (support@eppendorf.com).



WARNING! Risk of contamination from multiple use.

Consumables are intended for single use only.

- ▶ After use, dispose of consumables in accordance with the substances with which they have come into contact.



CAUTION! Risk of contamination when disposing of used consumables.

- ▶ Dispose of used consumables in accordance with the substances with which they have come into contact.
- ▶ Observe the rules that apply to your laboratory.



WARNING! Risk of contamination

Consumables are only sterile in sealed packaging.

- ▶ Please check that the packaging is undamaged.
- ▶ Observe the expiry date printed on the packaging.
- ▶ Only open the packaging immediately before use.
- ▶ Only use visually perfect items.
- ▶ Do not use liquid nitrogen. The consumables could get damaged or seals could spring open during thawing.



WARNING! Danger due to harmful substances escaping the tube

If the maximum filling volume is exceeded, substances can escape the tube during centrifugation.

- ▶ Do not fill tubes beyond their maximum filling volume.
- ▶ Make sure that the snap cap's safety tab audibly snaps into place when closing the tube.



NOTICE! Risk of material damage due to improper use.

- ▶ Only use the product for its intended purpose as described in the operating manual.
 - ▶ Ensure adequate material resistance when using chemical substances.
 - ▶ If in doubt, contact the manufacturer of the product.
-

8 Product description
Eppendorf Conical Tubes 25 mL and SnapTec® 50
English (EN)

2 Product description
2.1 Product overview

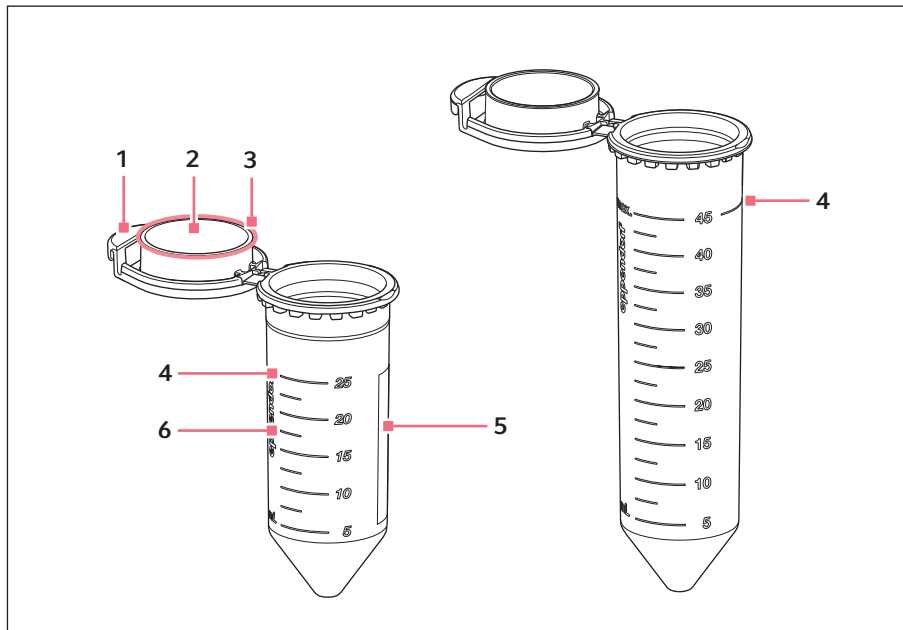


Fig. 2-1: Product overview - Eppendorf Conical Tubes 25 mL/SnapTec® 50

- | | |
|----------------------|--------------------------------|
| 1 Safety tab | 4 Maximum filling level |
| 2 Snap cap | 5 Labeling area |
| 3 Sealing lip | 6 Graduation |

2.2 Features

The Conical Tubes 25 mL and SnapTec® 50 micro test tubes meet the high endurance requirements for centrifugation, as well as temperature and chemical resistance. They are equipped with a snap cap. The graduation indicates the filling volume and the labeling area identifies the contents. The Conical Tubes SnapTec® 50 have a circumferential ring that indicates the maximum filling volume.

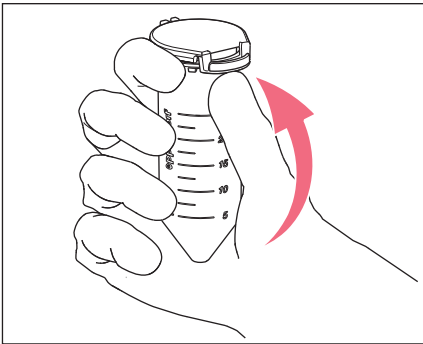
2.2.1 Maximum filling level of the SnapTec® 50

The SnapTec® 50 can be used in the periphery of the Conical Tubes 50 mL.

- i** Do not exceed the maximum filling level of 45 mL. Leaks may occur if the maximum filling level is exceeded.

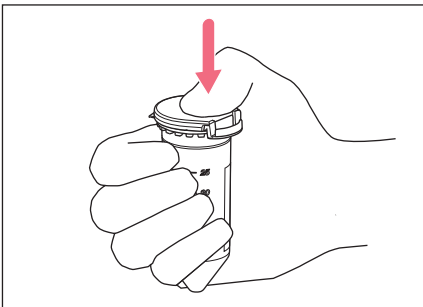
2.3 Opening and closing

2.3.1 Opening the micro test tubes



1. Press against the safety tab from below to open the snap cap.

2.3.2 Closing the micro test tubes



1. Press the lid down by its frontmost side until the safety tab snaps audibly into place.
 - i** The micro test tubes have only been properly closed if the safety tab has snapped into place correctly. The tab must sit at a right angle to the micro test tube for this.
 - i** Leaks may occur if the safety tab is not correctly engaged.

Technical data

Eppendorf Conical Tubes 25 mL and SnapTec® 50
English (EN)

3 Technical data

Material	Polypropylene
Autoclavability	121 °C for 20 min in an upright and opened state in a rack
Micro test tube storage	Store in a cool and dry place. Protect from direct sunlight and UV light.
Sample storage	Only store micro test tubes containing samples in an upright position.
Chemical resistance	Refer to application no. 56: <i>The best material for original Eppendorf Tubes® and Plates</i> at www.eppendorf.com/manuals

SnapTec 25 mL

Temperature range	-86 °C - 100 °C	
Tempering without mixing	max. 100°C	
Tempering with mixing (max. 800 rpm)		
	Not autoclaved	max. 80°C
	Autoclaved	max. 60°C

SnapTec® 50

Temperature range	-86 °C - 100 °C
Storage at low temperatures	max. 36 mL (80 % of the filling volume)
Tempering without mixing	max. 100°C
Tempering with mixing (max. 800 rpm)	max. 60°C
Tempering in a water bath	max. 80°C

SnapTec 25 mL Protein LoBind

Temperature range	-86 °C – 80 °C
Tempering without mixing	max. 80°C
Tempering with mixing (max. 800 rpm)	max. 60°C

3.1 Centrifugation stability

The centrifugation stability of consumables generally depends on the following conditions:

- Properties of the consumable (e.g., material, shape)
 - Combination of centrifuge, rotor and, if applicable, adapter
 - Accuracy of fit of the consumable in the rotor bore or adapter
 - Centrifugation parameters (speed/*g*-force, temperature, centrifugation time)
 - Overall weight of consumable and contents
 - Physical and chemical properties of the centrifuged liquid
- ▶ Perform a test run to determine which conditions are suitable for your application.
- i** The mechanical strength of the tubes is reduced by the use of organic solvents. If in doubt, contact Eppendorf Application Support.

3.1.1 Conical Tubes 25 mL

The Conical Tubes 25 mL Snap Cap can be centrifuged in a 45° fixed-angle rotor at the following *g*-forces:

- Conical Tubes 25 mL: 17000 × *g*
- Conical Tubes 25 mL DNA LoBind: 17000 × *g*
- Conical Tubes 25 mL Amber: 17000 × *g*
- Conical Tubes 25 mL Protein LoBind: 14000 × *g*

Applied testing conditions:

- Centrifuge 5920R; rotor FA6x50 or centrifuge 5810R; FA-45-6-30
- Centrifugation with suitable 25 mL centrifuge adapters
- Centrifugation temperature: 4 °C – 25 °C
- Centrifugation time: 90 min
- Sample: aqueous solutions and suspensions (density ≤ 1.0 g/mL)
- Filling quantity: 25 mL

- i** Further information on centrifugation stability can be found in the instructions for use of the centrifugation adapter for 25 mL *Conical Tubes*.

Technical data

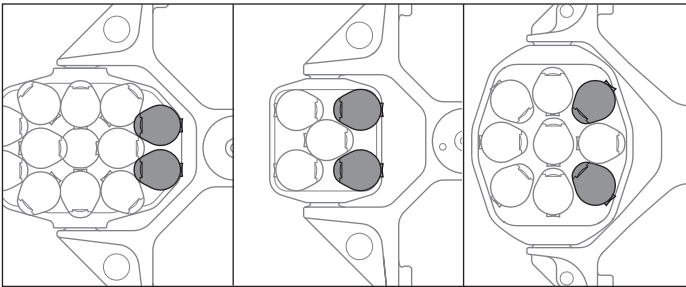
Eppendorf Conical Tubes 25 mL and SnapTec® 50
English (EN)

3.1.2 Conical Tubes SnapTec® 50

The SnapTec® 50 can be centrifuged in a 45° fixed-angle rotor at up to 17 000 × *g*.

Applied testing conditions:

- Centrifuge 5920R; rotor FA6x50 or centrifuge 5810R; FA-45-6-30
- Centrifugation temperature: 4 °C – 25 °C
- Centrifugation time: 90 min
- Sample: aqueous solutions and suspensions (density ≤ 1.0 g/mL)
- Filling quantity: 45 mL



When using the SnapTec® 50 tubes in swing-bucket rotors, make sure that the tubes located on the inside are aligned as shown in the figure.

Depending on the type of bucket used, turn the front of the tube towards the center of the bucket.

If the tubes located on the inside are not correctly aligned, it may cause the bucket to become blocked when it swings back after centrifugation.

3.2 Eppendorf purity grades

Eppendorf Conical Tubes 25 mL, snap cap and SnapTec® 50 are available with the following purity grades:

- Eppendorf Quality certified by batch:
- Sterile, pyrogen-free, DNase-free, RNase-free, free of human and bacterial DNA
- PCR clean

Eppendorf Conical Tubes 25 mL, snap cap Amber are available with the following purity grades:

- Sterile, pyrogen-free, DNase-free, RNase-free, free of human and bacterial DNA

Eppendorf Conical Tubes 25 mL, snap cap Protein and DNA LoBind are available with the following purity grades:

- PCR clean

	Eppendorf Quality	Sterile	PCR clean
Batch-certified for the following purity criteria			
Human DNA-free		■	■
DNA-free (free of human and bacterial DNA)			
DNase-free		■	■
RNase-free		■	■
PCR inhibitor-free			■
ATP-free			
Pyrogen-free (endotoxin-free)		■	
Sterile (Ph.Eur./USP)		■	

Batch-specific certificates are available on the Internet at: www.eppendorf.com/certificates.

Ordering informationEppendorf Conical Tubes 25 mL and SnapTec® 50
English (EN)**4 Ordering information**

Order no. (International)	Description
0030 118.405	Eppendorf Conical Tubes 25 mL with snap cap, 200 pieces (5 bags x 50 tubes), clear Eppendorf Quality
0030 118.421	Eppendorf Conical Tubes 25 mL with snap cap, 150 pieces (6 bags x 25 tubes), clear Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free
0030 118.502	Eppendorf Starter Pack snap cap 1 set 25 mL tubes, PCR clean, 1 set of centrifugations adapter, 1 set of single tube stand
0030 119.860	Eppendorf Single Tube Stand for Eppendorf Conical Tubes 25 mL and 50 mL, 4 Pieces
0030 108.523	Eppendorf Conical Tubes 25 mL SnapTec DNA LoBind PCR clean
0030 108.531	Eppendorf Conical Tubes 25 mL SnapTec Protein LoBind PCR clean
0030 118.430	Eppendorf Conical Tubes 25 mL SnapTec Amber Sterile
0030 140.729	Eppendorf Storage Box 3 × 3, 3.5 inch height 88,9 mm, for 9 conical tubes 25 mL and 4 micro test tubes 5 mL 2 pieces
5365 000.109	Adapter 25 mL for SmartBlock 50 mL, Set of 4
5353 040.156	Tube Holder for Mixmate, for 4 conical tubes 25 mL/50 mL
5820 733.004	Adapter for Eppendorf Conical Tubes 25 mL with snap cap, for centrifuges with rotors for conical 50 mL tubes set of 6 pieces



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