



# Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap

**Instructions for Use**

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## 1 Safety

### 1.1 Intended use

Eppendorf Conical Tubes 5.0 mL/15 mL/25 mL/50 mL are single-use 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 Warnings for intended use

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#### **WARNING! 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.
- ▶ Consult the "Laboratory Biosafety Manual" (source: World Health Organization, Laboratory Biosafety Manual, as amended) for comprehensive regulations on the handling of germs or biological material of risk group II or higher.



#### **WARNING! Damage to health due to escaping substances.**

Tube contents may escape if the tube lids are not closed properly or the seal lips in the tube lid are damaged.

- ▶ Only use visually perfect and undamaged tubes.
- ▶ Close the tubes properly. Do not damage the sealing area in doing so.
- ▶ Observe the maximum filling volume. When opening the tubes, foaming or gas-forming substances may escape.
- ▶ Make the necessary safety arrangements for transport or storage to prevent material escaping from the tube.
- ▶ The micro test tubes must not be used with liquid nitrogen. The operating temperature ranges from -86°C to +100°C.



**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.
- ▶ Always 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@eppeppendorf.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.
- ▶ Observe the regulations applicable for your laboratory.



**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.



**NOTICE! 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.



**NOTICE! Loss of information**

- ▶ Missing or faulty barcodes can lead to sample loss or mix-up. The consequences of the loss of information must be assessed by the user.



**WARNING! Risk of contamination.**

Tubes are only sterile in sealed packaging. After five years the shelf life expires even in sealed packaging.

- ▶ Only open the packaging immediately before use.
  - ▶ Observe the expiry date printed on the packaging.
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**6** **Product description**  
Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap  
English (EN)

**2** **Product description**

**2.1** **Features**

Eppendorf Conical Tubes 5.0 mL/15 mL/25 mL/50 mL meet the high endurance requirements for centrifugation as well as temperature and chemical resistance. They are equipped with a screw cap. The graduation indicates the filling quantity and the labeling area identifies the contents.

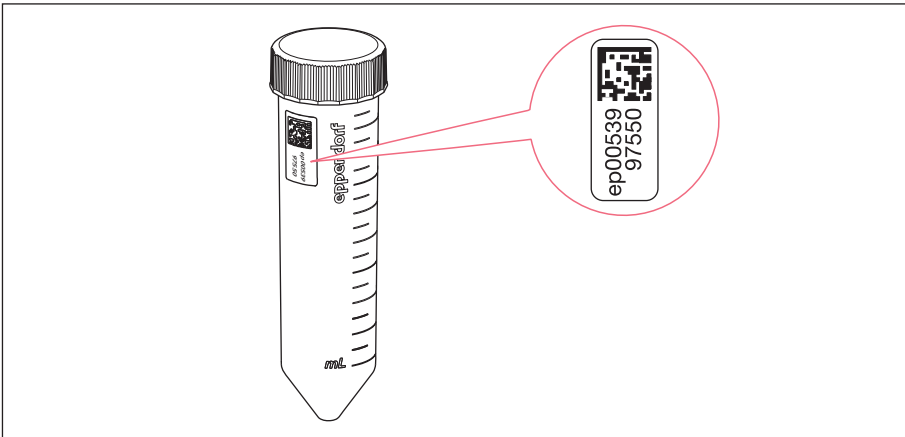
### 3 SafeCode consumables

These single-use tubes are available as a barcoded SafeCode variant. You can access all available information on these single-use tubes (including lot numbers) on the Eppendorf website based on their IDs.

#### 3.1 DataMatrix code

Coding is done with a DataMatrix code. Eppendorf uses the Reed-Solomon algorithm for error correction, known as ECC200 (error correcting code), for its DataMatrix codes. The ECC200 DataMatrix-symbology ensures that even codes with an up to 25 % unreadable code area are read. This coding is unambiguous within the Eppendorf consumables portfolio and enables clear sample identification. In addition, the plain text (human-readable code) makes using the SafeCode consumables even easier.


#### 3.2 SafeCode position on tubes with screw caps



On tubes with screw caps, the SafeCode is attached to the tube. This prevents confusing the samples when exchanging tube lids.

### 3.3 SafeCode properties


Feature	SafeCode
Configuration	2 letters + 8 or 10 numeric characters <ul style="list-style-type: none"><li>Eppendorf Safe-Lock Tubes, Tubes 5.0 mL and Conical Tubes: ep+10 numeric characters (ep0123456789)</li><li>CryoStorage Vials: EQ+8 numeric characters or ER+8 numeric characters</li></ul>
Code type	DataMatrix code 14x14 with ECC200
ISO standard	ISO/IEC 16022
ANSI quality standard	ISO-IEC TR 29158

-  Barcodes can become unreadable due to severe damage (scratching, bleaching, autoclaving, etc.), which may result in loss of information.

### 3.4 Using the SafeCode consumables

Check your system's compatibility (scanner and software) before using the various SafeCode consumables.

Also ensure error-free data transmission within your systems.

-  Multiple use of SafeCode consumables leads to inconsistent data and can result in loss of information and sample confusion. Assess the consequences of loss of information or sample confusion and implement risk minimization mechanisms, if necessary.

### 3.5 DataPort

A complete tube description with lot number, technical data, certificates and other information can be found on our website at [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates) (Service & Support > Quality and Certificates > Certificates).



## 4 Technical data

<b>Screw cap</b>	5.0 mL	15 mL	25 mL	50 mL
Maximum operating temperature without mixing	100 °C			
Maximum operating temperature with mixing (maximum 800 rpm)	80 °C			
Maximum filling volume	5.0 mL	15 mL	25 mL	50 mL
Sample storage	4.0 mL	12 mL	20 mL	40 mL
	Only store micro test tubes containing samples in an upright position. The maximum filling volume at low temperatures is 80 % of the nominal volume.			
Storage before use	Protect from direct sunlight and UV light. Store in a cool and dry place.			
Autoclavability	Not autoclavable.			
Operational temperature	-86 °C – 100 °C			
	The brittleness of the LoBind Tubes is increased when the tubes are stored at cold temperatures. Mechanical stress, e.g., due to centrifugation at high g-forces, can cause the tubes to break under these circumstances.			
Material	Tube: polypropylene Screw cap: high-density polyethylene (HDPE)			
Chemical resistance	Refer to application no. 56: "The best material for original Eppendorf Tubes®" at <a href="http://www.eppendorf.com">www.eppendorf.com</a> .			



Drawings with the product dimensions can be found in the downloads area of the respective Eppendorf product page on our website, [www.eppendorf.com](http://www.eppendorf.com).

### 4.1 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.

**Technical data**

Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap  
English (EN)



The mechanical strength of the tubes is reduced by the use of organic solvents.. To determine the maximum centrifugation speed for your applications, perform a test run at a lower g-force.

Tube		Standard	Protein LoBind	DNA LoBind	Amber
Eppendorf Conical Tubes with screw caps	5.0 mL	25 000 × <i>g</i>			
	15 mL	19 500 × <i>g</i>			
	25 mL	17 000 × <i>g</i>			
	50 mL	19 500 × <i>g</i>			

Applied testing conditions:

- Centrifuge 5920R; rotor FA6x50 or centrifuge 5810R; FA-45-6-30
- Centrifugation temperature: 4 °C – 25 °C
- Using suitable rotors and, if necessary, adapters
- Centrifugation time: 90 min
- Sample: aqueous solution and suspensions (density ≤ 1.0 g/mL)

#### 4.1.1 Eppendorf Conical Tubes 5 mL and 25 mL



Use suitable adapters for centrifugation with 5 mL and 25 mL tubes. The specified maximum centrifugation speeds can only be ensured if suitable adapters are used. Further information on centrifugation stability can be found in the corresponding manuals for the centrifugation adapters, if applicable.

## 4.2 Eppendorf purity grades

Eppendorf Conical Tubes are available with the following purity grades (tested per batch):

### 5.0 mL

- Eppendorf Quality
- Sterile (Ph. Eur./USP), pyrogen-(endotoxin-free), DNase-free, RNase-free, DNA-free
- PCR clean

### 25 mL

- Sterile (Ph. Eur./USP) and pyrogen-free (endotoxin-free), DNase-free, RNase-free, DNA-free
- PCR clean

### 15 mL und 50 mL

- Sterile (Ph. Eur./USP) and pyrogen-free (endotoxin-free), DNase-free, RNase-free, DNA-free
- Forensic DNA Grade
- PCR clean

### 5 mL, 15 mL und 50 mL mit SafeCode

- Sterile (Ph. Eur./USP) and pyrogen-free (endotoxin-free), DNase-free, RNase-free, DNA-free

Batch-specific certificates are available on the Internet at: [www.eppendorf.com/certificates](http://www.eppendorf.com/certificates)

**Ordering Information**Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap  
English (EN)**5 Ordering Information**

<b>Order no. (International)</b>	<b>Order no. (North America)</b>	<b>Description</b>
0030 108.302	0030108302	<b>Eppendorf Protein LoBind Tubes 5.0 mL</b> PCR clean, 100 pieces
0030 108.310	0030108310	<b>Eppendorf DNA LoBind Tubes 5.0 mL</b> PCR clean, 200 pieces
0030 113.489	0030113489	<b>Eppendorf Conical Tubes 15 mL</b> sterile, pyrogen-, DNase-, RNase- and bacterial DNA-free, colorless with 2D SafeCode (DataMatrix/ ECC200) and human readable code 500 tubes (10 bags x 50 pieces)
0030 113.497	0030113497	<b>Eppendorf Conical Tubes 50 mL</b> sterile, pyrogen-, DNase-, RNase- and bacterial DNA-free, colorless with 2D SafeCode (DataMatrix/ ECC200) and human readable code 500 tubes (20 bags x 25 pieces)
0030 113.500	0030113500	<b>Eppendorf Tubes 5.0 mL, with screw cap</b> sterile, pyrogen-, DNase-, RNase- and bacterial DNA-free, colorless with 2D SafeCode (DataMatrix/ ECC200) and human readable code 200 tubes (2 bags x 100 pieces)
0030 115.860	0030115860	<b>Single Tube Stand</b> for 25/50 mL Tubes, Set of 4
0030 119.380		<b>Eppendorf Tubes 5.0 mL with snap cap starter pack</b> 5.0 mL, 400 tubes (2 packages with 2 bags of 100 each), 2 racks (with 12 locations each), white, 8 universal adapters for rotors with bore holes for 15 mL conical tubes, PCR clean, colorless
0030 119.401	0030119401	<b>Eppendorf Tubes 5.0 mL</b> Eppendorf Quality, 200 pieces, clear
0030 119.452	0030119452	Eppendorf Quality, 200 pieces, amber (light protection)
0030 119.460	0030119460	PCR clean, 200 pieces, clear
0030 119.479	0030119479	Biopur, 50 pieces, clear , individually packaged
0030 119.487	0030119487	Sterile, 200 pieces, clear

Order no. (International)	Order no. (North America)	Description
0030 119.495	0030119495	<b>Tube rack</b> for Eppendorf Tubes 5.0 mL 2 pieces
0030 119.509	0030119509	<b>Tube Clip for Eppendorf Tubes 5.0 mL</b> 10 pieces
0030 119.606		<b>Eppendorf Tubes 5.0 mL with snap cap</b> Forensic DNA Grade 200 tubes (4 bags × 50 pieces), colorless
0030 122.151 0030 122.160	0030122151 0030122160	<b>Eppendorf Conical Tubes 15 mL</b> Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless 500 tubes (10 bags × 50 pieces) 500 tubes (20 racks × 25 pieces)
0030 122.178 0030 122.186	0030122178 0030122186	<b>Eppendorf Conical Tubes 50 mL</b> Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, colorless 500 tubes (20 bags × 25 pieces) 300 tubes (12 racks × 25 pieces)
0030 122.194	0030122194	<b>Eppendorf Conical Tubes 15 mL, amber</b> Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection) 200 tubes (4 bags × 50 pieces)
0030 122.208	0030122208	<b>DNA LoBind Conical Tubes 15 mL</b> DNA LoBind, PCR clean 200 tubes (4 bags × 50 pieces), colorless
0030 122.216	0030122216	<b>Protein LoBind Tubes 15 mL</b> Protein LoBind, PCR clean 200 tubes (4 bags × 50 pieces), colorless
0030 122.224	0030122224	<b>Eppendorf Conical Tubes 50 mL, amber</b> Sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free, amber (light protection) 200 tubes (8 bags × 25 pieces)
0030 122.232	0030122232	<b>DNA LoBind Conical Tubes 50 mL</b> DNA LoBind, PCR clean 200 tubes (8 bags × 25 pieces), colorless
0030 122.240	0030122240	<b>Protein LoBind Tubes 50 mL</b> DNA LoBind, PCR clean 200 tubes (8 bags × 25 pieces), colorless

**Ordering Information**

Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap  
English (EN)

<b>Order no. (International)</b>	<b>Order no. (North America)</b>	<b>Description</b>
0030 122.259	0030122259	<b>Eppendorf Conical Tubes 15 mL</b> Forensic DNA Grade, colorless 100 tubes, individually wrapped
0030 122.267	0030122267	<b>Eppendorf Conical Tubes 50 mL</b> Forensic DNA Grade, colorless 48 tubes, individually wrapped
0030 122.275	0030122275	<b>Eppendorf Conical Tubes 25 mL</b> DNA-LoBind, PCR-clean with screw cap, 200 pieces (4 bags x 50 pieces), colorless
0030 122.283	0030122283	<b>Eppendorf Conical Tubes 25 mL</b> Protein-LoBind, PCR-clean with screw cap, 200 pieces (4 bags x 50 pieces), colorless
0030 122.305 0030 122.313	0030122305 0030122313	<b>Eppendorf Tubes 5.0 mL</b> with screw cap Eppendorf Quality, 200 pieces PCR clean, 200 pieces
0030 122.321	0030122321	<b>Eppendorf Tubes 5.0 mL</b> Sterile with screw cap, 200 tubes, clear
0030 122.330	–	<b>Eppendorf Tubes 5.0 mL</b> Sterile, pyrogen-, DNase-, RNase- and DNA-free 200 tubes (2 Beutel x 100 pieces), Ambre (light protection)
0030 122.348	–	<b>Eppendorf Tubes 5.0 mL</b> DNA LoBind, PCR clean 200 tubes (2 bags x 100 pieces), clear
0030 122.356	–	<b>Eppendorf Tubes 5.0 mL</b> Protein LoBind, PCR clean 200 tubes (2 bags x 100 pieces), clear
0030 122.364		<b>Eppendorf Tubes 5.0 mL with screw cap, starter pack</b> 5.0 mL, 400 tubes (2 packages with 2 bags of 100 each), 2 racks (with 12 locations each), white, 8 universal adapters for rotors with bore holes for 15 mL conical tubes, PCR clean, colorless

Order no. (International)	Order no. (North America)	Description
0030 122.410	0030122410	<b>Eppendorf Conical Tubes 25 mL</b> Eppendorf Quality with screw cap, 200 pieces (5 bags x 40 pieces), clear
0030 122.429	0030122429	<b>Eppendorf Conical Tubes 25 mL</b> PCR clean with screw cap, 200 pieces (5 bags x 40 pieces), clear
0030 122.437	0030122437	<b>Eppendorf Conical Tubes 25 mL</b> sterile, pyrogen-, DNase-, RNase-, DNA-free with screw cap, 200 tubes (8 bags x 25 pieces), clear
0030 122.445	0030122445	<b>Eppendorf Conical Tubes 25 mL</b> Amber, sterile, pyrogen-, DNase-, RNase-, human and bacterial DNA-free with screw cap, 200 pieces (8 bags x 25 pieces), amber (light protection)
0030 122.500	0030122500	<b>Eppendorf Starter Pack</b> screw cap 1 set of 25 mL tubes (PCR clean), 1 set of centrifugation adapter, 1 set of single tube stand
0030 122.704	0030122704	<b>Caps for Conical Tubes 25/50 mL</b> Cap 500 Caps (50/bag) PCR clean
0030 140.532		<b>Eppendorf Storage Box 5 x 5, 2.5 inch</b> height 63.5 mm, for 25 micro test tubes 5 mL 4 pieces
0030 140.591	0030140591	<b>Eppendorf Storage Box 3 x 3, 5 inch</b> height 127 mm, for 9 conical tubes 50 mL and 4 conical tubes 15 mL 2 pieces
0030 140.613		<b>Eppendorf Storage Box 5 x 5, 3 inch</b> height 76.2 mm, for 25 screw cap tubes 5 mL 2 pieces
0030 140.729	0030140729	<b>Eppendorf Storage Box 3 x 3, 3.5 inch</b> height 88,9 mm, for 9 conical tubes 25 mL and 4 micro test tubes 5 mL 2 pieces
5365 000.109	5365000109	<b>Adapter</b> 25 mL for SmartBlock 50 mL, Set of 4

**16** **Ordering Information**  
Eppendorf Conical Tubes 5 / 15 / 25 / 50 mL Screw Cap  
English (EN)

<b>Order no. (International)</b>	<b>Order no. (North America)</b>	<b>Description</b>
5353 040.156	5353040156	<b>Tube Holder</b> for Mixmate, for 4 conical tubes 25 mL/50 mL
5820 734.000	5820734000	<b>Adapter</b> for Eppendorf Conical Tubes 25 mL with screw cap for centrifuges with rotors for conical 50 mL tubes set of 6 pieces





# Evaluate Your Manual

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