



Eppendorf Cell Culture Consumables

Instructions for use

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1 **Operating instructions**

1.1 **Using this manual**

Before using the consumables for the first time, read these instructions for use and the operating manual of the device that you use the consumables with. You can find the current version of the operating manual on the Internet at www.eppendorf.com. These instructions for use do not replace the device operating manual.

2 **Product description**

The Eppendorf Cell Culture Consumables are suitable for the growth and cultivation of eukaryotic cells and also for the storage and microscopy of cells.

They are available as multiwell plates, flasks and dishes with tissue culture-treated (TCT) surfaces for adherent cells and untreated surfaces for suspension cells.

Eppendorf Cell Culture Consumables can be used for training, routine and research laboratories in the areas of life sciences, industry or chemistry. This product is intended to be used for research purposes only. Eppendorf does not provide a warranty for other applications. The articles are not suitable for use in diagnostic or therapeutic applications.

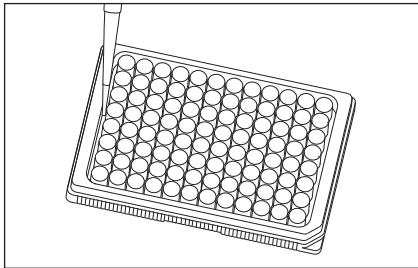
Eppendorf Cell Culture Consumables may only be used by skilled personnel who have been trained in the areas mentioned above.

2.1 **Plates**

- **Sealing:**
The plates are delivered with a lid. The plates can also be sealed with Eppendorf Storage Film or Eppendorf Storage Foil.
- **Photometric measurements:**
The plates are suitable for photometric measurements and cell-based assays.
- **Centrifugation:**
The plates are suitable for centrifugation. The centrifugation of plate stacks is also possible (see *Technical data on p. 8*).
- **Growth area:**
The optimized growth area of the 96-well plate results in an increased yield of the number of cells.



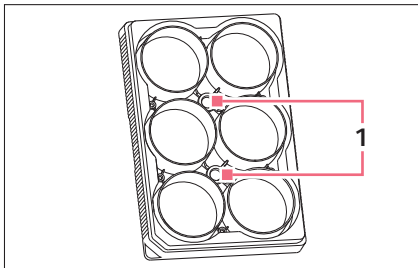
Mind the comparatively large growth area/well. Depending on the cell system, more cells may be required for seeding in order to achieve the same cell density (cell number/mm²) as in other 96-well plates.



- Prevention of the edge effect:
The 96-well plate has a peripheral moat which can be filled prior to cell seeding in order to prevent the edge effect. Before filling the cells into the wells, pipette 5 mL of water/buffer into the peripheral moat.

In order to make the filling of the moat easier, you can reduce the surface tension of the liquid by adding serum, proteins or detergent. Additional information is available in Eppendorf Application Note 326.

In addition, it is also possible to fill the inter-well space within the plate with 8 to 10 mL of liquid. This delays the cooling of the medium in the wells when the plate is used outside of the incubator.



- Additional wells:
For the growth of very small numbers of cells, the 6-well plate has 2 small, additional wells (1) at the center. These wells can also be used for direct sample preparation on the plate (e.g., preparing of coloring or antibody solutions).

2.2 Flasks

The flasks are suitable for centrifugation (see *Technical data on p. 8*).

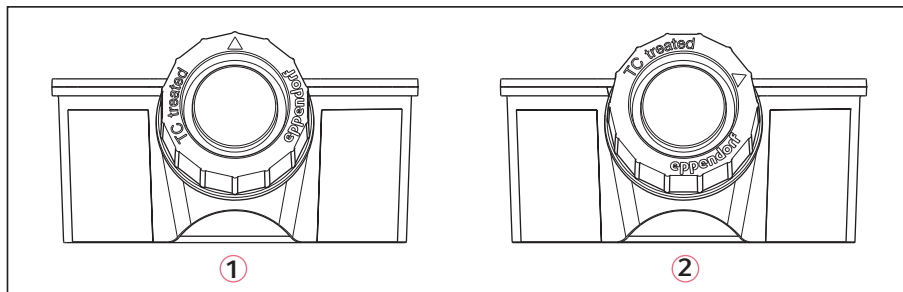
2.2.1 Filter cap

When fully closed, flasks with a filter cap are suitable for the growth of cells as the gas exchange takes place continuously via the filter.

2.2.2 Plug-seal cap

The flasks can be completely sealed with the plug-seal cap to prevent further gas exchange.

To incubate the cells, turn the cap to the vent position (**Vent (1)**). Securely engaging the cap in the **Vent** position creates a gap that ensures that the cells are properly vented.



1 Vent position (Vent)

2 Closed position (closed)

2.3 Dishes

- Closing of dishes:
The dishes are delivered with a lid.
- Corrugated handling ring:
The dishes have a gripping ring which facilitates opening and closing as well as the safe transport of the dishes.
- SplashProtect ring:
The dishes have a ring on the inside of the lid. This reduces the risk of liquids overflowing and therefore the risk of contamination.

3 Safety precautions



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.
- ▶ Check the welds of bottles.
- ▶ Only use visually perfect and undamaged items.
- ▶ Do not use liquid nitrogen. The consumables could get damaged or the lids could burst open during thawing.



WARNING! Damage to health due to infectious liquids and pathogenic germs.

- ▶ When handling infectious liquids and pathogenic germs, observe the national regulations, the biological security level of your laboratory, the material safety data sheets, and the manufacturer's application notes.
- ▶ Wear 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 its respectively current valid version).



The Eppendorf Cell Culture bottles are not suitable for shipping living cells.

4 Technical data

Tab. 4-1: Plates

	Unit	6-well	12-well	24-well	48-well	96-well
Working volume:	mL	3.0 to 5.0	1.0 to 2.0	0.5 to 1.0	0.3 to 0.5	0.1 to 0.2
Theoretical total volume:	mL	16.0 Extra wells: 47.1	6.8	3.6	1.5	0.4
Growth area*/well:	mm ²	940.3 Extra wells: 27.5	391.1	208.9	85.6	37.0
Well diameter:	mm	34.6 Extra wells: 5.9	22.4	16.2	10.4	6.8
Length x width x height (l x w x h):	mm	127.8 x 85.5 x 20.0				127.8 x 85.5 x 14.4
Height with lid:	mm	23.2				17.6

*For the initial seeding of cells, take into account the growth area in order to support optimal cell growth.

Tab. 4-2: Dishes

	Unit	35 mm	60 mm	100 mm
Working volume:	mL	2.0 to 3.0	3.0 to 5.0	8.0 to 10.0
Theoretical total volume:	mL	8.1	26.6	99.2
Growth area:	cm ²	9.5	21.9	56.8
Diameter x height (d x h):	mm	36.7 x 10.8	59.7 x 14.0	93.8 x 19.4
Height with lid:	mm	12.5	15.7	21.3

Tab. 4-3: Flasks

	Unit	T-25	T-75	T-175
Working volume:	mL	3.0 to 7.0	8.0 to 20.0	20.0 to 30.0
Theoretical total volume:	mL	83.6	279.8	662.1
Growth area:	cm ²	26.9	77.9	179.5
Length x width x height (l x w x h):	mm	99.0 x 56.0 x 37.1	163.0 x 82.0 x 46.6	230.0 x 122.0 x 48.0

Tab. 4-4: Materials

Material:	Polystyrene, meets the requirements of USP Class VI
Surface:	Tissue culture treated or non-treated

Tab. 4-5: Dimensions

96-well plate:	Conforms to ANSI/SLAS* 1-2004 through ANSI/SLAS* 4-2004
6-/12-/24-/48-well plate:	Conforms to ANSI/SLAS* 1-2004: Microplates — Footprint Dimensions

*SLAS: Society of Laboratory Automation and Screening

Tab. 4-6: Centrifugability

Plates:	Centrifugatable up to 2500 x <i>g</i> . Centrifugatable in stack (4 plates or 5 96-well plates) up to 300 x <i>g</i>
Dish:	Cannot be centrifuged
Flask:	Can be centrifuged with the suitable adapters; refer to the manufacturer's instructions

The centrifugation stability of each plate type is generally dependent on the centrifuge and its accessories, the ambient conditions and the liquid used.

Tab. 4-7: Temperature conditions, resistance

Operating temperature:	-86°C to 60°C
Storage before use:	Store dry at room temperature. Protect from sunlight and UV rays

Tab. 4-8: Certificates

Certificates:	Leachables, heavy metals, production conditions, cytotoxicity. The certificates can be found at www.eppendorf.com/certificates .
Lot-specific certificates:	Free from: RNase/DNase, human DNA, bacterial DNA, endotoxins Sterility Cell growth test on TCT surfaces Lot-specific certificates can be downloaded at www.eppendorf.com/certificates .



Further technical data can be found online in the "Technical Data Sheets" at www.eppendorf.com/worldwide.

Ordering informationEppendorf Cell Culture Consumables
English (EN)**5 Ordering information****5.1 Cell Culture Consumables****5.1.1 Plates**

Order no. (International)	Order no. (North America)	Description
0030 720.113	0030720113	Eppendorf Cell Culture Plate, 6-Well TC treated
0030 720.130	0030720130	60 pieces, individually wrapped 100 pieces, 10 bags of 10 pieces
0030 720.016	0030720016	Eppendorf Cell Culture Plate, 6-Well non-treated
		60 pieces, individually wrapped
0030 721.110	0030721110	Eppendorf Cell Culture Plate, 12-Well TC treated
		60 pieces, individually wrapped
0030 721.012	0030721012	Eppendorf Cell Culture Plate, 12-Well non-treated
		60 pieces, individually wrapped
0030 722.116	0030722116	Eppendorf Cell Culture Plate, 24-Well TC treated
		60 pieces, individually wrapped
0030 722.019	0030722019	Eppendorf Cell Culture Plate, 24-Well non-treated
		60 pieces, individually wrapped
0030 723.112	0030723112	Eppendorf Cell Culture Plate, 48-Well TC treated
		60 pieces, individually wrapped
0030 723.015	0030723015	Eppendorf Cell Culture Plate, 48-Well non-treated
		60 pieces, individually wrapped
0030 730.119	0030730119	Eppendorf Cell Culture Plate, 96-Well TC treated
0030 730.135	0030730135	80 pieces, individually wrapped 100 pieces, 10 bags of 10 pieces
0030 730.011	0030730011	Eppendorf Cell Culture Plate, 96-Well non-treated
		80 pieces, individually wrapped

5.1.2 Dishes

Order no. (International)	Order no. (North America)	Description
0030 700.112	0030700112	Eppendorf Cell Culture Dish, 35 mm TC treated 300 pieces, 30 bags of 10 pieces
0030 700.015	0030700015	Eppendorf Cell Culture Dish, 35 mm non-treated 300 pieces, 30 bags of 10 pieces
0030 701.119	0030701119	Eppendorf Cell Culture Dish, 60 mm TC treated 300 pieces, 30 bags of 10 pieces
0030 701.011	0030701011	Eppendorf Cell Culture Dish, 60 mm non-treated 300 pieces, 30 bags of 10 pieces
0030 702.115	0030702115	Eppendorf Cell Culture Dish, 100 mm TC treated 300 pieces, 30 bags of 10 pieces
0030 702.018	0030702018	Eppendorf Cell Culture Dish, 100 mm non-treated 300 pieces, 30 bags of 10 pieces

Ordering informationEppendorf Cell Culture Consumables
English (EN)**5.1.3 Flasks**

Order no. (International)	Order no. (North America)	Description
0030 710.126 0030 710.118	0030710126 0030710118	Eppendorf Cell Culture Flask, T-25 TC treated Filter cap, 192 pieces, 24 bags of 8 pieces Plug-seal cap, 192 pieces, 24 bags of 8 pieces
0030 710.029 0030 710.010	0030710029 0030710010	Eppendorf Cell Culture Flask, T-25 non-treated Filter cap, 192 pieces, 24 bags of 8 pieces Plug-seal cap, 192 pieces, 24 bags of 8 pieces
0030 711.122 0030 711.114	0030711122 0030711114	Eppendorf Cell Culture Flask, T-75 TC treated Filter cap, 80 pieces, 16 bags of 5 pieces Plug-seal cap, 80 pieces, 16 bags of 5 pieces
0030 711.025 0030 711.017	0030711025 0030711017	Eppendorf Cell Culture Flask, T-75 non-treated Filter cap, 80 pieces, 16 bags of 5 pieces Plug-seal cap, 80 pieces, 16 bags of 5 pieces
0030 712.129 0030 712.110	0030712129 0030712110	Eppendorf Cell Culture Flask, T-175 TC treated Filter cap, 48 pieces, 12 bags of 4 pieces Plug-seal cap, 48 pieces, 12 bags of 4 pieces
0030 712.021 0030 712.013	0030712021 0030712013	Eppendorf Cell Culture Flask, T-175 non-treated Filter cap, 48 pieces, 12 bags of 4 pieces Plug-seal cap, 48 pieces, 12 bags of 4 pieces

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