

# CELLMASTER™ Cell Culture Roller Bottles

The cultivation of cells as mass cultures has become increasingly important over the past few decades and has led to further developments of high-quality products. This includes items such as roller bottles which are used for the production of virus vaccines or recombinant proteins used for therapeutic approaches. CELLMASTER™ roller bottles are made from polystyrene (PS) or polyethylene terephthalate (PET). These materials, like those used for the screw caps (HDPE) and the hydrophobic membrane (PET/PTFE) of the filter screw caps (Fig. 1), comply with the quality standards of the U.S. Pharmacopoeia. The complete end product is USP Class VI certified. All roller bottles are sterilised by irradiation. Pyrogen testing is conducted using the kinetic turbidimetric “Limulus Amoebocyte Lysate” (LAL) assay in accordance with FDA guidelines (12/8) with a tolerance level of 0.03 EU/ml. Since roller bottles are manufactured using a two-phase blow-moulding procedure, the bottles are seamless ruling out the risk of liquid leaking from a faulty seam.

- PS or PET roller bottles depending on the cultivation requirements
- Particularly high stability and clarity
- Different sizes (116 x 276 mm, 122 x 271 mm, 122 x 275 mm, 122 x 500 mm) with or without a radially ribbed surface for an expanded growth area (850 cm<sup>2</sup>, 1700 cm<sup>2</sup>, 2125 cm<sup>2</sup>, 4250 cm<sup>2</sup>)
- Seamless blow-moulding technique rules out leaking seams
- Free of detectable endotoxins (tolerance limit 0.03 EU/ml)
- Graduations from 150 to 2000 ml
- Lot number and best-before date to ensure lot traceability for roller bottles made of polystyrene
- Certified USP Class VI end product testing
- Safety screw cap for tightly closed, contamination-free cultivation
- Short screw cap thread for quick and easy opening of all roller bottles made of polystyrene



Figure 1: Filter screw cap

2 HTS-  
Microplates3 Immunology/  
HLA4 Microbiology/  
Bacteriology5 Tubes/Multi-  
Purpose Beakers6 Liquid  
Handling7 Molecular  
Biology8 Protein  
Crystallisation

9 Separation

10 Biochips/  
Microfluidics11 Cryo-  
Technics12 Lids/Sealers/  
CapMats13 Reaction Tubes/  
Analyser Cups

14 Accessories



### CELLMASTER™ Roller Bottle Nomenclature:

- The product range includes two different sizes, a short and a long form. The sizes are labelled as **X** (short) and **XL** (long)
- Both sizes are available with a smooth or a radially ribbed surface. The ribbed design increases the growth area of the roller bottle without changing the height. The **figure** in front of the **X** or **XL** indicates the multiplication factor by which the surface of a ribbed type increases compared to the short smooth roller bottle with 850 cm<sup>2</sup>
- Short forms with a ribbed design have a 2-fold or 2.5-fold expanded growth area (2 X or 2.5 X)
- Long roller bottles with a ribbed design have a 5-fold expanded growth area (5 XL) compared to the smooth short form (1 X)

## Polystyrene Roller Bottles



Free of detectable  
DNase, RNase,  
human DNA  
non-pyrogenic

non-  
cytotoxic

### Polystyrene Roller Bottles

- Particularly high stability and optical clarity
- Improved cell adhesion through physical surface treatment
- Thread enables quick opening with a 2/3 turn
- Screw caps with larger knurls for improved grip and ease of opening/closing
- Lot number and best-before date on each roller bottle
- Sterile, individually packed screw caps available:
  - Standard screw cap (Cat.-No. 383 361)
  - Filter screw cap (Cat.-No. 383 382)
- Nomenclature p. 1 | 23
- Double-bag bulk packaging (suited for clean room use) available on request

Cat.-No.	680 060	680 065	681 060	681 065	681 070	681 075
Description	1 X	1 X	2 X	2 X	2.5 X	2.5 X
Surface	smooth	smooth	ribbed	ribbed	ribbed	ribbed
ø [mm] x height [mm]	122 x 271	122 x 271	122 x 271	122 x 271	122 x 271	122 x 271
Growth area [cm²]	850	850	1700	1700	2125	2125
Max. volume [ml]	2520	2520	2280	2280	2300	2300
TC surface treatment	+	+	+	+	+	+
Sterile	+	+	+	+	+	+
Standard screw cap	+	+	+	+	+	+
Quantity per bag/case	2/24	24	2/24	24	2/24	24

Cat.-No.	682 012	682 060	682 075	682 070
Description	1 XL	1 XL	5 XL	5 XL
Surface	smooth	smooth	ribbed	ribbed
ø [mm] x height [mm]	122 x 500	122 x 500	122 x 500	122 x 500
Growth area [cm²]	1700	1700	4250	4250
Max. volume [ml]	4970	4970	4640	4640
TC surface treatment	+	+	+	+
Sterile	+	+	+	+
Standard screw cap	+	+	+	+
Quantity per bag/case	12	1/12	12	1/12



## Polystyrene Filter Cap Roller Bottles

- Particular high stability and optical clarity
- Improved cell adhesion through physical surface treatment
- Thread enables quick opening with a 2/3 turn
- Screw caps with larger knurls for improved grip and ease of opening/closing
- Lot number and best-before date on each roller bottle
- Sterile, individually packed screw caps available:
  - Standard screw cap (Cat.-No. 383 361)
  - Filter screw cap (Cat.-No. 383 382)
- Nomenclature p. 1 | 23
- Double-bag bulk packaging (suited for clean room use) available on request

Free of detectable DNase, RNase, human DNA  
non-pyrogenic

non-cytotoxic

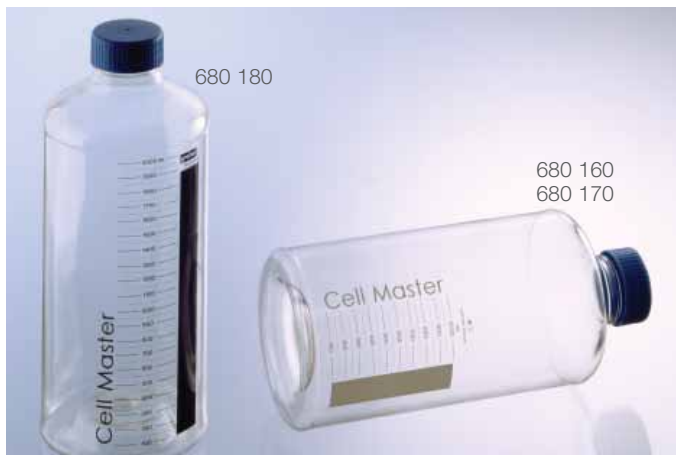


Cat.-No.	680 058	680 068	682 015	682 065
Description	1 X	1 X	1 XL	1 XL
Form	short	short	long	long
Surface	smooth	smooth	smooth	smooth
ø [mm] x height [mm]	122 x 271	122 x 271	122 x 500	122 x 500
Growth area [cm <sup>2</sup> ]	850	850	1700	1700
Max. volume [ml]	2520	2520	4970	4970
TC surface treatment	+	+	+	+
Sterile	+	+	+	+
Filter screw cap	+	+	+	+
Quantity per bag/case	2/24	24	12	1/12



Cat.-No.	681 062	681 072	682 078
Description	2 X	2.5 X	5 XL
Form	short	short	long
Surface	ribbed	ribbed	ribbed
ø [mm] x height [mm]	122 x 271	122 x 271	122 x 500
Growth area [cm <sup>2</sup> ]	1700	2125	4250
Max. volume [ml]	2280	2300	4640
TC surface treatment	+	+	+
Sterile	+	+	+
Filter screw cap	+	+	+
Quantity per bag/case	2/24	2/24	1/12

## Polyethylene Terephthalate (PET) Roller Bottles



### Polyethylene Terephthalate (PET) Roller Bottles

- PET material with high impact resistance and gas permeability
- Surface suitable for many adherent cell lines
- All PET(G) roller bottles have a standard screw cap
- PETG (glycolised PET) with high stability at a consistent level of transparency
- Break-proof
- Nomenclature p. 1 | 23

Free of detectable DNase, RNase, human DNA  
non-pyrogenic

non-cytotoxic



Cat.-No.	680 160	680 170	680 180 <sup>*)</sup>	681 160	681 170
Description	1 X	1 X	1 X	2 X	2.5 X
Material	PET	PET	PET	PETG	PETG
Form	short	short	short	short	short
Surface	smooth	smooth	smooth	ribbed	ribbed
ø [mm] x height [mm]	116 x 276	116 x 276	116 x 276	122 x 275	122 x 275
Growth area [cm <sup>2</sup> ]	850	850	850	1700	2125
Max. volume [ml]	2500	2500	2500	2450	2500
Sterile	+	+	+	+	+
Quantity per bag/case	1/18	30	1/18	20	5/20

<sup>\*)</sup> black graduation



Cat.-No.	682 180	682 160
Description	1 XL	5 XL
Material	PETG	PETG
Form	long	long
Surface	smooth	ribbed
ø [mm] x height [mm]	122 x 500	122 x 500
Growth area [cm <sup>2</sup> ]	1800	4250
Max. volume [ml]	5130	4750
Sterile	+	+
Quantity per bag/case	22	22