



# Stericup<sup>®</sup> and Steritop<sup>®</sup> Filtration and Storage Systems

## Introduction

Stericup<sup>®</sup> and Steritop<sup>®</sup> systems are filter funnel products for use in the sterile vacuum filtration of aqueous solutions such as tissue culture media and biological fluids. The systems are designed to maximize flow and reduce foaming and protein denaturation. The Stericup<sup>®</sup> system has a quick release connection and includes a receiver flask (bottle) with cap. The Steritop<sup>®</sup> system has a standard threaded connection and does not include a bottle. Stericup<sup>®</sup> and Steritop<sup>®</sup> systems are sterile and non-pyrogenic.

## Usage Guidelines

- Choose a Stericup<sup>®</sup> or Steritop<sup>®</sup> system with a capacity large enough to accommodate the volume of fluid being filtered. Systems are available in 150, 250, 500, or 1,000 milliliter (mL) capacities.
- Perform binding studies before you filter very dilute biological solutions.
- To avoid clogging the membrane when filtering a particulate-laden solution, place a glass fiber prefilter (cat. no. AP2007500) on top of the membrane filter in the funnel.
- To ensure safe use, always follow good laboratory practices and review the following warnings.

### WARNINGS:

- Do not use these systems in direct patient care applications or diagnostic procedures; they were designed for laboratory use only.
- Stericup<sup>®</sup> and Steritop<sup>®</sup> systems are for single use only; do not reuse.
- Do not autoclave or expose to temperatures greater than 50 °C (122 °F), as this may damage the product.
- To avoid possible injury from implosion during vacuum filtration:
  - Always use appropriate protective safety equipment and protective eyewear during vacuum filtration.
  - Use only glass or plastic bottles designed for vacuum applications. For the Steritop<sup>®</sup> filter funnel, use a 33 or 45 mm threaded glass or plastic media bottle **no larger than 2 liters**.
  - Do not use a bottle that is chipped, scratched, or cracked.
  - Do not exceed 700 mm Hg differential vacuum at 25 °C.
- Perforations in the receiver cap bag will not prevent contamination. Once the outer bag is opened, keep the receiver cap bag in a sterile area to ensure sterility.
- When using infectious or hazardous materials, follow the required regulations and procedures for disposal.

## Chemical Compatibility

The Steritop<sup>®</sup> and Stericup<sup>®</sup> systems are compatible with most aqueous solutions. For chemical compatibility information, go to [www.millipore.com](http://www.millipore.com) and enter *DS1151EN00* in the search box.

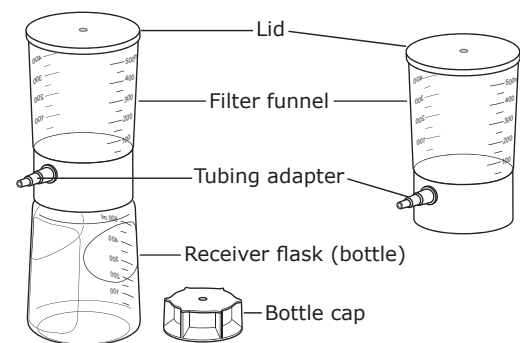
## Materials Required

- Vacuum source
- Vacuum tubing
- Glass fiber prefilters and pipettes (if necessary)
- Vacuum-safe threaded glass or plastic media bottle (for Steritop<sup>®</sup> systems)

## Components

### Stericup<sup>®</sup> System

### Steritop<sup>®</sup> System

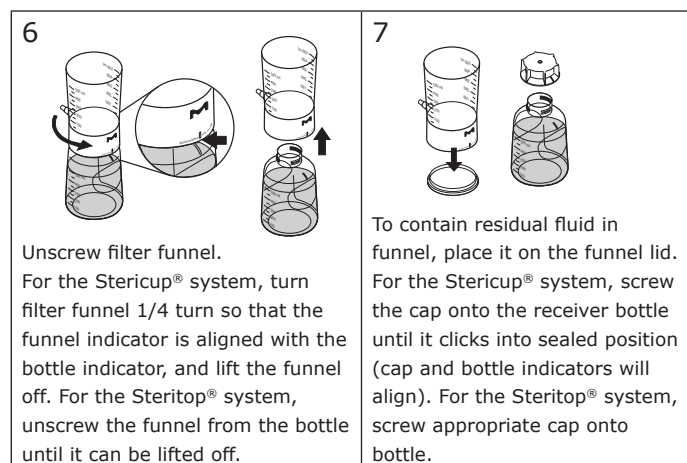


Stericup<sup>®</sup> and Steritop<sup>®</sup> systems come in different sizes to handle different sample capacities; the system components are the same except for capacity.

## How to Use the Stericup<sup>®</sup>/Steritop<sup>®</sup> System

|   |   |
|---|---|
| <p>1</p> <p>Open the Stericup<sup>®</sup> or Steritop<sup>®</sup> bag at the notched edge. The Stericup<sup>®</sup> filter funnel is packaged fully tightened onto the bottle and requires no further tightening.</p>   | <p>2</p> <p>If using the Steritop<sup>®</sup> filter funnel, screw it onto the top of a glass or plastic media bottle with a 33 or 45 mm neck size.</p> |
| <p>3</p> <p>Attach one end of the vacuum tubing to the system and other end to vacuum source. If using a prefilter, remove funnel filter lid and center prefilter on top of the membrane with the edge inserted under the rounded tab. Wet the prefilter to keep it in place.</p> |   |
| <p>4</p> <p>Remove lid (if not already removed) and pour sample into funnel. Replace lid, if desired, and apply vacuum until filtration is complete.</p>  | <p>5</p> <p>Turn off vacuum and remove tubing, then remove funnel. This prevents potential contaminants from entering the receiver bottle.</p>          |

## How to Use the Stericup®/Steritop® System, continued



## Storage Conditions

You can successfully freeze and store many aqueous solutions (such as culture media) in Stericup® bottles at temperatures to -20 °C (-4 °F). It is strongly recommended that you run a sample stability trial under your actual storage conditions prior to using Stericup® bottles for frozen storage.

## Specifications

| Component                      | Specification   |
|--------------------------------|---|
| Funnel/Receiver capacity       | 150 mL/150 mL, 250 mL/250 mL, 500 mL/500 mL, 500 mL/1,000 mL, 1,000 mL/1,000 mL             |
| Membrane pore size             | 0.10 µm, 0.22 µm, 0.45 µm   |
| Membrane diameter              | 73 mm   |
| Sterilization method           | Gamma irradiation   |
| Funnel, receiver, funnel cover | Polystyrene   |
| Bottle cap, tubing connector   | Polyethylene  |
| Filter membrane                | Durapore® polyvinylidene fluoride (PVDF), or Millipore Express® PLUS polyethersulfone (PES) |
| Vacuum port matrix             | Cellulose acetate   |
| Temperature limit              | 50 °C (122 °F)  |
| Pressure limit                 | 700 mm Hg differential vacuum at 25 °C (77 °F)  |

## Stericup® Ordering Information

Products with an asterisk (\*) have been tested for use in stem cell research applications. To determine their effects on mouse stem cell growth and differentiation, three lots of Stericup®-GP devices were used to filter media with LIF. Once filtered, this media was used to passage mouse stem cells five times to verify that Stericup®-GP filtration did not impact pluripotency of mouse stem cells.

Stericup® systems are shipped in quantities of 12 per box.

| System            | Membrane  | Diameter/<br>Pore Size | Catalogue No. |
|-------------------|---|------------------------|---------------|
| 150 mL funnel/    | Durapore® low binding membrane (PVDF)                 | 73 mm/0.22 µm          | S2GVU01RE     |
| 150 mL receiver   | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.45 µm          | S2HVVU01RE    |
| 250 mL funnel/    | Durapore® low binding membrane (PVDF)                 | 73 mm/0.22 µm          | S2GVU02RE     |
| 250 mL receiver   | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.45 µm          | S2HVVU02RE    |
| 500 mL funnel/    | Durapore® low binding membrane (PVDF)                 | 73 mm/0.10 µm          | S2VPU02RE     |
| 500 mL receiver   | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.22 µm          | S2GPU02RE*    |
| 500 mL funnel/    | Durapore® low binding membrane (PVDF)                 | 73 mm/0.22 µm          | S2GVU05RE     |
| 500 mL receiver   | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.45 µm          | S2HVVU05RE    |
| 1,000 mL receiver | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.22 µm          | S2GPU05RE*    |

## Stericup® Ordering Information, continued

|                   |   |               |            |
|-------------------|---|---------------|------------|
| 500 mL funnel/    | Durapore® low binding membrane (PVDF)                 | 73 mm/0.22 µm | S2GVU10RE  |
| 1,000 mL receiver | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.22 µm | S2GPU10RE* |
| 1,000 mL funnel/  | Durapore® low binding membrane (PVDF)                 | 73 mm/0.22 µm | S2GVU11RE  |
| 1,000 mL receiver | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.45 µm | S2HVVU11RE |
| 1,000 mL receiver | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.10 µm | S2VPU11RE  |
| 1,000 mL receiver | Millipore Express® PLUS high flow rate membrane (PES) | 73 mm/0.22 µm | S2GPU11RE* |

## Steritop® Ordering Information

Steritop® systems are shipped in quantities of 12 per box.

### Durapore® Membrane

| System | Diameter/Pore Size | Threads | Catalogue No. |
|--------|--------------------|---------|---------------|
| 500 mL | 73 mm/0.22 µm      | 45 mm   | S2GVT05RE     |

### Millipore Express® PLUS Membrane

| System   | Diameter/Pore Size | Threads | Catalogue No. |
|----------|--------------------|---------|---------------|
| 150 mL   | 73 mm/0.22 µm      | 33 mm   | S2GPS01RE*    |
| 150 mL   | 73 mm/0.22 µm      | 45 mm   | S2GPT01RE*    |
| 250 mL   | 73 mm/0.22 µm      | 33 mm   | S2GPS02RE*    |
| 250 mL   | 73 mm/0.22 µm      | 45 mm   | S2GPT02RE*    |
| 500 mL   | 73 mm/0.22 µm      | 33 mm   | S2GPS05RE*    |
| 500 mL   | 73 mm/0.22 µm      | 45 mm   | S2GPT05RE*    |
| 1,000 mL | 73 mm/0.22 µm      | 45 mm   | S2GPT10RE*    |

## Accessories Ordering Information

This section lists the catalogue numbers for accessories used with the Stericup® and Steritop® systems.

| Accessory  | Size           | Qty    | Catalogue No. |
|--|----------------|--------|---------------|
| Stericup® receiver flask (bottle)                          | 250 mL         | 12/pk  | S200B02RE     |
| Stericup® receiver flask (bottle)                          | 500 mL         | 12/pk  | S200B05RE     |
| Stericup® receiver flask (bottle)                          | 1,000 mL       | 12/pk  | S200B10RE     |
| Glass fiber prefilters                                     | 75 mm          | 100/pk | AP2007500     |
| Silicone rubber tubing, 3/16 in. (4.8 mm) ID, with adapter | 4.5 ft (1.4 m) | 1/pk   | XX7100004     |
| Vacuum/Pressure Pump                                       |                |        |               |
| 115 V, 60 Hz   | N/A            | 1/pk   | WP6111560     |
| 100 V, 50/60 Hz  | N/A            | 1/pk   | WP6110060     |
| 220 V, 50 Hz   | N/A            | 1/pk   | WP6122050     |

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## Technical Assistance

For more information, contact the office nearest you. In the U.S., call 1-800-645-5476. Outside the U.S., go to our web site at [www.millipore.com/offices](http://www.millipore.com/offices) for up-to-date worldwide contact information. You can also visit the tech service page on our web site at [www.millipore.com/techservice](http://www.millipore.com/techservice).

## Warranty

The applicable warranty for the products listed in this publication may be found at [www.millipore.com/terms](http://www.millipore.com/terms) ("Conditions of Sale").

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