

# VacuCap® and VacuCap PF Vacuum Filtration Devices

Innovative bottle-top filters for fast vacuum filtration of 100 mL to 5 L of aqueous solutions



- ▶ Filter faster. Supor® membrane provides high flow rates.
- ▶ No need to constantly refill upper fluid reservoir. Draws directly from the mixing reservoir.
- ▶ Eliminates the possibility of contamination from transfer steps. Filters directly into the desired container.
- ▶ Match filter to sample volume by choosing from two sizes.
- ▶ Available built-in prefilter increases throughput of particulate-laden solutions such as serum-containing media.
- ▶ Environmentally-friendly with minimal plastic waste.
- ▶ Patented small design accepts a variety of collection vessels and reduces storage space and waste.
- ▶ TA version available with tubing attached to each device for maximum convenience.
- ▶ Sterilization by gamma irradiation eliminates potential contamination by EtO residuals.

## Applications

- ▶ Excellent device for cell culture media preparation.
- ▶ PF version is useful for sterilization of hard-to-filter solutions.
- ▶ Reduce mycoplasma with the 0.1 µm pore size.

## Specifications

### Materials of Construction

Filter Media: Supor [hydrophilic polyethersulfone (PES)] membrane  
Housing: Modified acrylic  
Membrane Support Material: Polyester  
Sinker Material: Glass-filled polyurethane elastomer  
Inlet Tubing: Polyvinyl chloride (PVC) medical-grade tubing  
Gasket Seal Material: Polyethylene

### Pore Size

0.1, 0.2, 0.45, and 0.8/0.2 µm

### Effective Filtration Area

VacuCap 60 Devices: 30 cm<sup>2</sup>  
VacuCap 90 Devices: 60 cm<sup>2</sup>

### Typical Throughput

(RPMI + 10% newborn calf serum)  
VacuCap 60 Devices, 0.2 µm: 1 L  
VacuCap 90 Devices, 0.2 µm: 5 L  
(RPMI + 10% calf serum)  
VacuCap 60 PF Devices: 500 mL  
VacuCap 90 PF Devices: 1 L

### Collection Vessel

VacuCap 60 Devices: Can be used on receptacles with openings ranging from 2 - 5 cm (0.8 - 1.9 in.)  
VacuCap 90 Devices: Can be used on receptacles with openings ranging from 2 - 6.5 cm (0.8 - 2.5 in.)

### WARNING

Collection vessels should be vacuum rated. Implosion may result.

### Maximum Operating Temperature

55 °C (131 °F)

### Typical Water Flow Rate

mL/min at 25.4 cm Hg (10 in. Hg)

### VacuCap 60 Devices

0.1 µm: 50
0.2 µm: 200
0.45 µm: 280
PF: 200

### VacuCap 90 Devices

0.1 µm: 100
0.2 µm: 400
0.45 µm: 560
PF: 400

### Maximum Vacuum

63.5 cm Hg (25 in. Hg)

### Endotoxin Level

< 0.25 EU/mL using Limulus Amoebocyte Lysate (LAL) test

### Biological Safety

Passes United States Pharmacopeia (USP) Biological Reactivity Test, *In Vivo* <88>

### Sterilization

Sterilized by gamma irradiation and individually packaged.

## Basic Procedures



1. Connect the feed tubing to the port marked "INLET" on the VacuCap® device. Place the opposite end of the tubing in the unfiltered fluid to be drawn.
2. Connect the vacuum tubing to the port marked "VACUUM" on the VacuCap device. Refer to the product insert for safety precautions.
3. While holding the VacuCap device securely onto the filtrate container, start the vacuum. The VacuCap device will seal securely to the container top and fluid will be drawn.
4. When filtration is complete, switch off the vacuum pump allowing the vacuum inside the receiving container to dissipate. Refer to the product insert for complete instructions.

## Ordering Information

### VacuCap 60 Devices

Part Number	Description	Pkg
4631	0.1 µm, 60 mm, gamma-irradiated	10/pkg
4632	0.2 µm, 60 mm, gamma-irradiated	10/pkg
4634	0.45 µm, 60 mm, gamma-irradiated	10/pkg
TA4632	0.2 µm, 60 mm (supplied with individually attached tubing for each filter device), gamma-irradiated	10/pkg

### VacuCap 60 PF Device

Part Number	Description	Pkg
4638	0.8/0.2 µm, 60 mm, gamma-irradiated	10/pkg

### VacuCap 90 Devices

Part Number	Description	Pkg
4621	0.1 µm, 90 mm, gamma-irradiated	10/pkg
4622	0.2 µm, 90 mm, gamma-irradiated	10/pkg
4624	0.45 µm, 90 mm, gamma-irradiated	10/pkg
TA4622	0.2 µm, 90 mm (supplied with individually attached tubing for each filter device), gamma-irradiated	10/pkg
TA4624	0.45 µm, 90 mm (supplied with individually attached tubing for each filter device), gamma-irradiated	10/pkg

### VacuCap 90 PF Device

Part Number	Description	Pkg
4628	0.8/0.2 µm, 90 mm, gamma-irradiated	10/pkg

### Accessories and Replacement Parts

Part Number	Description	Pkg
4623	Feedline accessory kit	1/pkg

### Related Products

AcroCap™ Positive Pressure Devices . . . . .	124
Acrodisc® Syringe Filters with Supor® Membrane . . . . .	117, 118, 123
AcroPak™ Capsules with Supor Membrane. . . . .	129, 132, 137
Supor Membrane Disc Filters . . . . .	111
Vacushield™ Vent Device. . . . .	165