

MicroFunnel™ Filter Funnels

Increase laboratory efficiency with a newly designed filter funnel and Petri dish all in one

- Certified. Each lot is certified for microbiological analysis to provide added assurance of reliable results.
- Easy to use. Unique squeeze separation of cylinder from base allows easy access to membrane.
- Individually bagged, disposable filter units prevent cross-contamination of samples.
- Available in 300 mL capacity to process larger samples.
- Easy and accurate sample measurement. The 100 mL funnels are marked in 10 mL increments. The 100 mL increment is marked completely around the funnel for higher visibility. The 300 mL funnel is marked in 50 mL increments.
- Saves time. Disposable design eliminates the cleaning and sterilization required with reusable funnels.
- Ready to use. Preassembled and sterilized by gamma irradiation to eliminate the potential for toxic extractables associated with EtO sterilization.



- Variety of options. Choose from GN-6 Metrical® or Supor® membranes with 0.2 or 0.45 μm pore size, or Metrical Black membrane with 0.45 or 0.8 μm pore size.
- Easily remove the membrane for culturing on agar or broth medium.

Applications

- Test any aqueous solution for microbial contamination using MicroFunnel filter funnels and the principles of the Membrane Filter (MF) Technique. Convenient and ready to use, these disposable filter funnels increase the productivity and efficiency of busy laboratories that do not have time to clean and sterilize reusable hardware.
- Ideal for quality control analysis of aqueous fluids used in pharmaceutical production. Individually bagged for added assurance of sterility. Individually labeled for lot traceability. Disposable filter funnels eliminate the possibility of sample cross contamination. All of these features increase the reliability and efficiency of analysis in pharmaceutical laboratories.
- Convenient for last-minute samples at the end of a day or work week. Maintain a supply of MicroFunnel filter funnels in case the autoclave breaks down and reusable hardware cannot be sterilized.
- The 300 mL funnel is ideal for processing larger samples without the “pour and wait” of smaller funnels. Processing larger samples can improve sensitivity and confidence in the results.
- Test for a variety of bacterial contaminants, such as Total Coliforms or *Pseudomonas* species, by choosing between the 0.45 and 0.2 μm pore sizes.
- Yeasts, molds and other light-colored organisms can be easily identified by selecting MicroFunnel YMB filter funnel with Metrical Black membrane in 0.45 or 0.8 μm pore size.

Specifications

Membrane Selection

GN-6 Metrical® membrane: A 0.45 µm mixed cellulose ester membrane ideal for use in most applications.

Supor® membrane: A 0.2 µm polyethersulfone membrane ideal for its low binding characteristics and superior retention of small organisms such as *Pseudomonas sp.*

Metrical Black membrane: A 0.45 µm modified polyethersulfone membrane ideal for yeast and mold analysis or providing good contrast for light colored colonies.

Materials of Construction

Filter Media:

PN 4800, 4801, 4804, 4810, 4815, 4826:

GN-6 Metrical membrane (mixed cellulose ester)

PN 4803, 4806, 4818, 4828: Supor membrane (hydrophilic polyethersulfone)

PN 4805, 4817, 4819, 4827: Metrical Black membrane (hydrophilic modified polyethersulfone)

Support Pad: Cellulose

Cylinder, Base, Lid Petri Dish Base: Polypropylene

Cover: Polystyrene

Plug: Polyethylene

Funnel Adapter: Polyethylene (not autoclavable)

Effective Filtration Area

13.46 cm²

Maximum Vacuum

635 mm Hg (25 in. Hg)

Sterilization

Individually packed and sterilized by gamma irradiation

Dimensions

100 mL

Height:

8.05 cm (3.17 in.) with lid Petri dish

7.62 cm (3.00 in.) with cover

Diameter:

6.40 cm (2.52 in.) with lid Petri dish

6.05 cm (2.38 in.) with cover

300 mL

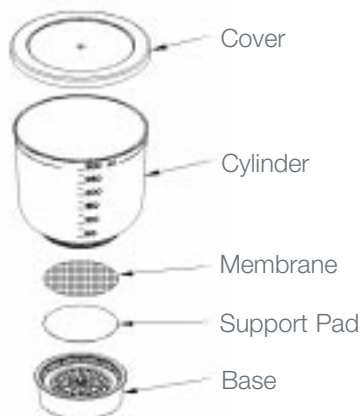
Height:

9.09 cm (3.58 in.) with cover

Diameter:

8.84 cm (3.48 in.) with cover

MicroFunnel™ Filter Funnel Component Diagrams



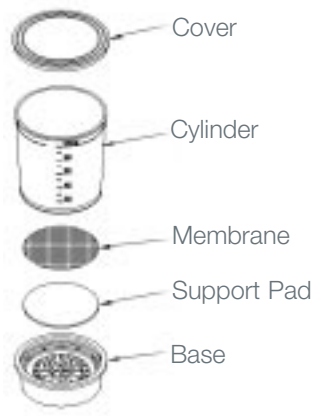
PN 4815

PN 4817

PN 4818

PN 4819

PN 4828



PN 4800

PN 4801

PN 4803

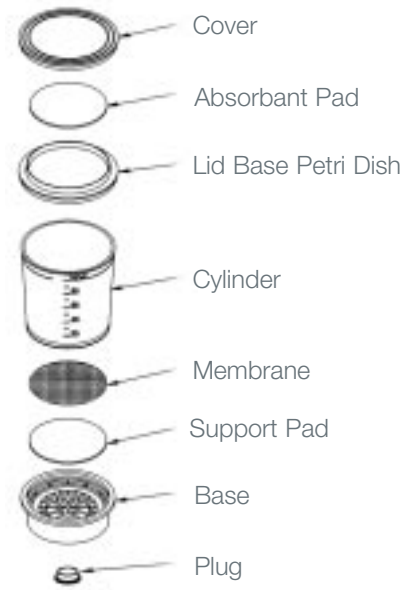
PN 4804

PN 4805

PN 4806

PN 4826

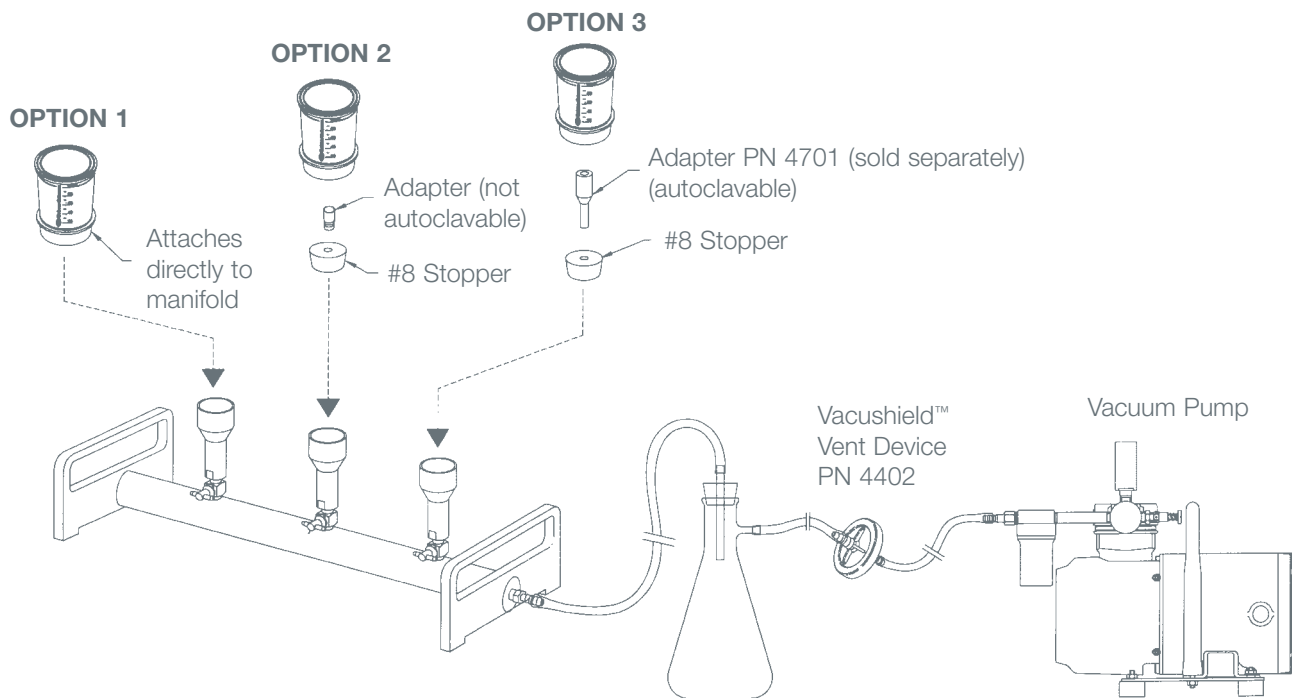
PN 4827



PN 4810

How-to-Use

MicroFunnel™ Filter Funnel in Use



Filter The Sample



1. Remove the sterile funnel from the bag and place directly onto a Pall Life Sciences aluminum manifold. If you do not have a Pall Life Sciences aluminum manifold, insert funnel adapter into #8 stopper, then place stopper/adapter assembly into manifold or flask.



2. Remove funnel cover without touching the inner surface of the funnel, and pour sample into the funnel. Replace cover and turn on the vacuum to draw the entire sample through the filter.



3. Rinse the inside walls of the funnel with 60 mL of sterile buffer solution. Allow the vacuum to remain for 30 to 45 seconds, then turn off the vacuum.

Culture The Sample

Top Loading the Media



1. Remove the cover of the funnel and dispense the contents of an ampoule of culture medium onto the membrane surface. Use caution to avoid excessive splashing and subsequent loss of the media onto the inside of the funnel cylinder. Allow media to be drawn in by residual or momentary vacuum.



2. Separate the funnel from the base by removing funnel cover and gently squeezing near the top of the funnel cylinder. Place funnel cover directly onto the base to create a Petri dish.

3. Invert and incubate.

Transferring the Membrane



1. Separate the funnel from the base by removing funnel cover and gently squeezing near the top of the funnel cylinder.



2. Using aseptic technique, carefully remove the membrane filter from the base with smooth-tipped forceps.

3. Place the membrane filter on a prepared agar plate or Petri dish with absorbent pad soaked with broth.

4. Cover, invert, and incubate.

For MicroFunnel™ LP, Product No. 4810



1. Dispense the contents of an ampoule of culture medium onto the absorbent pad in the Petri dish lid kit, supplied only with MicroFunnel LP, PN 4810.



2. With Petri dish lid kit removed, filter the sample, rinse, then access the membrane by gently squeezing near the top of the funnel cylinder.

3. Using aseptic technique, carefully remove the membrane filter from the base with smooth-tipped forceps.

4. Place the membrane filter onto the broth-soaked absorbent pad in the Petri dish lid kit.

5. Cover, invert, and incubate.

Ordering Information

MicroFunnel™ Filter Funnels

Product No.	Description	Packaging
4800	0.45 µm GN-6 Metrical® membrane, white, gridded, sterile, individually bagged	50/pkg
4801	NB unit with 0.45 µm GN-6 Metrical membrane, white, gridded, sterile	50/pkg
4803	SP unit with 0.2 µm Supor® membrane, white, gridded, sterile, individually bagged	50/pkg
4804	0.45 µm GN-6 Metrical membrane, white, gridded, sterile, individually bagged	200/pkg
4805	YMB unit with 0.45 µm Metrical Black membrane, gridded, sterile, individually bagged	50/pkg
4806	SNG unit with 0.2 µm Supor membrane, white, no grid, sterile, individually bagged	50/pkg
4810	LP unit with 0.45 µm GN-6 Metrical membrane, white, gridded, sterile, individually bagged, Petri dish lid	50/pkg
4815	0.45 µm GN-6 Metrical membrane, white, gridded, sterile, individually bagged, 300 mL	20/pkg
4817	YMB unit with 0.45 µm Metrical Black membrane, gridded, sterile, individually bagged, 300 mL	20/pkg
4818	SP unit with 0.2 µm Supor membrane, white, gridded, sterile, individually bagged, 300 mL	20/pkg
4819	YMB unit with 0.8 µm Metrical Black membrane, gridded, sterile, individually bagged, 300 mL	20/pkg
4826	0.45 µm GN-6 membrane, white, no grid, sterile, individually bagged	50/pkg
4827	0.45 µm Metrical Black membrane, no grid, sterile, individually bagged	50/pkg
4828	0.45 µm Supor membrane, white, gridded, sterile, individually bagged, 300 mL	20/pkg

Additional MicroFunnel Filter Funnel Products

MicroFunnel Plus Filter Funnels

Product No.	Description	Packaging
4807	0.45 µm GN-6 Metrical membrane, white, gridded, sterile, individually bagged, 100 mL capacity	50/pkg
4808	0.45 µm Metrical Black membrane, gridded, sterile, individually bagged, 100 mL capacity	50/pkg
4809*	0.2 µm Supor membrane, white, gridded, sterile, individually bagged, 100 mL capacity	50/pkg
4823*	0.45 µm Supor membrane, white, gridded, sterile, individually bagged, 100 mL capacity	50/pkg
4813*	0.2 µm Supor membrane, white, gridded, sterile, individually bagged, 300 mL capacity	20/pkg
4814*	0.45 µm Supor membrane, white, gridded, sterile, individually bagged, 300 mL capacity	20/pkg

*Compatible with hot water samples when using Pall Life Sciences funnel holders for critical sample sites.

MicroFunnel ST Disposable Filter Funnels

Product No.	Description	Packaging
4750**	0.45 µm Supor membrane, no grid, sterile, 100 mL capacity	40/pkg
4751**	0.45 µm Supor membrane, no grid, sterile, 300 mL capacity	20/pkg
4811**	0.45 µm GN-6 Metrical membrane, gridded, sterile, 100 mL capacity	40/pkg
4812**	0.45 µm GN-6 Metrical membrane, gridded, sterile, 300 mL capacity	20/pkg

**100 mL funnels (40 units total per box): 10 individually bagged funnels within an overpack bag, 4 overpack bags per box.

300 mL funnels (20 units total per box): 5 individually bagged funnels within an overpack bag, 4 overpack bags per box.

Complementary Products

Product No.	Description	Packaging
4701	Autoclavable adapters for vacuum manifold when using rubber stopper	3/pkg
4713	Vacuum pump adapter	1/pkg

Complementary Products

Microbiological Media

2 mL Plastic Ampoules

Product No.	Description	Packaging
4302	M-FC Broth with rosolic acid, Fecal Coliforms	50/pkg
4306	Pseudomonas Broth, <i>Pseudomonas sp.</i>	50/pkg
4307	Trypticase Soy Broth – USP, Total Bacteria	50/pkg
4352	HPC Media with TTC Indicator, Total Bacteria	50/pkg
68105	MF-Endo Broth, Total Coliforms	50/pkg
68106	M-TGE Broth, Total Bacteria	50/pkg
68107	M-Green YM Broth, yeast and mold	50/pkg
68108	KF-Streptococcal Broth, Fecal <i>Streptococcus</i>	50/pkg
68109	Orange Serum Broth, <i>Lactobacillus sp.</i>	50/pkg

2 mL Glass Ampoules

Product No.	Description	Packaging
4355	MF-Endo Broth, Total Coliforms	20/pkg
4356	M-FC Broth, Fecal Coliforms	20/pkg
4372	M-TGE Broth, Total Bacteria	20/pkg

2 mL Wide-mouth Glass Ampoules

Product No.	Description	Packaging
68100	M-FC Broth, Fecal Coliforms	20/pkg
68101	M-FC Broth with rosolic acid, Fecal Coliforms	20/pkg
68102	MF-Endo Broth, Total Coliforms	20/pkg

100 mL Bottle

Product No.	Description	Packaging
4313	MF-Endo Broth, Total Coliforms, Bottle RG	1/pkg

Filter Funnel Manifolds

Product No.	Description	Packaging
15408	1-place Aluminum	1/pkg
15402	3-place Aluminum	1/pkg
15403	6-place Aluminum	1/pkg
4205	3-place Polyurethane	1/pkg



Life Sciences

Pall Life Sciences
600 South Wagner Road
Ann Arbor, MI 48103-9019 USA

800.521.1520 toll free in USA
734.665.0651 phone
734.913.6114 fax

Australia – Lane Cove, NSW

Tel: 02 9428-2333
1800 635-082 (in Australia)
Fax: 02 9428-5610

Austria – Wien

Tel: 043-1-49 192-0
Fax: 0043-1-49 192-400

Canada – Ontario

Tel: 905-542-0330
800-263-5910 (in Canada)
Fax: 905-542-0331

Canada – Québec

Tel: 514-332-7255
800-435-6268 (in Canada)
Fax: 514-332-0996

800-808-6268 (in Canada)

China – P. R., Beijing

Tel: 86-10-8458 4010
Fax: 86-10-8458 4001

France – St. Germain-en-Laye

Tel: 01 30 61 39 92
Fax: 01 30 61 58 01
Lab-FR@pall.com

Germany – Dreieich

Tel: 06103-307 333
Fax: 06103-307 399
Lab-DE@pall.com

India – Mumbai

Tel: 91-22-5956050
Fax: 91-22-5956051

Italy – Milano

Tel: 02-47796-1
Fax: 02-47796-394
or 02-41-22-985

Japan – Tokyo

Tel: 3-3495-8319
Fax: 3-3495-5397

Korea – Seoul

Tel: 2-569-9161
Fax: 2-569-9092

Poland – Warszawa

Tel: (+ 48 22) 510 21 00
Fax: (+ 48 22) 510 21 01

Russia – Moscow

Tel: 095 787-76-14
Fax: 095 787-76-15

Singapore

Tel: (65) 389-6500
Fax: (65) 389-6501

Spain – Madrid

Tel: 91-657-9876
Fax: 91-657-9836

Sweden – Lund

Tel: +46 (0)46 158400
Fax: +46 (0)46 320781

Switzerland – Basel

Tel: 061-638 39 00
Fax: 061-638 39 40

Taiwan – Taipei

Tel: 2-2545-5991
Fax: 2-2545-5990

United Kingdom – Portsmouth

Tel: 023 92 302600
Fax: 023 92 302601
Lab-UK@pall.com

Visit us on the Web at www.pall.com/lab

E-mail us at Lab@pall.com

© 2004, Pall Corporation. Pall, , Metrical, MicroFunnel, Supor, and Vacushield are trademarks of Pall Corporation. ® indicates a trademark registered in the USA. **Filtration. Separation. Solution.** is a service mark of Pall Corporation.