

# User Guide

## Steripak™ -GP

### Pressure Driven Filter Units

---

- Single use only
- Sterile
- Non-pyrogenic
- For laboratory use only

SPGP M10 RJ (3/box)

SPGP M20 RJ (3/box)

MILLIPORE



## **Notice**

The information in this document is subject to change without notice and should not be construed as a commitment by Millipore Corporation. Millipore Corporation assumes no responsibility for any errors that may appear in this document. This manual is believed to be complete and accurate at the time of publication. In no event shall Millipore Corporation be liable for incidental or consequential damage in connection with or arising from the use of this manual.

Copyright 2003, Millipore Corporation. All rights reserved.

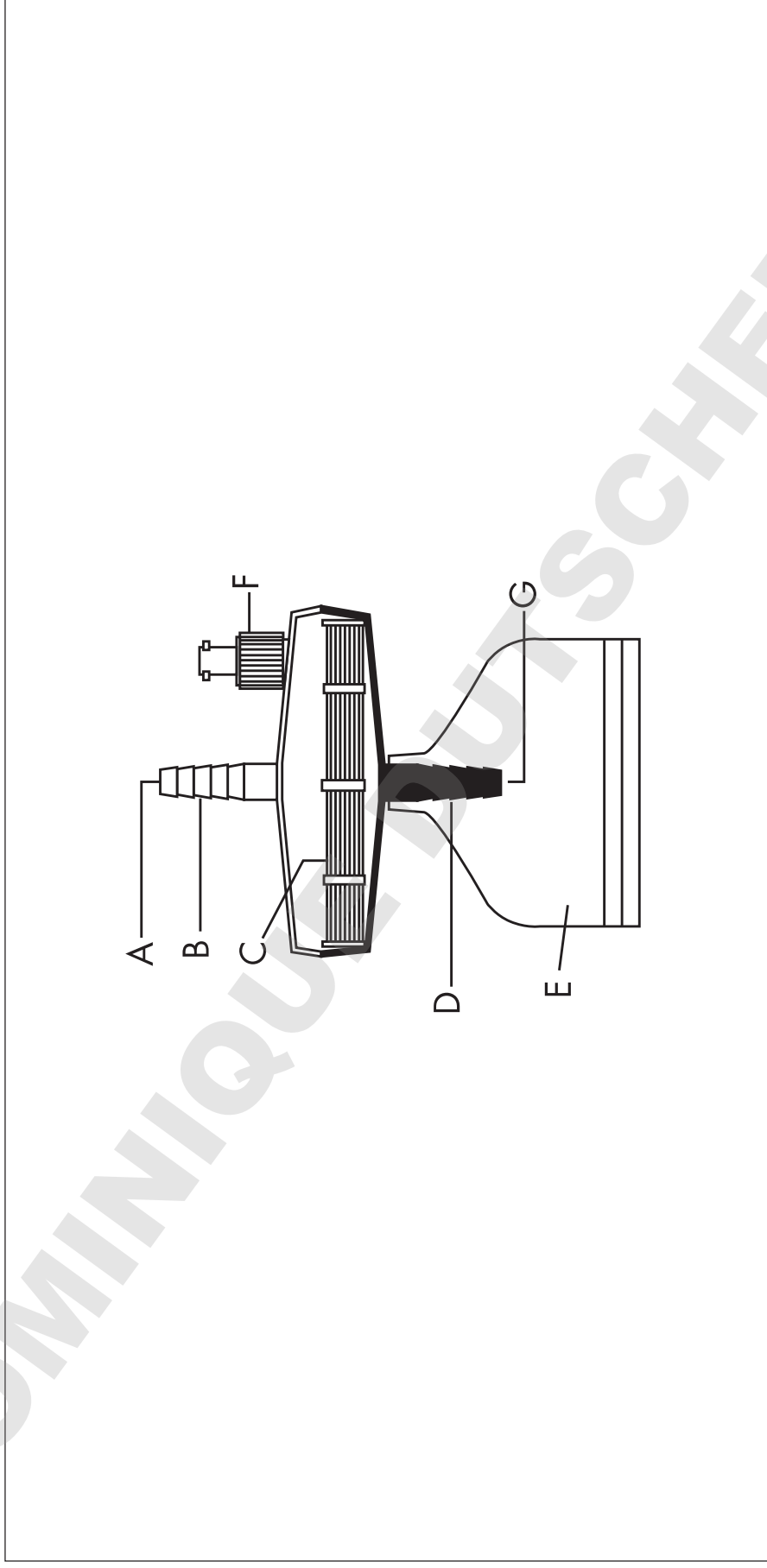
Millipore and Millipore Express are registered trademarks of Millipore Corporation. Steripak is a trademark of Millipore Corporation. Clorox is a trademark of Clorox Company.

PF07111, Rev A, 09/03

## **Introduction**

The Steripak™-GP filter unit is a sterilizing filter for aqueous solutions. It removes microorganisms, particles, precipitates, and undissolved powders larger than 0.22 µm. The Steripak-GP filter unit is non-pyrogenic and non-toxic. This single-use product consists of a Millipore Express® 0.22 µm membrane filter sealed in a SAN housing. The Steripak-GP filter unit is available in two sizes. The 100 cm<sup>2</sup> version can filter up to 10L while the 200 cm<sup>2</sup> version can filter up to 20L. Typical applications include the sterile filtration of tissue culture media, additives, buffers, and water.

## Diagram of the Steripak-GP Filter Unit with Filling Bell



A	Female Luer Slip Inlet	E	Filling Bell
B	Hose Barb	F	Vent
C	0.22 $\mu\text{m}$ Filter	G	Female Luer Slip Outlet
D	Hose Barb		

## Chemical Compatibility

The Steripak-GP filter unit is compatible with most aqueous solutions. It may be used to filter the agents listed in the following chart. This guide has been developed from technical publications, materials suppliers, laboratory tests, and field evaluations, etc., and is believed to be reliable. However, because of variability in temperature, concentrations, duration of exposure, and other factors outside of our control that may affect the use of the unit, no warranty is given or is to be implied with respect to such information. Agents not listed below should be tested with the Steripak-GP filter unit before use.

---

### Chemical

Aqueous buffers  
Cell culture media  
Clorox® bleach (5% solution)  
Sodium hydroxide  
Water

---

## How to Use the Steripak-GP Pressure Driven Filter Unit

This section lists warnings and cautions you need to know when using the Steripak-GP filter unit. It also provides steps to use it with a pressure vessel or a peristaltic pump.

### WARNINGS:

- **To ensure sterility, do not use this product if the package is damaged.**
- **For laboratory use only.**

### CAUTIONS:

- Do not resterilize or reuse the Steripak-GP filter unit. The Steripak-GP unit is not autoclavable.
- Do not use the Steripak-GP unit at temperatures above 45 °C (113 °F).
- Use hose clamps to avoid blowing the tube off the Steripak-GP filter unit.
- Do not exceed the operating pressure of 75 psig when using Steripak-GP filter unit with a peristaltic pump.

## Directions to Use the Steripak-GP Filter Unit with a Pressure Vessel or Peristaltic Pump

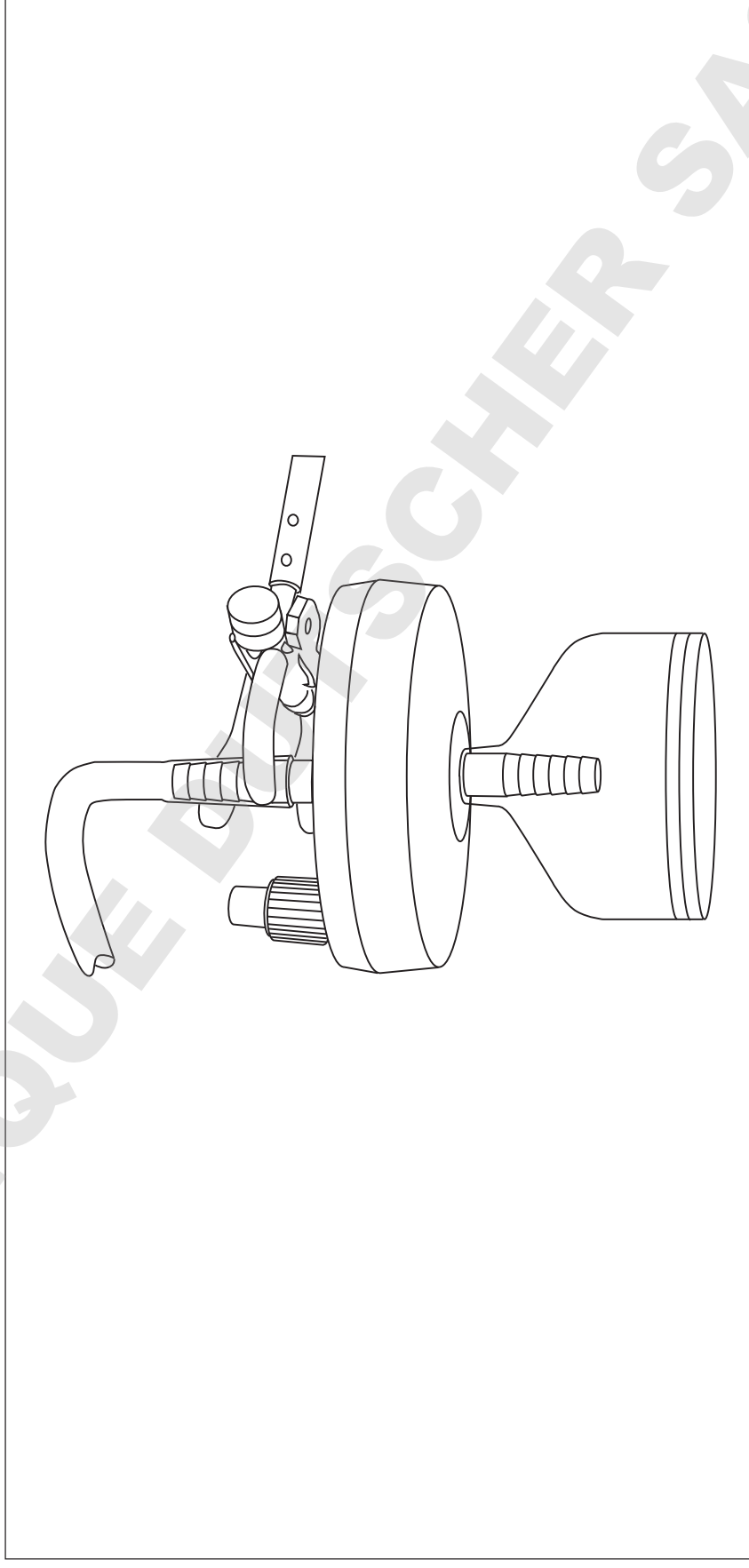
1. Fill a pressure vessel or container (if using a pump) with the solution you want to sterilize.
2. Prepare the pressure vessel or peristaltic pump. If using the pump, load the pump head with 7.93 mm (3/16") I.D. silicone tubing.

<b>Device</b>	<b>For Best Results...</b>
Pressure vessel	Pressurize the vessel at 15 to 20 psig (103 to 138 kPa).
Peristaltic pump	Use a pump drive and pump head that delivers a constant speed of 60 rpm. This generates an average flow rate of 100 mL/min. (The Millipore fixed speed peristaltic pump delivers a maximum flow of 100 mL/min.)

3. Fit a 4–9 1/2 mm (.15"–.37") I.D. silicone rubber or latex tube over the outlet connector of the pressure vessel. The fit should be snug.
4. Peel open the Steripak filter unit package container using aseptic technique.

### **Directions to Use the Steripak-GP Filter Unit with a Pressure Vessel or Peristaltic Pump,** continued

5. Remove the unit from the blister pack and attach the tubing to the inlet using aseptic technique.
6. Connect the unit to a ring stand and place a sterile collection flask under it.



7. Turn on the pressure vessel or peristaltic pump. When done, discard the Steripak filter unit appropriately.



## Specifications

	<b>SPGP M10 RJ</b>	<b>SPGP M20 RJ</b>
<b>Dimensions</b>		
inlet to edge of filling bell diameter	99 mm (3.88 in.)	99 mm (3.88 in.)
filtration area	76 mm (3 in.)	76 mm (3 in.)
pore size	100 cm <sup>2</sup>	200 cm <sup>2</sup>
	0.22 µm	0.22 µm
<b>Filtration volume</b>	10L	20 L
<b>Flow rate at 25°C</b>		
typical initial average flow rate for water at 15 psig:	2 L/min	4 L/min
<b>Materials</b>	Millipore Express membrane, hydrophilic polyethersulfone (PES), type GP; SAN housing; polycarbonate filling bell	
<b>Temperature limit</b>	45 °C (113 °F) maximum	
<b>Pressure limit at 25°C</b>	5 bar (75 psi) max., forward direction; 0.3 bar (5 psi) max., reverse direction	
<b>Hold-up volume</b>	≤ 2.7 mL after air purge	
<b>Connections</b>	6 mm (1/4") stepped hose barb inlet and outlet	
<b>Sterilization</b>	gamma irradiation	

## Technical Assistance

For more information, contact the Millipore office nearest you. In the U.S., call **1-800-MILLIPORE** (1-800-645-5476). Outside the U.S., see your Millipore catalogue for the phone number of the office nearest you or go to our web site at [www.millipore.com/](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). For the most up-to-date information on our sterile filtration devices, see <http://www.millipore.com/sterile>.

## Standard Warranty

**Millipore Corporation** (“Millipore”) warrants its products will meet their applicable published specifications when used in accordance with their applicable instructions for a period of one year from the date of shipment of the products. **MILLIPORE MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** The warranty provided herein and the data, specifications and descriptions of Millipore products appearing in Millipore’s published catalogues and product literature may not be altered except by express written agreement signed by an officer of Millipore. Representations, oral or written, which are inconsistent with this warranty or such publications are not authorized and if given, should not be relied upon.

In the event of a breach of the foregoing warranty, Millipore’s sole obligation shall be to repair or replace, at its option, the applicable product or part thereof, provided the customer notifies Millipore promptly of any such breach. If after exercising reasonable efforts, Millipore is unable to repair or replace the product or part, then Millipore shall refund to the customer all monies paid for such applicable product or part. **Millipore shall not be liable for consequential, incidental, special or any other indirect damages resulting from economic loss or property damages sustained by any customer from the use of its products.**

DOMINIQUE DUTSCHER SAS

**MILLIPORE**

PF07111, Rev A, 09/03