

# CROSS-CONTAMINATION . . . A REAL CONCERN.



## MICROGARD™ . . . REAL SPIROMETER PROTECTION.

**W**ith today's awareness of disease transmission, breathing through a medical instrument has become a real concern. The possibility of cross-contamination has caused a rethinking of the methods traditionally used to protect both the patient and instrument. That's why MicroGard™ is an important part of your laboratory protocol, providing the assurance of a safe testing environment every time you use it.

Independent studies of the MicroGard filter clearly demonstrate superiority as a barrier to viral and bacterial cross-contamination, while resistance to inspiratory and expiratory air flow is lower than published recommendations. Priced to be truly disposable, MicroGard filters provide your patients and your laboratory the assurance and protection you need, at a cost you can afford.

## Technical Specifications

### Description

The SensorMedics MicroGard Filter is a disposable barrier type filter intended to protect both patient and instrument, by preventing the transmission of pathogens by droplets and aerosolized particles between the patient and the spirometer, or pulmonary function testing instrument. Independent studies with bacteria and viral aerosols demonstrate 99+% filtration<sup>1</sup>.

### Indications

A disposable filter for use in prevention of contamination of spirometers and pulmonary function testing instruments, associated valves and hoses, from aerosols and particulates which may be present in a patient's exhaled gas. The MicroGard filter incorporates the highest filtration medium available with an exceptionally low resistance to air flow. Filter resistance to air flow is less than one-half of published recommendations for pulmonary function testing devices<sup>2,3</sup>.

### Applications

- Spirometry
- Pulmonary Function Testing
  - Lung Volumes
  - Diffusing Capacity
  - Airways Resistance
  - Compliance

### Instructions For Use

Place the SensorMedics MicroGard microbial filter in-line directly between the patient's mouthpiece and the pulmonary function testing equipment. Dispose of the filter after use on each patient

### Caution

United States Federal Law restricts this device to sale by or on the order of a physician. This device is intended for single patient use and should be destroyed after use. No attempt to clean or sterilize this device should be made. To do so will affect the resistance and the filtering capacity of the device.

### Specifications

- Inspiratory Resistance:  
<0.7cm H<sub>2</sub>O/LPS at 12 LPS
- Expiratory Resistance:  
<0.7cm H<sub>2</sub>O/LPS at 12 LPS
- Filtering Efficiency: >99%
- Functional Filter Volume: 50ml
- Connections: 30mm ID. 30mm OD  
Tapered ports
- Recommended for single patient use

### Regulatory

- FDA 510(k) #K934272

### Optional Adapters

- Part #42108 Rubber coupler for Model 2450, 2130. Inside diameter 32mm (1-1/4").
- Adapters for many PF Instruments available, adapter part numbers available upon request.

### References

1. Nelson Laboratories, Inc. Technical reports N. 49169 (26/Feb./93), 49170 (24/Feb/93)
2. American Thoracic Society. Single Breath Carbon Monoxide Diffusion Capacity (transfer factor). 1995 update. Recommendations for a Standard Technique. Am J Respir Crit Care Med Vol 152. pp 2185-2198, 1995.
3. American Thoracic Society. Standardization of Spirometry. 1994 update. Am J Respir Crit Care Med Vol 152. pp 1107-1136, 1995.



Life Support



Sleep Diagnostics



Pulmonary Function



Metabolic Measurement

SensorMedics Corporation  
22705 Savi Ranch Parkway  
Yorba Linda, CA 92887-4645  
Telephone: (800) 231-2466  
(714) 283-2228  
Fax: (714) 283-8439  
<http://www.sensormedics.com>

SensorMedics BV  
Rembrandtlaan 1b  
3723 BG Bilthoven  
The Netherlands  
Telephone: (31) 30 2289711  
Fax: (31) 30 2286244



**SENSORMEDICS**  
A subsidiary of Thermo Electron

P/N 769010C Copyright © SensorMedics Corporation, 1998

Due to continual product innovation SensorMedics designs and specifications are subject to change without notice.

**Caution:** Federal law restricts this device to sale by, or on the order of a physician.