

# MicroGard® II specifications

Vyntus™, JAEGER® MasterScreen, Vmax® and Micro Medical pulmonary instruments have been validated using MicroGard® filters.



## Filtering properties

Bacterial 99.999% (based on Nelson Lab test<sup>1</sup>)

Viral 99.999% (based on Nelson Lab test<sup>1</sup>)

## Filtering material

### Material name: Microstat M190

Filtering layer density (filtering material and three layers scrim) (258 ± 11%) g/m<sup>2</sup>

Filtering layer thickness 3.0 ± 0.5 mm

Filtering layer mass 1.3 ± 0.2 g

Filtering layer diameter (effective) 80 ± 0.5 mm

Filtering layer surface (effective) (50.2 ± 1.2%) cm<sup>2</sup>

## Filter mass: housing and filter material

MicroGard IIB	MicroGard IIC
(38 ± 10%) g	(42 ± 10%) g

## Filter dimensions

Filter volume (excluding adapters and housing) (55 ± 3%) mL

Connection inner diameter system side (30 ± 2%) mm tapered port

Connection outer diameter patient side (30 ± 2%) mm tapered port (MicroGard IIC only)

## Filter ambient conditions

Temperature 0–42°C  
32–108°F

Relative humidity (noncondensing) 0–100%

## Materials

Materials and additives compliant with: REACH regulations

Housing (with mouthpiece) Styrolution PS 454N

Bis(2-ethylhexyl) phthalate (DEHP)

Filter does not contain: Bisphenol A (BPA)

Polyvinyl chloride (PVC)

## Filter resistance at various flows: MicroGard IIB (± 4%)

L/s	L/min	kPa.s/l	cmH <sub>2</sub> O
0.50	30	0.034	0.35
1.00	60	0.036	0.37
1.67	100	0.039	0.39
5.00	300	0.051	0.52
8.33	500	0.063	0.64
10.0	600	0.069	0.71
11.7	700	0.075	0.77
14.0	840	0.084	0.86
<b>14.0</b>	<b>840</b>	<b>ATS<sup>2</sup> max: 0.150</b>	<b>ATS<sup>2</sup> max: 1.53</b>

## Filter resistance at various flows: MicroGard IIC (± 4%)

L/s	L/min	kPa.s/l	cmH <sub>2</sub> O
0.50	30	0.034	0.34
1.00	60	0.035	0.36
1.67	100	0.037	0.38
5.00	300	0.046	0.47
8.33	500	0.054	0.56
10.0	600	0.059	0.60
11.7	700	0.063	0.65
14.0	840	0.069	0.71
<b>14.0</b>	<b>840</b>	<b>ATS<sup>2</sup> max: 0.150</b>	<b>ATS<sup>2</sup> max: 1.53</b>






## REFERENCES

1. Nelson Report 10003754 - Viral Filtration Efficiency Test (VFE) at an Increased Challenge level GLP Report Nelson Report 10003754 - Bacterial Filtration Efficiency Test (BFE) at an Increased Challenge level GLP Report.
2. ATS Standardization of Spirometry [ATS 2005, p. 332]

## GLOBAL HEADQUARTERS

Vyairé Medical, Inc.  
26125 North Riverwoods Blvd  
Mettawa, IL 60045  
USA

 Vyairé Medical GmbH  
Leibnizstrasse 7  
97204 Hoechberg  
Germany



[vyaire.com](http://vyaire.com)

**Rx ONLY**

© 2019 Vyairé. Vyairé, the Vyairé logo and all other trademarks or registered trademarks are property of Vyairé Medical, Inc., or one of its affiliates. Medical devices class IIa according to Medical Devices Directive 93/42/EEC. Please read the complete Instructions For Use that come with the devices or follow the instructions on the product labelling. VYR-GLB-1900025