



sartorius stedim
biotech

Midisart[®] 2000
The ready-to-use filter for
sterilizing gases and venting



DOMINI

turning science into solutions

Midisart® 2000. The sterilizing filter with impressive performance and total handling ease.

Midisart® 2000 filtration units are ideal tools in biotechnology, the pharmaceutical industry, research institutes and anywhere you need sterile vents, bioisolation or sterile air and gases.

- Midisarts® are excellent for
- sterile venting of filling vessels and fermentation carboys, including culture vessels and CO₂ incubators (6 to 120 liters)
 - venting of holding tanks for sterile, distilled water and liquid culture media
 - autoclave venting
 - in-line sterilization of and particulate removal from air and gases, such as sterilization of air for small fermenters

Midisart® 2000 filtration units have been specially designed for maximum handling ease and safety. Tapered hose barbs ensure a simple and secure hold for 6- to 12-mm inner diameter tubing. Other connector types such as a small hose barb (for tubings with 4–12 mm inner diameter), 1/8" NPT thread and TriClamp are also available.



Midisart® is lightweight – only 20 g – so it will not weigh down or kink tubing.

User benefits:

1. Maximum handling ease

- Midisart® 2000 comes individually packaged and presterilized – it's ready to connect!

2. Extra reliability and safety

- Midisart® 2000 is integrity testable and delivers reproducible results.
- The membrane is reinforced with polypropylene gauze, giving the Midisart® unit added stability and making it pressure resistant up to 3 bar (approx. 44 psi).
- Midisart® 2000 entirely eliminates moisture breakthrough because of its inherently hydrophobic PTFE material.
- In addition, Midisart® is biosafe because all materials of construction meet the requirements of the current USP Plastics Class VI testing.
- Midisart® 2000 units easily withstand at least 20 autoclaving cycles with no loss in performance. The convenient Memory Discs supplied with each Midisart® 2000 in UPN-coded boxes enable you to keep track of the number of autoclaving cycles by marking or clipping off each cycle. This feature is key in complying with GLP and ISO standards for traceable documentation.

3. Quality control certificate

- Each unit is automatically tested 100% for housing and membrane sealing during manufacture as part of our zero-defect quality control testing.
- The lot number and the individual unit number are imprinted on the top part of each Midisart® 2000 housing to ensure complete traceability.

Midisart® 2000 units are visually inspected before they are packaged. In addition to 100% leak testing, random samples taken from each lot undergo the following tests to

assure compliance with Sartorius Stedim Biotech stringent in-house quality assurance standards:

- Housing burst pressure test
- Pressure-hold test
- Bubble point test
- Pyrogen test
- Sterile filtration capability
- Flow rate test
- Sterility test

Performance

- With a diameter measuring just 64 mm, Midisart® incorporates a filter area of 20 cm², which means that it is "packed" with high flow rate performance power!
- Midisarts® multiply filtration performance in more ways than one. They can be autoclaved at least 20 times at 134°C!

Chemical compatibility

The materials used in Midisart® (PTFE and polypropylene) give it excellent compatibility with the solvents and other chemicals listed below:

- Acetic acid (concentrated), acetone, acetonitrile
- n-butanol
- Cellosolve (ethyl), chloroform
- Diethylacetamide, dimethyl formamide, dimethyl sulfoxide, dioxane
- Ethanol, ethyl acetate, ethylene glycol
- Freon TF
- Gasoline
- 1 N hydrochloric acid, hexane
- Isobutanol, isopropanol
- Methanol, methylene chloride, methyl ethyl ether, methyl ethyl ketone
- Sodium hydroxide (5%)
- Pentane
- Tetrahydrofuran, toluene, trichloroacetic acid, trichloroethane
- Water
- Xylene

However, its compatibility can be affected by various factors, such as temperature, concentration, composition, etc. We therefore recommend that you perform a trial filtration run to test whether Midisart® is compatible with the particular medium you wish to filter.

Midisart® 2000 can also be used to filter aqueous solutions. In this case, it must be first wetted with alcohol to overcome the membrane's hydrophobicity.

Technical specifications

Filter material	PTFE – reinforced with polypropylene gauze	
Housing material	Polypropylene	
Filtration area	20 cm ²	
Housing diameter	64 mm	
Priming volume	Approx. 3 ml	
Maximum operating pressure	300 kPa (3 bar = 44 psi)	
Water penetration point (breakthrough)	0.2 µm – approx. 400 kPa (4 bar = 58 psi) 0.45 µm – approx. 300 kPa (3 bar = ~ 44 psi)	
Max. autoclaving temperature	134°C	
Max. autoclave cycles	60	
Hold-up volume	Before the bubble point approx. 1.0 ml After the bubble point approx. 0.5 ml	
Biosafety	USP Plastics Class VI	
Bubble point with isopropanol (60%)	0.45 µm	≥ 0.9 bar (~13.1 psi)
	0.2 µm	≥ 1.1 bar (~16 psi)
Flow rate for air at Δp = 0.1 bar (1.45 psi) (1 bar = 100 kPa = 14.5 psi)	0.2 µm pore size	5.0 l/min
	0.45 µm pore size	8.5 l/min

Order information

Order numbers	Pore size	Membrane	Connectors E A	Pieces/Case	Sterile
17804 E	0.45 µm	PTFE	Hose Barb Hose Barb	12	Yes
17804 G	0.45 µm	PTFE	Hose Barb Hose Barb	25	Yes
17804 NPE	0.45 µm	PTFE	1/8" 1/8" NPT	12	Yes
17804 NPG	0.45 µm	PTFE	1/8" 1/8" NPT	25	Yes
17805 E	0.2 µm	PTFE	Hose Barb Hose Barb	12	Yes
17805 G	0.2 µm	PTFE	Hose Barb Hose Barb	25	Yes
17805 NPE	0.2 µm	PTFE	1/8" 1/8" NPT	12	Yes
17805 NPG	0.2 µm	PTFE	1/8" 1/8" NPT	25	Yes
17805 UPN	0.2 µm	PTFE	Hose Barb Hose Barb	100	No
17805 UPQ	0.2 µm	PTFE	Hose Barb Hose Barb	500	No
17809 UNN	0.2 µm	PTFE	1/8" 1/8" NPT	100	No
17812 UNN	0.2 µm	PTFE	1/8" Hose Barb	100	No
17805 TCN	0.2 µm	PTFE	TriClamp TriClamp	100	No
17877 UPN	0.2 µm	PTFE	small Hose Barb small Hose Barb	100	No



Standard Hose Barb



Small Hose Barb



1/8" NPT Thread



TriClamp

In the interest of further development of Sartorius Stedim Biotech products, we reserve the right to make changes without notice.

Sales and Service Contacts

For further contacts, visit www.sartorius-stedim.com

Europe

Germany

Sartorius Stedim Biotech GmbH
August-Spindler-Strasse 11
37079 Goettingen

Phone +49.551.308.0
Fax +49.551.308.3289

www.sartorius-stedim.com

Sartorius Stedim Systems GmbH
Robert-Bosch-Strasse 5-7
34302 Guxhagen

Phone +49.5665.407.0
Fax +49.5665.407.2200

France

Sartorius Stedim Biotech S.A.
ZI Les Paluds
Avenue de Jouques - CS 91051
13781 Aubagne Cedex

Phone +33.442.845600
Fax +33.442.845619

Sartorius Stedim France SAS
ZI Les Paluds
Avenue de Jouques - CS 71058
13781 Aubagne Cedex

Phone +33.442.845600
Fax +33.442.846545

Austria

Sartorius Stedim Austria GmbH
Franzosengraben 12
1030 Vienna

Phone +43.1.7965763.18
Fax +43.1.796576344

Belgium

Sartorius Stedim Belgium N.V.
Leuvensesteenweg, 248/B
1800 Vilvoorde

Phone +32.2.756.06.80
Fax +32.2.756.06.81

Hungary

Sartorius Stedim Hungária Kft.
Kagyló u. 5
2092 Budakeszi

Phone +36.23.457.227
Fax +36.23.457.147

Italy

Sartorius Stedim Italy S.p.A.
Via dell'Antella, 76/A
50012 Antella-Bagno a Ripoli (FI)

Phone +39.055.63.40.41
Fax +39.055.63.40.526

Netherlands

Sartorius Stedim Netherlands B.V.
Edisonbaan 24
3439 MN Nieuwegein

Phone +31.30.6025080
Fax +31.30.6025099

Poland

Sartorius Stedim Poland Sp. z o.o.
ul. Wrzesinska 70
62-025 Kostrzyn

Phone +48.61.647.38.40
Fax +48.61.879.25.04

Russian Federation

LLC "Sartorius ICR" and LLC "Biohit"
Uralskaya str. 4, Lit. B
199155, Saint-Petersburg

Phone +7.812.327.5.327
Fax +7.812.327.5.323

Scandinavia

Sartorius Stedim Nordic A/S
Hoerskaetten 6D, 1.
2630 Taastrup, Denmark

Phone +45.7023.4400
Fax +45.4630.4030

Spain

Sartorius Stedim Spain SA
C/Isabel Colbrand 10,
Oficina 70
Poligono Industrial de Fuencarral
28050 Madrid

Phone +34.90.2110935
Fax +34.91.3589623

Switzerland

Sartorius Stedim Switzerland AG
Ringstrasse 24 a
8317 Tagelswangen

Phone +41.52.354.36.36
Fax +41.52.354.36.46

U.K.

Sartorius Stedim UK Ltd.
Longmead Business Centre
Blenheim Road, Epsom
Surrey KT19 9 QQ

Phone +44.1372.737159
Fax +44.1372.726171

America

USA

Sartorius Stedim North America Inc.
5 Orville Drive, Suite 200
Bohemia, NY 11716

Toll-Free +1.800.368.7178
Fax +1.631.254.4253

Argentina

Sartorius Argentina S.A.
Int. A. Ávalos 4251
B1605ECS Munro
Buenos Aires

Phone +54.11.4721.0505
Fax +54.11.4762.2333

Brazil

Sartorius do Brasil Ltda
Av. Dom Pedro I, 241
Bairro Vila Pires
Santo André
São Paulo
Cep 09110-001

Phone +55.11.4451.6226
Fax +55.11.4451.4369

Mexico

Sartorius de México S.A. de C.V.
Circuito Circunvalación Poniente
No. 149
Ciudad Satélite
53100, Estado de México
México

Phone +52.5555.62.1102
Fax +52.5555.62.2942

Asia | Pacific

Australia

Sartorius Stedim Australia Pty. Ltd.
Unit 5, 7-11 Rodeo Drive
Dandenong South Vic 3175

Phone +61.3.8762.1800
Fax +61.3.8762.1828

China

Sartorius Stedim Biotech (Beijing) Co. Ltd.
Airport Industrial Zone B
No. 33 Yu'an Road
Beijing 101300, Shunyi District

Phone +86.10.80426516
Fax +86.10.80426580

Sartorius Stedim Biotech (Beijing) Co. Ltd.
Shanghai Branch office
Room 618, Tower 1, German Centre,
Shanghai, PRC., 201203

Phone +86.21.28986393
Fax +86.21.28986392.11

Sartorius Stedim Biotech (Beijing) Co. Ltd.
Guangzhou representative office
Room 704, Broadway Plaza,
No. 233-234 Dong Feng West Road
Guangzhou 510180

Phone +86.20.8351.7921
Fax +86.20.8351.7931

India

Sartorius Stedim India Pvt. Ltd.
#69/2-69/3, Jakkasandra
Kunigal Road, Nelamangala Tq
Bangalore - 562 123

Phone +91.80.4350.5248
Fax +91.80.4350.5253

Japan

Sartorius Stedim Japan K.K.
Kiba Park Bldg
5-11-13 Kiba
Koto-ku
Tokyo 135-0042

Phone +81.3.5639.9981
Fax +81.3.5639.9983

Malaysia

Sartorius Stedim Malaysia Sdn. Bhd.
Lot 13-F-3B, Enterprise 4
Technology Park Malaysia
Bukit Jalil
57000 Kuala Lumpur, Malaysia

Phone +60.3.8996.0622
Fax +60.3.8996.0755

Singapore

Sartorius Stedim Singapore Pte. Ltd.
1 Science Park Road,
The Capricorn, #05-08A,
Singapore Science Park II
Singapore 117528

Phone +65.6872.3966
Fax +65.6778.2494

South Korea

Sartorius Korea Biotech Co., Ltd.
8th Floor, Solid Space B/D,
PanGyoYeok-Ro 220, Bundang-Gu
SeongNam-Si, GyeongGi-Do, 463-400

Phone +82.31.622.5700
Fax +82.31.622.5799



◀ www.sartorius-stedim.com