



## Instructions for Use

# Midisart® 2000

### Midisart® 2000 0.2 µm, 0.45 µm

Midisart® 2000 are ready-to-connect filtration units that consist of a hydrophobic PTFE membrane available with 0.2 µm and 0.45 µm pore size in a polypropylene housing. They can be ordered sterile or non-sterile and can be repeatedly autoclaved. They are designed for particulate removal and sterilization of gases.

#### 1. Labeling

Each Midisart® 2000 filtration unit is labeled with filter type, lot number, individual unit number and use before date. For simplified data integration into Sartocheck® integrity testing devices these information are also available in form of a Data Matrix code according to ISO | IEC 16022 applied to the units by laser along with the direction of filtration.

#### 2. Applications

Midisart® 2000 filtration units have been designed for small-scale venting applications, such as:

- Filling and transfer vessels
- Holding and storage tanks for sterile media
- Autoclaves
- Small bioreactors
- Disposable bags | bottles and tubing systems
- Carboys

The excellent chemical stability of these practical units also makes them useful for removal of particles from chemicals and organic solvents.

Midisart® 2000 filtration units can also be used for the filtration of aqueous liquids, but the hydrophobic PTFE membrane filter must first be wetted with a water-miscible solvent, such as ethanol.

#### 3. Installation

- Remove a Midisart® 2000 from the box
- Fit the connector of e. g. your tubing system to the Midisart® 2000 connector without touching it
- Available connections (inlet and outlet):
  - standard stepped hose barbs for hoses with an inner diameter of 6 – 12 mm
  - small stepped hose barbs for hoses with an inner diameter of 4 – 12 mm
  - 1/8" NPT thread
  - 3/4" Tri-Clamp, 25 mm

△ **NOTE** Please check the label on the housing of the Midisart® 2000 filtration unit to be sure that you have connected it in the right direction. The direction of filtration is governed by the application and must always be checked before starting filtration.

#### 4. Sterilization

##### Autoclaving:

Max. temperature 134 °C for 30 min. (max. 20 cycles)

Pre-sterilized versions sterilized via ethylene oxide.

#### 5. Integrity test data

Integrity testing can be performed by using a Sartocheck® integrity test device, which records the corresponding integrity test data.

For detailed information on how to perform an automatic integrity test, please see our Operating Instructions for Sartocheck® integrity test devices.

Bubble Point Limit with 60% IPA | Water:

- 0.2µm ≥ 1100 mbar
- 0.45µm ≥ 900 mbar

△ **NOTE** Bubble Point measuring only IN direction of filtration.

#### 6. Maximum allowable differential pressure

In direction of filtration:

- Air: 3 bar
- Liquid: 3 bar

In reversed direction of filtration:

- Air: 2 bar
- Liquid: 2 bar

#### 7. Specifications

Filter material	PTFE reinforced with polypropylene gauze
Housing material	Polypropylene
Filtration Area	20 cm <sup>2</sup>
Housing diameter	64 mm
Priming volume	3 mL
Hold-up volume	approx. 1 mL before, 0.5 mL after bubble point
Max. operating pressure	300 kPa (3 bar)

#### 8. Return of used filtration units

If you wish to return used filtration units for testing at Sartorius in Germany, make sure that you sterilize or decontaminate the filter units before packing them for shipment. You must enclose a completed Return Shipment Form in every shipment. This form is available from your local Sartorius representative. Any return shipment not accompanied by this completed form must be rejected under the German Regulations for Workplace Safety.

#### 9. Liability

Sartorius shall not assume any liability for defects or damage resulting from improper handling of Midisart® 2000 filtration units. In particular, if the user does not follow these Instructions for Use, the filtration units will be considered to have been improperly handled. In the interest of further development of Sartorius products, we reserve the right to make changes to the specifications of these products without notice.

Sartorius Stedim Biotech GmbH  
August-Spindler-Strasse 11  
37079 Goettingen  
Phone +49 551 308 0  
www.sartorius.com

# List of Sartorius material numbers applying to EPA-FIFRA

17804	17805---NPG	J1-17805
17804----E	17805---PCM	
17804----G	17805---SUN	
17804----M	17805---TCN	
17804---CPW	17805---UFQ	
17804---NAN	17805---UKN	
17804---NP	17805---UPB	
17804---NPE	17805---UPN	
17804---NPG	17805---UPQ	
17804---NQN	17805---UQ1	
17804---SUN	17805---UQN	
17805	17805---UZQ	
17805----B	17806---ATJ	
17805----E	17809---SAN	
17805----G	17809---SUN	
17805----M	17809---UNN	
17805---BME	1780D---UPN	
17805---CDE	17811---UNN	
17805---CPW	17812---UNN	
17805---CXE	17839---UNN	
17805---DCE	17877---AI1	
17805---NAN	17877---DRN	
17805---NP	17877---UPN	
17805---NPE	18072	