

Saint-Gobain
Life Sciences –
Bioprocess Solutions



PureFlo® PTFE
Cartridges

PureFlo® PTFE cartridges are validated sterilizing grade air filters with a robust design capable of withstanding multiple steam-in-place cycles. The hydrophobic, polytetrafluoroethylene (PTFE) membrane demonstrates exceptional flow performance in compressed air and venting applications in the biopharmaceutical industry.

Membrane Configurations

PureFlo® PTFE capsules incorporate a final sterilizing grade 0.2 µm membrane.

Engineered Filtration Solutions

To meet the needs of an innovative and rapidly growing industry, and in addition to the standard product offering, Saint-Gobain Life Sciences offers a collaborative service with a dedicated team of engineers and subject matter experts to develop specialized filtration solutions that are tailored to achieve optimal performance. Please contact us for more information.

Features / Benefits

- Inherently Hydrophobic
- 100% Integrity Tested
- Optimal Flow
- Autoclavable
- Steam Sterilizable
- Broad Chemical Compatibility

Typical Applications

- Bioreactor Vent
- Moisture Barrier
- Compressed Gas
- Fermentation Tank Vent
- Autoclavable Vent

SAINT-GOBAIN

©2022 Saint-Gobain Life Sciences

Technical Summary

Materials	
Membrane	Polytetrafluoroethylene (PTFE)
Support Material	Polypropylene (PP)
Molded Components (cage, core, shell, end caps)	Polypropylene (PP)
O-rings	Silicone
Adapter Insert (when present)	Stainless Steel (overmolded)

Membrane Configurations		
Membrane	**Description**	**Minimum Bubble Point (at 22°C)**
F020	0.2 µm	1.2 bar | 17.4 psi (in 60% isopropyl alcohol and 40% water)

Measurements (nominal)		
Size	**Outside Diameter (mm)**	**Filtration Area (cm^2)**
Mini (MM)	56	730 - 2600
Full (M)	70	3650 - 26000

Operating Conditions		
	Mid (MM)	**Full (MC)**
Maximum Temperature	80°C	80°C
Maximum Forward Differential Pressure (at 22°C)	4.1 bar | 59.5 psi	5 bar | 72.5 psi

Sterilization	
Steam-in-Place (SIP)	Mini (MM): Up to 10 cycles at 135°C for 30 minutes Full (MC): Up to 50 cycles at 135°C for 30 minutes
Autoclave	Mini (MM): Up to 25 cycles at 135°C for 30 minutes Full (MC): Up to 50 cycles at 135°C for 30 minutes
Ethylene Oxide	Testing is recommended

Shelf Life

Non-sterile products have a shelf life of 3 years after the date of manufacture.

Traceability

For traceability and easy identification:

- A Certificate of Conformance is provided in each box.
- Each filter bag and box are labeled with the product part number, lot number, and identifying characteristics.
- Each cartridge is engraved and labeled with the product part number, lot number, and identifying characteristics.

©2022 Saint-Gobain Life Sciences

Regulatory & Stewardship

Saint-Gobain Life Sciences' PureFlo® PTFE Cartridges were designed, manufactured, and qualified with an ISO 13485 certified Quality Management System. For more information, please refer to the Product Validation Guide and Regulatory Information Overview (RIO).

Category	Standard or Reference Test
Cleanliness	USP <85> Bacterial Endotoxin Test 21 CFR sections 211.72 and 210.3 (b) (6)
Biocompatibility	ASTM F756-17 Hemolysis USP <88> (USP Class VI Plastics) Biological Reactivity Tests, In Vivo
Bacterial Retention	Quantitative Retention of 10^7 CFU/cm^2 *Brevundimonas Diminuta* per ASTM methodology

Lot Release Criteria

Each PureFlo® PTFE cartridge product lot is sampled and tested for conformity to the following criteria:

Criteria	Description
Integrity (membrane)	Each filter (100%) in a lot is integrity tested during the manufacturing process.
USP Bacterial Endotoxins	A representative sample from the lot is tested to confirm that an aqueous extraction of the product contains <0.25 EU/mL as determined by the Limulus Amebocyte Lysate (LAL) Test.

©2022 Saint-Gobain Life Sciences

PureFlo® PTFE
Mini Cartridges

Saint-Gobain
Life Sciences –
Bioprocess Solutions



PRODUCT TECH SNAPSHOT: (Values are nominal. Please see Technical Summary for additional information).

Filter Size	Diameter (mm)	Filtration Area (cm^2)	Typical Flow Performance in Air (22 °C)*
1.5″	56	730	MMF020AH3P - 1.4 psid at 200 L/min
2.5″	56	1,400	MMF020AS3P - 0.65 psid at 200 L/min
5″	56	2,600	MMF020AL2P - 0.33 psid at 200 L/min

Ordering Guide

PART NUMBER:

M	M	[1]	[2]	[3]	S	[4]	[5]

[1] Filter Membrane
F020 = 0.2 µm

[2] End Modification
0 = 2-222 O-rings, Flat
6 = 2-226 O-rings, Flat
A = 116 Inner O-ring
B = 1.5″ Tri-clamp, Flat
E = 118 O-rings
F = Flange (compatible with Pall Sealkleen™ housing)
M = 123 O-rings with Tabs
S = 116 Inner O-ring with Locking Groove

[3] Length
H = 1.5″
S = 2.5″
L = 5″

[4] Package Quantity
2P = 2 pcs/pack (5″ only)
3P = 3 pcs/pack (1.5″ and 2.5″ only)

[5] Optional
-5 = Stainless Steel Insert for steam-in-place (0 and 6 adaptors only)

Don't see what you're looking for?
Please let us know! We're here to help.

*IMPORTANT: The flow performance of a filter is dependent on several variables including the process fluid characteristics, operating conditions, filter surface area, pore size, and fittings. The above values are approximate for example part numbers and provided for reference only. Actual values may vary. For application guidance and flow performance information for a specific part number please contact your local Saint-Gobain Life Sciences representative.

SAINT-GOBAIN

Customer Service
50 W. Watkins Mill Rd.
Gaithersburg, MD 20878
Tel: (301) 407-2720
Fax: (240) 566-5774
Email: info.ft@saint-gobain.com

www.biopharm.saint-gobain.com

FLS-5365-092022-BPS

©2022 Saint-Gobain Life Sciences

PureFlo® PTFE
Full Size

Saint-Gobain
Life Sciences –
Bioprocess Solutions



PRODUCT TECH SNAPSHOT: (Values are nominal. Please see Technical Summary for additional information).

Filter Size	Body Diameter (mm)	Filtration Area (m^2)
5″	70	0.365
10″	70	0.73
20″	70	1.5
30″	70	1.9
40″	70	2.6

Typical pressure drop in air (22 °C) at 200 LPM is approximately 0.12 psid per 10" cartridge with code 7 adapter*

Ordering Guide

PART NUMBER:

M	C	[1]	[2]	[3]	S	1	[4]

[1] Filter Membrane
F20 = 0.2 µm

[2] End Modification
0 = 2-222 O-rings, Flat
5 = 2-222 O-rings, Spear
6 = 2-226 O-rings with Tabs
7 = 2-226 O-rings with Tabs, Spear
B = 1.5″ Tri-Clamp, Flat

[3] Length
5 = 5″
1 = 10″
2 = 20″
3 = 30″
4 = 40″

[4] Optional
-5 = Stainless Steel Insert for steam-in-place (0, 5, 6, and 7 adaptors only)

Don't see what you're looking for?
Please let us know! We're here to help.

*IMPORTANT: The flow performance of a filter is dependent on several variables including the process fluid characteristics, operating conditions, filter surface area, pore size, and fittings. The above values are approximate for example part numbers and provided for reference only. Actual values may vary. For application guidance and flow performance information for a specific part number please contact your local Saint-Gobain Life Sciences representative.

SAINT-GOBAIN

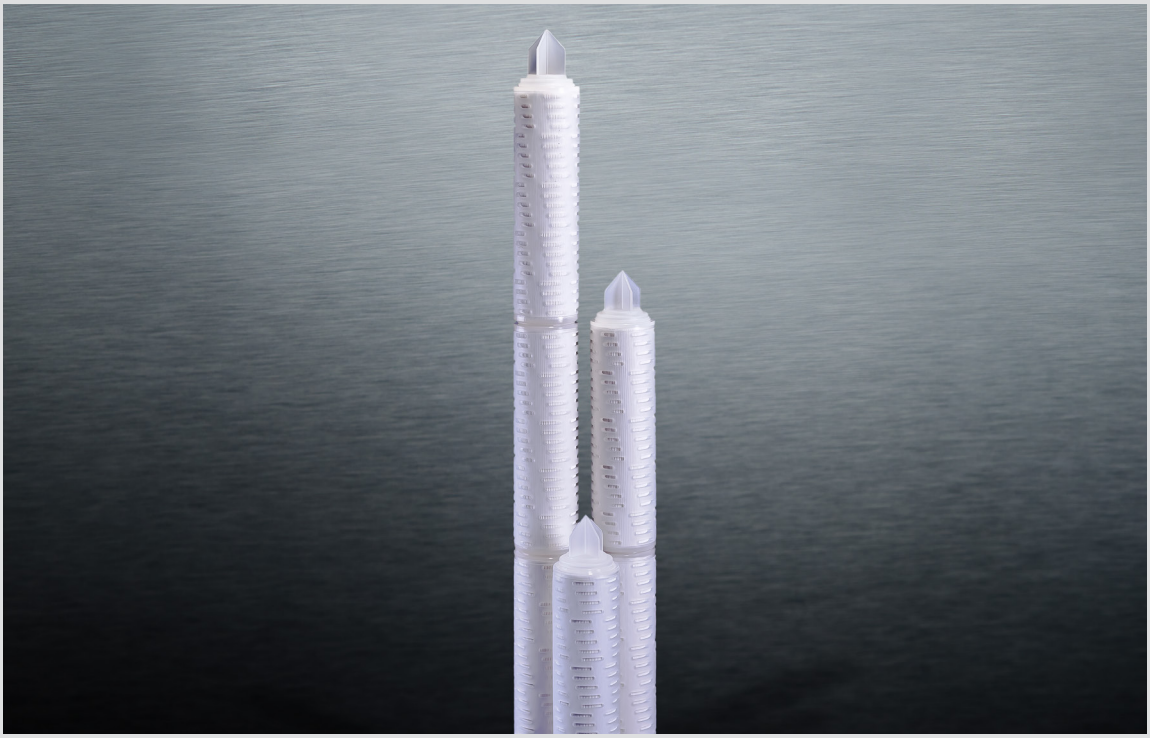
Customer Service
50 W. Watkins Mill Rd.
Gaithersburg, MD 20878
Tel: (301) 407-2720
Fax: (240) 566-5774
Email: info.ft@saint-gobain.com

www.biopharm.saint-gobain.com

©2022 Saint-Gobain Life Sciences

PureFlo® PTFE

Saint-Gobain
Life Sciences –
Bioprocess Solutions



PureFlo® is a registered trademark of Saint-Gobain Performance Plastics

Uncontrolled Document - for the controlled version of this document please visit www.biopharm.saint-gobain.com

Contact us today for:
Consultations • Samples • Quotes • Orders

For registered access to Saint-Gobain Product Validation Summaries, CLICK HERE

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics products for all intended uses and that the materials to be used comply with all applicable medical regulatory requirements. Saint-Gobain Performance Plastics assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication, or application of the products into which the materials are incorporated.
WARRANTY: For a period of 12 months from the date of first sale, Saint-Gobain Performance Plastics warrants this product to be free of defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price there of.
SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

SAINT-GOBAIN

Customer Service
50 West Watkins Mill Rd.
Gaithersburg, MD 20878
Tel: (301) 407-2720
Fax: (240) 566-5774
Email: info.ft@saint-gobain.com

www.biopharm.saint-gobain.com

FLS-5365-092022-BPS

©2022 Saint-Gobain Life Sciences