

Ultradyne®

0.2 µm TM-grade Filter Cartridge

Description

The Ultradyne® TM0.2 filter cartridge is a hydrophobic PTFE membrane filter offering maximum chemical compatibility with minimal extractables in a wide range of fluids and applications. This filter provides reliable removal of particles and microorganisms from aggressive liquids, including strong acids and bases, and organic solvents. Ultradyne® is optimized for applications requiring complete removal of contaminant bacteria and viruses from air and gas streams, such as fermenter inlet air and exhaust, sterile process air, and sterile venting of tanks, lyophilizers, and autoclaves. The Ultradyne® filter provides sterility assurance, high flow rates and throughput under demanding conditions.

Materials of Construction

All components of the filter are either animal component free or in compliance with EMA/410/01 Rev. 3 (EDQM 5.2.807/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5 These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

Membrane:	Polytetrafluoroethylene (PTFE)	CFR Title 21, 177.1550
Upstream support:	Polypropylene	CFR Title 21, 177.1520
Downstream support:	Polypropylene	CFR Title 21, 177.1520
Outer guard:	Polypropylene	CFR Title 21, 177.1520
Core:	Polypropylene	CFR Title 21, 177.1520
End caps:	Polypropylene	CFR Title 21, 177.1520
O-rings:	Typically Silicone	CFR Title 21, 177.2600
Sealing method:	Thermal bonding	

Pore Size 0.2 µm

Effective Filtration Area 6.0 ft² (0.56 m²)

Minimum Bubble Point 14 psi (0.97 bar) in 60% IPA/40% water, with air or nitrogen
14 psi (0.97 bar) in 70% IPA/30% water, with air or nitrogen

Maximum Diffusion Rate 10 mL/min per 10" (25 cm) @ 9 psig (0.6 bar), 60% IPA with air

Maximum Water Intrusion Rate 0.6 mL/min water per 10" (25 cm) after 10 minutes @ 32 psi (2.2 bar)
Specification can vary by instrumentation; consult Meissner.

Typical Water Flow Rate 0.4 psid/gpm per 10" (1.4 L/min per Δp 10 mbar per 25 cm)

Typical Air Flow Rate 50 scfm/psid per 10" (62 Nm³/hr per Δp 50 mbar per 25 cm)

Operating Characteristics

Operating temperature range:	32 °F to 100 °F (0 °C to 38 °C)
Maximum temperature rating:	180 °F @ 30 psid (82 °C @ 2.1 bar)
Maximum operating pressure:	80 psid @ 100 °F (5.5 bar @ 38 °C)
Maximum reverse pressure:	15 psid @ 100 °F (1.0 bar @ 38 °C)

Sterilization

Autoclave: 121 °C to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles.

Steam in place (SIP): 121 °C to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles. Irradiation not recommended.

Biological Safety

Ultradyne® filters meet the requirements as specified in USP 49 <88> Class VI plastics, <87> cytotoxicity and pyrogenicity tests. No binders, adhesives, or surfactants are used in its construction. Filters comply with Commission Regulation (EU) No. 10/2011.

Quality Assurance

Ultradyne® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner's Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each Ultradyne® filter is clearly marked with filter type, lot number, and unique serial number. The serial number for all cartridge filters can be found on the product packaging.

Ordering Guide

Product	Grade	Pore Size
Ultradyne® hydrophobic PTFE membrane	TM	0.2 µm

*GS option is only available for 9.75", 19.5", 29.25", and 39" length filters.

****GL option is only available for 20", 30", and 40" length filters.**

Additional information about this filter product is available in the Ultradyne® Green Docs document at www.meissner.com/green-docs.

Viton® and Teflon® are registered trademarks of DuPont Dow Elastomers L.L.C. & The DuPont Company.
Ultradyn® and nO-Ring® is a registered trademark of Meissner Filtration Products, Inc.
© 2024, 2006, 2005, 2002 Meissner Filtration Products, Inc. All rights reserved.
SSTM02-04 A

 **MEISSNER**
1001 Flynn Road • Camarillo, CA 93012 • USA
+1.805.388.9911 • +1.805.388.5948 Fax
www.meissner.com