# **Ultradyne**®

# 1.0 µm TM-grade Mini Capsule (CM2/CK2 Model)

# Description

The Ultradyne<sup>®</sup> TM1.0 capsule filter is a hydrophobic PTFE membrane filter offering maximum chemical compatibility with minimal extractables in a wide range of fluids and applications. The filter is optimized for controlling contaminants in demanding applications and provides reliable removal of particles from aggressive liquids, including strong acids and bases, and organic solvents.

#### Materials of Construction

All components of the capsule filter are animal component free. 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
Capsule housing:	Polypropylene	CFR Title 21, 177.1520
Sealing method:	Thermal bonding	
Pore Size	1.0 µm	
Minimum Bubble Point	4 psi (0.3 bar), 60% IPA/40% water	
Typical Air Flow Rate	CM: 59.2 L/min @ 1 psid (2.57 Nm³/hr at Δp 50 mbar)	
	CK: 60.3 L/min @ 1 psid (2.62 Nm <sup>3</sup> /hr at	∆p 50 mbar)
<b>Operating Characteristics</b>		
Operating temperature range:	32 °F to 122 °F (0 °C to 50 °C)	
Maximum temperature:	160 °F @ 35 psig (72 °C @ 2.4 bar)	
Maximum operating pressure:	100 psig @ 122 °F (6.9 bar @ 50 °C)	

15 psig @ 100 °F (1.0 bar @ 38 °C)

Sterilization

Maximum reverse pressure:

Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 minutes  $\geq$  3 cycles. Capsules must not be in-line steam sterilized. Irradiation is not recommended.

# **Biological Safety**

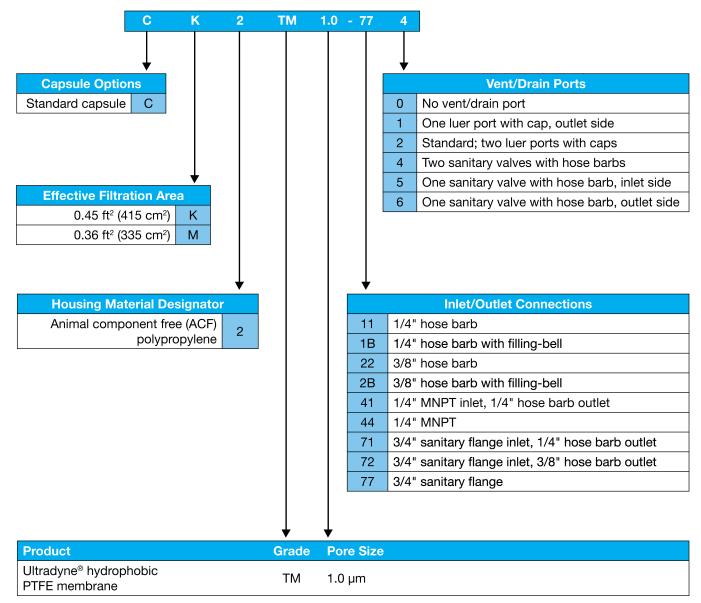
Ultradyne<sup>®</sup> filters meet the requirements as specified in the current USP <88> Class VI plastics, <87> cytotoxicity and pyrogenicity tests. No binders, adhesives, or surfactants are used in its construction. Filters comply with Commission Regulation (EU) No. 10/2011.

# **Quality Assurance**

Ultradyne<sup>®</sup> 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<sup>®</sup> filter is clearly marked with filter type, lot number, and serial number.



# **Ordering Guide**



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

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