

Steridyne®

VTV0.2 Mini Capsule

Description

The Steridyne® VTV0.2 hydrophobic PVDF filter capsule is a liquid rated, sterilizing grade filter that provides the added benefit of certification that meets the critical demands of the pharmaceutical, biotechnology and related industries.

Materials of Construction

All components of the Steridyne® mini capsule are animal free. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

Membrane:	Polyvinylidene fluoride	CFR Title 21, 177.2510
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 0.2 µm

Minimum Bubble Point 18 psi (1,24 bar), 60% IPA
17 psi (1,17 bar), 70% IPA

Bacterial Retention >10⁷ per cm² removal of *Brevundimonas diminuta* per ASTM F838

Operating Characteristics

Operating temperature range: 32 °F to 122 °F (0 °C to 50 °C)
Maximum operating pressure (gas service): 100 psig (6,9 bar)

Sterilization

Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles
Gamma irradiation: 25 to 40 kGy once. Do not autoclave irradiated capsules.
Capsules must not be steamed in place (SIP).

Biological Safety

Steridyne® filters meet the requirements as specified in the current USP Class VI plastics, physicochemical, oxidizable substances, and cytotoxicity tests. Bacterial endotoxin levels in aqueous extracts of Steridyne® filters are less than 0.5 EU/mL, as determined using the *Limulus* amoebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of Steridyne® filters. Filters comply with Commission Regulation (EU) No 10/2011.

Quality Assurance

Each Steridyne® VTV0.2 is supplied with a Certificate of Quality verifying the high standards and superior performance of the product. Steridyne® 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 Steridyne® filter is integrity tested during manufacture and is clearly marked with filter type, lot number and serial number.

Ordering Guide

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Capsule Options	
Standard capsule	C
Sterile capsule	G

Vent / Drain Ports	
0	No vent / drain port
1	One luer port with cap, inlet side
2	Standard; two luer ports with caps
4	Two sanitary valves with hose barbs
5	One sanitary valve with hose barb, inlet side
6	One sanitary valve with hose barb, outlet side

Effective Filtration Area (nominal)	
0.45 ft ² (415 cm ²)	K
0.36 ft ² (335 cm ²)	M

Inlet/ Outlet Connections	
11	1/4" hose barb (HB)
1B	1/4" hose barb (HB) w / filling-bell
22	3/8" hose barb (HB)
2B	3/8" hose barb (HB) w / filling-bell
44	1/4" MNPT
71	3/4" sanitary (TC) flange inlet, 1/4" hose barb outlet
72	3/4" TC inlet, 3/8" hose barb (HB) outlet
77	3/4" sanitary flange

Housing Material Designator	
Gamma-stable polypropylene, animal component free (ACF)	2

Product	Filter Grade	Retention Rating
Steridyne® hydrophobic PVDF membrane	VTV	0.2

Additional information about Steridyne® filter products is available in the Green Docs document which is viewable at <https://www.meissner.com/downloads/steridyne-gd004-2.2.pdf>