Whatman™ Puradisc™ 25 TF Disposable Filter Device

Product Information Sheet

Warning
For research use only.
Not recommended or intended for diagnosis of disease in humans or animals.
Do not use internally or externally in humans or animals.

Puradisc 25 TF disposable filter devices have been designed to provide pure filtration of solvents, chemicals and non-aqueous solutions and samples. They consist of a PTFE membrane with a polypropylene housing.

Disposable filtration devices provide great labor saving efficiency while ensuring consistent filtration when compared to hand assembled filter housings.

This document provides general information on the products listed below. The specifications in the Technical Data section are intended to provide the basis for establishing functional use, as well as setting quality assurance test performance levels.

- Hydrophobic PTFE membrane
- Solvent Resistant Membrane
- Polypropylene Housing
- Rugged Construction
- Autoclavable
- Four Pore Sizes Available
- 0.1 µm Filter Device for "Ultra Clean" Applications
- Inlet: Female Luer Lock (FLL)
  Outlet: Male Slip Luer (ML)
- Integrity Testable BP or WBT (In-situ)

Puradisc 25 TF - 25 mm Filters

Catalog Number	Product Name	Pore size (µm)	Media	Qty./Pkg.
6784-2501	Puradisc 25 TF	0.1	PTFE	50
6784-2502	Puradisc 25 TF	0.2	PTFE	50
6784-2504	Puradisc 25 TF	0.45	PTFE	50
6784-2510	Puradisc 25 TF	1.0	PTFE	50
6785-2502	Puradisc 25 TF	0.2	PTFE	200
6785-2504	Puradisc 25 TF	0.45	PTFE	200

HPLC Solvent Filtration
Sterilize Air/Gases
Air/Gas Filtration
Venting: Sterile solution; holding vessels
Isolation: Gas passed, liquids/aerosols stopped
Biotech: Sterile vents & exhausts for growth environments, in-line sterilize gases
Electronics: Photoresists, solvents, gases for research

Operating Instructions

Safety: When considering the special factors of your application, consult the Technical Data to determine correctness of use. Do not exceed the pressure, temperature or chemical compatibility recommendations. High pressures can be obtained when using syringes. The smaller the syringe the higher the pressure that can be generated. As a general guide, the following pressures can be obtained by hand with the syringes indicated: 20 mL, 80 psi; 10 mL, 140 psi; 5 mL, 180 psi; 3 mL, 200 psi; 1 mL, 250 psi. Each user should determine the pressure they can generate by hand with a specific size syringe and take appropriate safety precautions not to exceed the recommended rating for the device used. If these limitations are exceeded, bursting of the device may occur resulting in loss of sample or personal injury.

PTFE Membrane Considerations: PTFE membrane is hydrophobic and will not allow water (aqueous solutions) to pass without high pressure. This pressure is called the Water Breakthrough Test (WBT) value and changes with the pore size of the membrane. Aqueous solutions may be filtered if the membrane is initially "wetted" with alcohol or another appropriate solvent. PTFE membrane will stop aqueous aerosols in gas streams.

Efficiency: To maximize filtration throughput, use the largest pore size filter that will provide the required cleanliness. Sterilization of liquids requires a sterile 0.2 µm filter. To extend filter life use low flow or pressure and prefilters.

Autoclaving: Autoclave at 121°C (132°C max) for 20 minutes. PTFE is destroyed by radiation sterilization.

To use with a syringe:
1) Fill the syringe with the solution to be filtered.
2) Secure the filled syringe to the FLL on the inlet, with a twisting motion.
3) Gradually apply thumb pressure to the syringe plunger, to initiate flow.
4) Change filters when flow becomes too slow or resistance becomes excessive.

Air Locks seriously hamper flow rates. To eliminate, point the outlet of the filter device upward during the initiation of liquid flow and use low pressure.

Bubble Point (BP) Test: Flush the filter device with 1.0 ml or more of Isopropyl Alcohol (IPA). After the membrane is completely wet, with the outlet pointed upward, apply air under controlled pressure to the inlet until air breaks through the membrane and bubbles from the outlet. The pressure at which air passes through the wetted membrane is the BP. Refer to table for IPA BP values.

Water Breakthrough Test (WBT): The WBT will determine gross integrity of the filter device. The filter device must be dry. Use 5 ml water in a 10 ml syringe. Connect the syringe to the filter device inlet and apply a controlled pressure for 15 seconds. An integral membrane should hold water up to the published WBT pressure.

Vents: Attach inlet connector to vessel, the other connector is open to atmosphere. If exhaust gas is saturated with moisture, install vent filter in a vertical position to allow collected moisture to drain back into

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Cod. 09.9024.00

Filtro in PTFE autoclavabile per Swiftpet Pro da 0,45 µm cf .5 pz.

Descrizione

Filtro in PTFE autoclavabile per Swiftpet Pro da 0,45 µm cf .5 pz.

Dati Tecnici