

Whatman Puradisc 25 PP Disposable Filter Device

Product Information sheet

Introduction

Important

Read these instructions carefully before using the products.

Intended use

The products are intended for research use only, and shall not be used in any clinical or *in vitro* procedures for diagnostic purposes.

Description

The Puradisc 25 PP disposable filter devices were designed to provide pure filtration of aqueous or organic solutions. 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.

- Polypropylene Filter Media
- All Polypropylene with High Flow
- High Purity of Final Product
- Solvent/Chemical Compatible Media
- Chemical Resistant Housing
- Rugged Construction
- Autoclavable
- Two Pore Sizes Available
- Inlet: Female Luer Lock (FLL) Outlet: Male Slip Luer (ML)
- No adhesives used in construction

Puradisc 25 PP - 25 mm Filters

Product code	Product Name	Pore size (µm)	Media	Qty./Pkg.
6786-2502	Puradisc 25 PP	0.2	PP	50
6786-2504	Puradisc 25 PP	0.45	PP	50
6788-2502	Puradisc 25 PP	0.2	PP	200
6788-2504	Puradisc 25 PP	0.45	PP	200

Typical Applications for Puradisc 25 PP Filter Devices

- HPLC, TLC and GC Sample Clarification
- HPLC Sample Degassing
- HPLC Solvent Filtration
- HPLC Reagent Filtration
- Buffer Solutions
- Analytical Reagents
- Biological Samples
- Aqueous Solutions
- Venting
- Sterile Isolation
- Air/Gas Filtration
- Sterilize Air/Gases

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.

PP Media Considerations: This specially selected polypropylene filter media provides high flow with both solvent and aqueous compatibility. Use of this media provides a pure, one material compatibility, filter device with a broad range of solvent/chemical resistance.

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.

To use with a syringe: (3 mL, 5 mL, 10 mL)

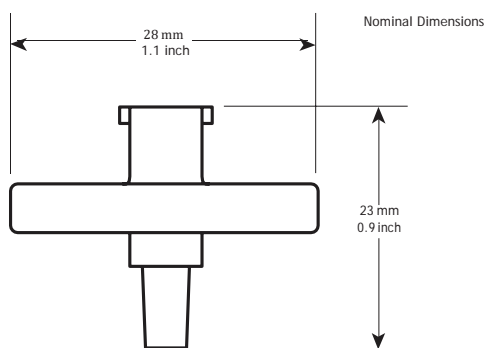
Step	Action
1	Fill the syringe with the solution to be filtered.
2	Secure the filled syringe to the FLL on the inlet with a twisting motion.
3	With outlet pointed upward, gradually apply thumb pressure to the syringe plunger to initiate flow.
4	Change filters when flow becomes too slow or resistance 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 methanol. 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 methanol BP values.

Note: *In order to provide a purer product, no wetting agents have been added to the filter media. When using Puradisc 25 PP 0.2 µm with water, the media requires 'wetting out' prior to use. With a 5 to 10 mL syringe gradually apply pressure until full flow is achieved. This usually requires 3 to 4 bar (45 to 60 psi). The filter is now ready for use at lower pressures.*

Technical Data: Puradisc 25 PP Disposable Filter Devices



Connections
Inlet: Female Luer Lock (FLL)
Outlet: Male Slip Luer (ML)

Dimensions:	28 mm (1.1 in.) x 23 mm (0.9 in)
Weight:	Approximately 2.7 grams
Filtration Area:	Approximately 4.2 cm ²
Maximum Pressure:	5.2 bar (75 psi)
Housing:	Polypropylene
Hold Up Volume:	Full housing 0.35 mL with air purge <0.2 mL
Filter Media:	PP (Polypropylene)
Flow Direction:	Flow should enter from the inlet
Connectors:	Inlet - Female Luer Lock (FLL)

Outlet - Male Luer (ML)

Autoclaving:

Autoclave at 121°C (132°C max) for 20 minutes.

Product code	Pore Size (µm)	Integrity Test Data ¹	
		IPA Bubble Point bar	psi
6786 - 2502	0.2	0.76	11.0
6786 - 2504	0.45	0.17	2.5
6788 - 2502	0.2	0.76	11.0
6788 - 2504	0.45	0.17	2.5

¹ Typical Values

Chemical Resistance Summary

Classes of Substances 20°C (68°F)	Polypropylene Guide ¹ for Use
Acetic Acid, 5%	R
Acetic Acid, Glacial	R
Acetone	R
Acetonitrile	R
Ammonia, 6N	R
Amyl Acetate	R
Amyl Alcohol	R
Benzene ¹	NR
Benzyl Alcohol ¹	R
Boric Acid	R
Butyl Alcohol	R
Butyl Chloride ¹	NR
Carbon Tetrachloride ¹	NR
Chloroform ¹	LR
Chlorobenzene ¹	LR
Citric Acid	R
Cresol ¹	NR
Cyclohexanone	R
Cyclohexane ¹	NR
Diethyl Acetamide	R
Dimethyl Formamide	R
Dioxane	R
DMSO	R
Ethanol	R
Ethers ¹	NR
Ethyl Acetate	R
Ethylene Glycol	R
Formaldehyde ¹	LR
Freon TF ¹	NR
Formic Acid	R
Hexane	R
Hydrochloric Acid, Conc ¹	LR
Hydrofluoric Acid ¹	LR
Isobutyl Alcohol	R
Isopropyl Alcohol	R
Methanol	R

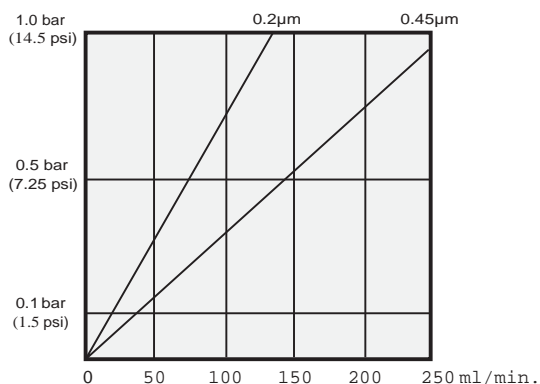
Classes of Substances 20°C (68°F)	Polypropylene Guide ¹ for Use
Methyl Ethyl Ketone	R
Methylene Chloride ¹	LR
Nitric Acid, Conc ¹	NR
Nitric Acid, 6N ¹	LR
Nitrobenzene ¹	R
Pentane ¹	NR
Perchloro Ethylene ¹	NR
Phenol 0.5%	R
Pyridine	R
Sodium Hydroxide, 6N	R
Sulfuric Acid, Conc ¹	NR
Tetrahydrofuran ¹	LR
Toluene ¹	LR
Trichloroethane ¹	LR
Trichloroethylene ¹	LR
Water	R
Xylene ¹	LR

¹ Short Term Resistance of Housing

R = Resistant; LR = Limited Resistance; NR = Not Recommended.

The above data is to be used as a guide only. Testing prior to application is recommended.

Typical Methanol Flow Rate



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