

# Duredunty® Filter Cartridges

Double-layer PES Membrane·Sterile Liquid Filter



**Duredunty®** Filter Cartridges use a unique double-layer PES membrane which provides excellent reliability in filtration and sterilization. They are designed for the filtration of a broad range of pharmaceutical products and the removal of particles, cysts, oocysts and bacteria in aqueous filtration application, while providing superior flow rates and high particle removal efficiency when compared to other sterilizing grade filter cartridges.



## Features and Benefits

- Double-layer hydrophilic PES membrane which requires no pre-wetting
- Asymmetric pre-filter layer provides longer service life and lower filtration cost
- Broad chemical compatibility (pH 1-14)
- Provides 10x the safety when compared to normal PES filters
- Design allows for multiple autoclave cycles (up to 30) and extended use

## Quality Standards

- Integrity Test correlates to ASTM F838-05 Bacterial Challenge Test (BCT)
- Each filter is individually Integrity Tested prior to leaving the factory
- Each filter is Fully Traceable with a unique serial number
- Designed, developed and manufactured in compliance with ISO9001
- Full Regulatory Compliance with the following:
  - 21CFR.210.3(b)(5)(6), 211.72 for Non-Fiber Release
  - Endotoxins: <0.25EU/ml/10inch filter
  - USP <88> Plastic Class VI-121°C
  - FDA 21 CFR177-182 & EU 1935/2004/EC

## Typical Application

- Biological Vaccines
- Blood Products
- LVP and SVP
- Lyophilization Freeze-dried Powder
- Ophthalmic Solutions
- Sterile API

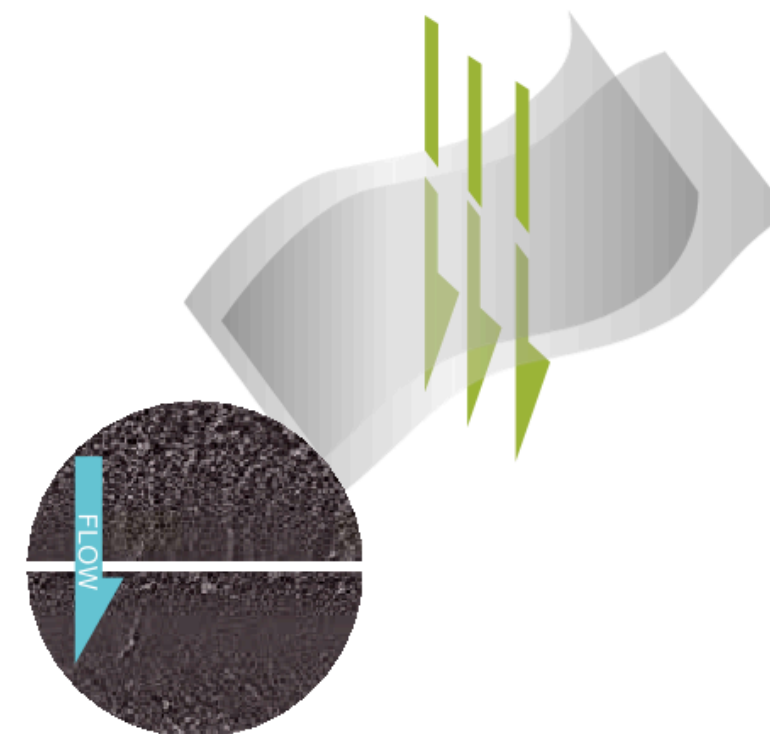


## Materials of Construction

<b>Filter Media</b>	Double-Layer PES Membrane (Asymmetric PES + Symmetric PES)
<b>Cage/Support</b>	Polypropylene
<b>Core/End Cap</b>	Polypropylene

## Operating Conditions

<b>Maximum Temperature</b>	90°C
<b>Max. Differential Pressure</b>	4.0 bar / 21°C (forward) 2.4 bar / 90°C (forward) 2.0 bar / 21°C (reverse)
<b>Effective Filtration Area</b>	0.6m <sup>2</sup> / Ø 68-10 inch



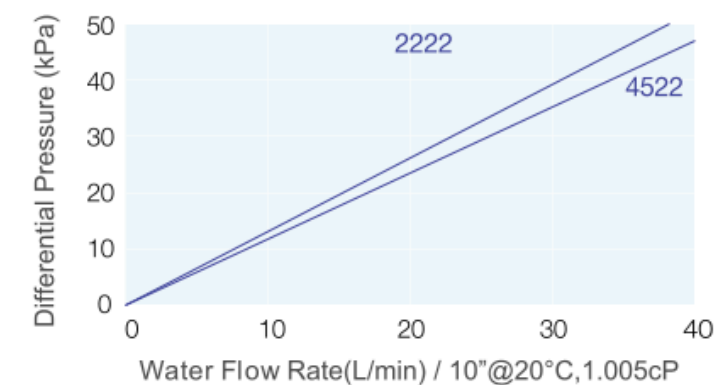
## Sterilization

<b>Inline Steam Sterilization</b>	up to 30 cycles (135°C for 30min@30kPa per cycle)
<b>Autoclave</b>	up to 30 cycles (130°C for 30min per cycle)

## Integrity Test Data

<b>Bubble Point</b>	≥ 0.34 MPa (water) ,0.45+0.22µm
<b>Diffusion Flow</b>	≤ 25 ml/min/10" @ 0.275MPa (water),0.45+0.22µm

## Flow Rate Characteristics



## Ordering Information

DPSDDT	Removal Ratings	End Cap	Nominal Length	Seal Material	-P
2210	=0.22µm+0.1µm	HSF=226 /Fin (PBT Insert)	05=5"	S=Silicone	
2222	=0.22µm+0.22µm	HSC=226 /Flat (PBT Insert)	10=10"	E=EPDM	
4522	=0.45µm+0.22µm	HTF=222 /Fin (PBT Insert)	20=20"	V=Viton	



**FILTRATION**  
P S A

Sterile Filtration  
Bio-burden Reduction  
Pre-Filtration  
All-Fluorine Filters  
Capsule Filters