

# FILTER PURE<sup>®</sup>

## FILTRATION CARTRIDGES

Sediment, dirt, rust, algae, Giardia cysts\*

### Large Surface Type Filtration

#### ▼ Pleated Polyester Reusable/Washable (for coarse dirt loadings)

Highly efficient filter cartridges made of pleated media for low pressure drop, high flow capability, increased dirt removal, long filter runs - *which all adds up to the lowest cost per litre filtered.*

### Depth Type Filtration ▼



#### Polypropylene Bonded

Typically cannot be reused.

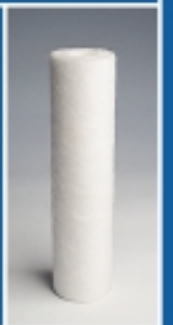
Finest filtration of the *Depth Type* cartridges.



#### Polypropylene Spun

Typically cannot be reused.

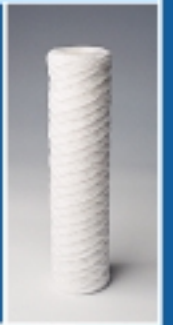
High purity media-ideal for potable, food products, brewing, etc.



#### Polypropylene Wound

Typically cannot be reused.

Widest range available.



# FILTERPURE® Polyester Pleated Filter Cartridges

...Compare Their Many Advantages!

## Pleated Design for More Surface Area and Superior Filtration for Increased Contaminant Removal

**Pleated Polyester** filter cartridges offer superior filtration because their filter media is pleated for more surface area and increased particulate removal. They offer up to twelve times more surface area than **Depth Type** cartridges!

### Low Pressure Drop

Flow restriction is less severe with our **Pleated Polyester** cartridges because the pleated design offers more filtration media than **Depth Type** cartridges. (See chart at bottom for pressure drop data.)

### Longer Filtration Runs for Fewer Change-outs and Less Maintenance

More dirt, sediment and other particulate is removed in our pleated media to provide significantly longer filtration runs compared to **Depth Type** cartridges. For this reason, **Pleated Polyester** cartridges require fewer change-outs, and labour costs are reduced!

**Note:** 1 and 5 micron are not as reusable as coarser ratings and are not recommended for colloidal silt or for cyst removal.

### Costs Less to Use!

Because **Pleated Polyester** cartridges filter longer, remove more solids and are changed less frequently, they cost significantly less to use compared to **Depth Type** cartridges.



### FDA Approved Materials

FILTERPURE **Pleated Polyester** cartridges may be used for potable water and liquid foods because all materials are FDA approved.

### Six Micron Ratings and Colour Coding

FILTERPURE **Pleated Polyester** cartridges are available in the following nominal micron ratings, each with colour coding on packaging for easy identification:

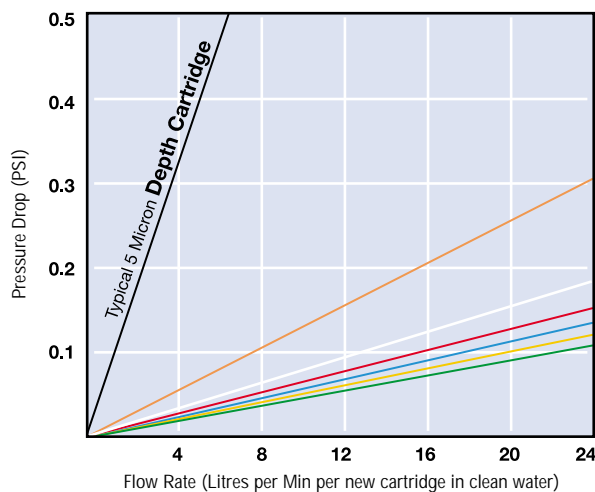
1	Very fine
5	Fine
10	Fine-Medium
20	Medium
50	Coarse
100	Very coarse

### Thermally Bonded for Longer Useable Life

**Pleated Polyester** cartridges are thermally bonded to provide an integral bonding between our pliable PVC end caps, rigid PVC centre tubes and filtration media for added strength and longer useable life. **Pleated Polyester** cartridges can withstand pressure differentials to 80 psid at 25°C!

### Pressure Drop with Pleated Polyester Cartridges

The data shown below is per 10" cartridge in clean water.



Colour coding stickers on each cartridge wrapper	Nominal Micron Rating
	1
	5
	10
	20
	50
	100



Three lengths available in 2 3/4" O.D. (Standard)  
Two lengths available in 4 1/2" O.D. (Jumbo)



**Pleated Polyester** cartridges are cleanable and reusable in most applications and most micron ratings.

**Note:** Rules in graph above correspond with colour codes used to identify each **Pleated Polyester** filter cartridges' nominal micron rating.

## Specifications

<b>Filter media:</b>	Polyester-Plus™
<b>End caps:</b>	Plastisol (pliable PVC)
<b>Centre tubes:</b>	Rigid PVC, perforated
<b>Temperature:</b>	60°C (standard cartridges)
<b>pH:</b>	3 to 11

<b>Surface area:</b>	<b>Standard</b> 6 sq. ft per 10" length (approx.) <b>Jumbo</b> 16 sq. ft per 10" length (approx.)
<b>Dimensions:</b>	2 <sup>3</sup> / <sub>4</sub> " O.D.; 1 1/16" I.D. Jumbo 4 1/2" O.D;
<b>Lengths:</b>	10", 20", 30" (Jumbo 10" & 20")
<b>Packaging:</b>	Cartridges are individually shrink wrapped.

## Tests prove Polyester Pleated Cartridges Outperform Depth Type Cartridges and Reduce Filtration Costs

A test facility was set up to evaluate the performance of various filter cartridges. The objective was to establish which cartridge removes more solids, filters longer and filters more litres before it reached capacity. Cartridges tested were nominal five microns, and types included string wound, spun polypropylene, rigid resin bonded cellulose and **Polyester Pleated** cartridges.

Test equipment included a test tank, circulating pump, filter housing, mixer and pressure gauges installed prior and after the filter housing. A mixture of water and AC Coarse Test Dust (3% by weight) was used as the test particulate.

To start the test, each cartridge was weighed (dry) and installed in the filter housing. A flow rate of twelve litres per minute was maintained. A mixer was operated to keep the test dust in suspension and a stopwatch was used to note start-up and termination times.

Filtration commenced until a thirty psi pressure differential was achieved. The elapsed time was recorded. After each cartridge was allowed to dry, it was again weighed to establish the amount of solids it had removed from the test stream. In all tests the filtered product was equivalent. The test results are shown below:

## Test Results:

### Solids Removal

*For coarse dirt loadings*  
**Polyester Pleated** cartridges removed more solids than all other cartridges tested. The solids removal weights for the cartridges tested are shown at right.

**Polyester Pleated**  
6 sq ft (10")



340 gms

**Polypropylene Bonded**



93 gms

**Polypropylene Spun**



71 gms

**Polypropylene Wound**

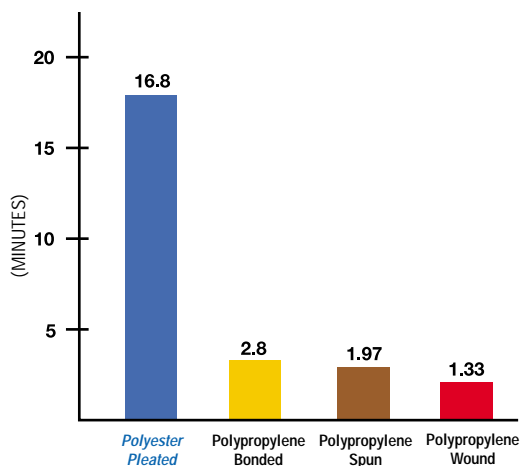


60 gms

### Solid Removed:

### Elapsed Time

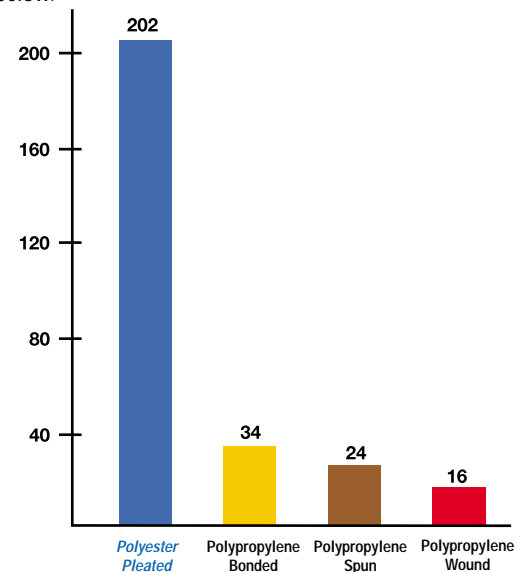
*For coarse dirt loadings* **Polyester Pleated** cartridges provide longer filtration before they reach 30Δp. The chart below shows the lapsed time each cartridge filtered before a 30 psi pressure differential was achieved.



Elapsed Time Until Filter Reached 30 Δp.

### Litres Filtered

*For coarse dirt loadings* **Polyester Pleated** cartridges filter more litres because they filter longer before they reach 30Δp as shown below.



Litres Filtered Before Filter Reached 30 Δp.

**With Polyester Pleated the more you filter the more you save.** **With Depth Type, the more you filter the more you pay!**

# FILTERPURE® Product Codes and Cartridge Selection

**FILTERPURE**  
Housings  
for cartridges



## Polyester Pleated cartridges - 2 3/4" O.D. (Standard) - with 6 sq. ft. of media per 10" length

Nominal Micron	10" Pt No	20" Pt No	N/A	End Cap	Colour Coding
1*	1PP10	1PP20		Blue	Orange
5*	5PP10	5PP20		Blue	White
10	10PP10	10PP20		Blue	Red
20	20PP10	20PP20		Blue	Blue
50	50PP10	50PP20		Blue	Yellow
100	100PP10	N/A		Blue	Green



## Polyester Pleated cartridges - 4 1/2" O.D. (Jumbo) - with 16 sq. ft. of media per 10" length

Nominal Micron	10" Pt No	20" Pt No	N/A	End Cap	Colour Coding
1*	1PP10J	1PP20J		Blue	Orange
5*	5PP10J	5PP20J		Blue	White
20	20PP10J	20PP20J		Blue	Blue
50	50PP10J	50PP20J		Blue	Yellow

\*Not as reusable as coarser ratings. Not recommended for fine colloidal silts. Not recommended for cysts.



## Polypropylene Bonded cartridges - Depth Type filtration - 2 3/4" O.D (standard)

Nominal Micron	10" Pt No	20" Pt No	30" Pt No	Cartridge Colour	Colour Coding
1 99.9% Cyst removal	1PB10	1PB20	1PB30	White	Orange
5	5PB10	5PB20	5PB30	White	White
10	10PB10	10PB20	10PB30	White	Red
25	25PB10	25PB20	25PB30	White	Blue



## Polypropylene Spun cartridges - Depth Type filtration - 2 3/4" O.D (standard)

Nominal Micron	10" Pt No	20" Pt No	30" Pt No	Cartridge Colour	Colour Coding
1 99% Cyst removal	1PS10	1PS20	1PS30	White	Orange
5	5PS10	5PS20	5PS30	White	White
10	10PS10	10PS20	10PS30	White	Red
20	20PS10	20PS20	20PS30	White	Blue
30	30PS10	30PS20	30PS30	White	Black
50	50PS10	50PS20	50PS30	White	Yellow
75	75PS10	75PS20	75PS30	White	Pink



## Polypropylene Spun cartridges - Depth Type filtration - 4 1/2" O.D (Jumbo)

Nominal Micron	10" Pt No	20" Pt No	30" Pt No	Cartridge Colour	Colour Coding
1 99% Cyst removal	1PS10J	1PS20J	N/A	White	Orange
5	5PS10J	5PS20J	N/A	White	White
20	20PS10J	20PS20J	N/A	White	Blue
<b>Dual Gradient</b> 25 Micron Pre-filter 1 Micron Final filter	10" Pt No PSDG10J	20" Pt No PSDG20J	N/A	White	—



## Polypropylene Wound cartridges - Depth Type filtration (not recommended for cysts)

Nominal Micron	10" Pt No	Jumbo 10"	20" Pt No	Jumbo 20"	30" Pt No	Cartridge Colour	Colour Coding
0.5	0.5PW10		0.5PW20		0.5PW30	White	Brown
1	1PW10	1PW10J	1PW20	1PW20J	1PW30	White	Orange
5	5PW10		5PW20		5PW30	White	White
10	10PW10		10PW20		10PW30	White	Red
20	20PW10		20PW20		20PW30	White	Blue
30	30PW10		30PW20		30PW30	White	Black
50	50PW10		50PW20		50PW30	White	Yellow
75	75PW10		75PW20		75PW30	White	Pink
100	100PW10		100PW20		100PW30	White	Green
200	200PW10		200PW20		200PW30	White	—

**Point-of-use**  
(i.e. Single Tap)



S10  
inlet/outlet 1/4"



W10  
inlet/outlet 1/2"



W10PR  
inlet/outlet 3/4"

**Point-of-entry**  
(i.e. Whole House)



W20PR  
inlet/outlet 3/4"



W10 Jumbo  
inlet/outlet 1"

**Larger Flows**



W20 Jumbo  
inlet/outlet 1 1/2"

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