

# Ultrapolyplea® PP100

*Depth filter for particle removal from aqueous solutions, water and gases with an absolute retention rate.*

## Product Description

The Ultrapolyplea® depth filter is a pleated all-polypropylene prefilter with an absolute retention rate between 0.45 µm and 40 µm.

## Features

All components meet the FDA requirements for the contact with food in accordance with CFR (Code of Federal Regulations) Title 21. Ultrapolyplea® has passed the USP XX Class VI tests for plastics. The filter element is manufactured in accordance with cGMP requirements (current Good Manufacturer Practice), has no migration of filter media, is non-fiber releasing and is thermally welded without the use of binders or other chemical additives. The filter element is pre-rinsed with 18 MΩ · cm water. This leads to extremely low extractables.

## Applications

The Ultrapolyplea® depth filter is designed and developed for:

- Particle removal from water
- Chemicals
- Solvents
- Etchants
- Biological liquids
- Pharmaceuticals
- Serums
- Cosmetics
- Food and beverage
- Syrup
- Paints and dyes
- Jet printer inks
- Photolithographical liquids
- Coatings
- Saltwater & seawater
- Coolants
- Isotonic salt solutions
- Inks and pigments
- Magnetic memory media
- Compressed air and other gases



**Ultrapolyplea® PP100** high efficient absolute pre- and after filter



**SEM of Ultrapolyplea® depth filter**

Features	Benefits
All-polypropylene construction	Wide chemical durability against numerous gases and liquids
0.45 µm to 40 µm	Precise particle retention at rated level, greater selection of optimum filter media
	Higher dirt holding capacity, larger throughputs, longer service life
	Fixed pore structure, high containment of solid materials, no migration of filter media, non-fiber releasing
	Wide solvent compatibility, extremely low extractables, immediately rinses to 18 MΩ · cm
	Reduced pressure loss, high flow rates
	Meets FDA requirements for food contact, passed USP class VI biological tests for plastics



**Filter Products Company**  
 Richmond, VA  
<http://fpcfilters.com>  
 (804) 231-4646

### Dimensions

Diameter: 2.75"  
Length: 5", 10", 20", 30" or 40"

### Particle retention

PP100 µm	Percent removal		
	100%	99%	90%
0.45	0.45	0.40	< 0.30
0.6	0.60	0.56	0.38
0.8	0.80	0.72	0.50
1.2	1.20	1.10	0.70
2.4	2.40	2.30	2.00
5	5.00	4.50	3.00
7	7.00	6.50	5.00
10	10.00	9.50	7.50
20	20.00	19.00	12.00
30	30.00	26.00	16.00
40	40.00	35.00	28.00

### Materials

Filter medium:	Polypropylene
Upstream support:	Polypropylene
Downstream support:	Polypropylene
Outer guard:	Polypropylene
End caps:	Polypropylene
O-Rings:	Silicone, Buna N, EPDM or Viton®

\*Viton is a registered trademark of E.I. du Pont de Nemours and Company

### Absolute retention rate

0.45 µm, 0.6 µm, 0.8 µm, 1.2 µm, 2.4 µm, 5 µm, 7 µm, 10 µm, 20 µm, 30 µm, 40 µm

### Filtration surface

5.4 ft² for 10" element (10/30)

### Maximum differential pressure

Operating temp.	Differential pressure
100°F	80 psid
150°F	60 psid
180°F	30 psid

### Sterilization

#### In-line sterilization with slow speed saturated steam

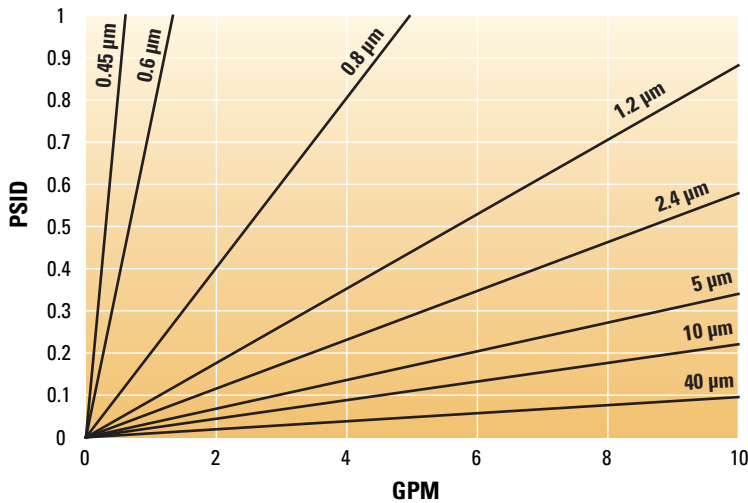
250-275°F for 30-60 minutes

#### Autoclave

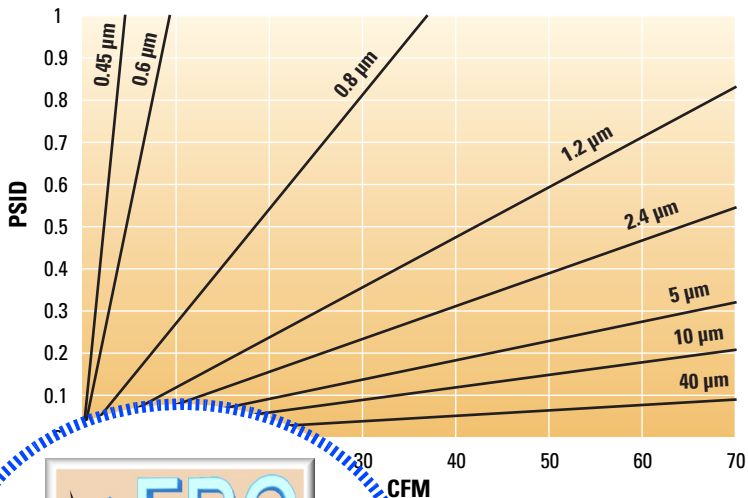
260°F for 30-60 minutes

Ultrapolyplea® filter elements are capable of repeated sterilization cycles

### Water



### Air



### Filter Products Company

Richmond, VA  
<http://fpcfilters.com>  
(804) 231-4646

Donaldson Company, Inc.  
Box 1299  
Minneapolis, MN  
55440-1299 U.S.A.

Tel 800.543.3634 (USA)  
Tel 800.343.3639 (within Mexico)  
processfilters@mail.donaldson.com  
[www.donaldson.com](http://www.donaldson.com)

Information in this document is subject to change without notice.

© 2006 Donaldson Co., Inc.  
Printed in U.S.A. on recycled paper

Bulletin No. PRO-201