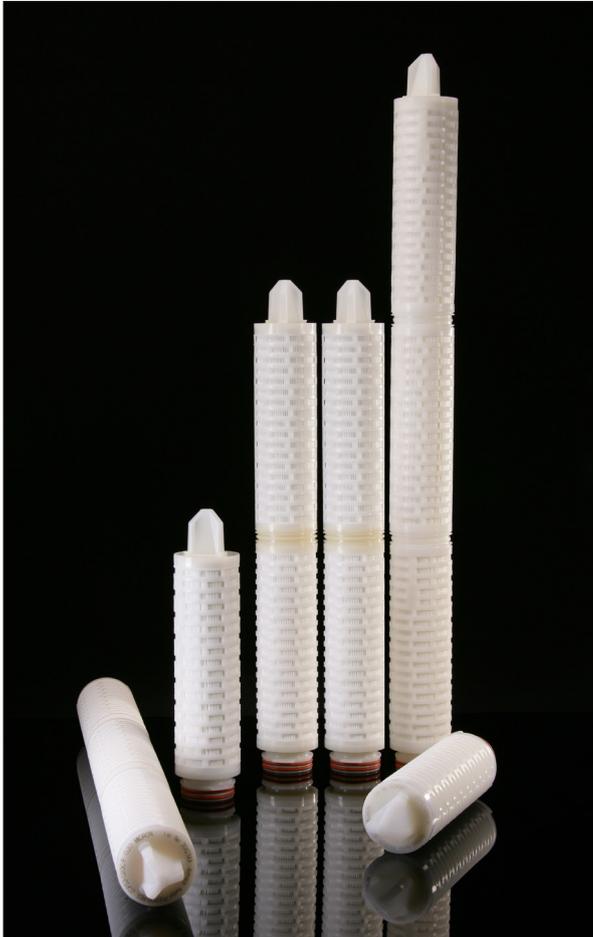


PREPOR PP

Filter Cartridges



PREPOR PP filter cartridges will significantly reduce the number of yeast and spoilage organisms from beverage products, providing extremely cost effective pre-stabilization of process liquids.

PREPOR PP will also "condition" liquids and can be used to improve the visual clarity and filterability of products to benefit the performance and efficiency of terminal stabilization operations such as final membrane stabilization and pasteurization.

The filters have been designed to withstand harsh operating conditions. Their mechanical strength and wide chemical resistance make them suitable for aggressive clean in place operations using chemicals and steam.

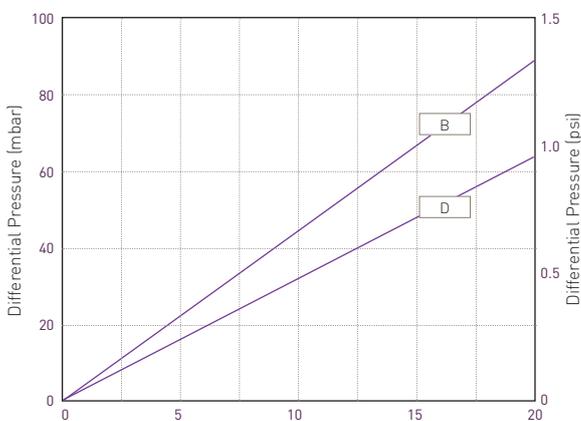
Features

- Validated retention to yeast and spoilage bacteria
- High filtration area pleated media
- Thermally bonded, all polypropylene construction

Benefits

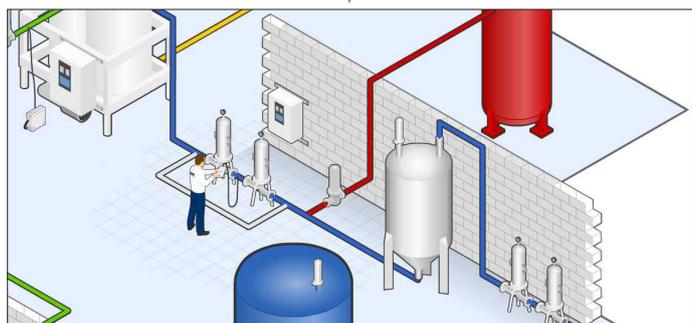
- Short term microbial stability of process liquids
- High flow and service life to blockage
- Compatible with aggressive process conditions including chemical cleaning and steam sterilization

Performance Characteristics



Flow (L / min) for liquid @ 20 °C and 1 cp per 10" module
Recommended flow rate 10-15 L / min / 10" module

Filtration Stage





Specifications

Materials of Construction

- Filtration Media: Polypropylene
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: Polypropylene
- Outer Protection Cage: Polypropylene
- End Caps: Polypropylene
- End Cap Insert: 316L Stainless Steel
- Standard o-rings/gaskets: Silicone / EPDM

Food Contact Compliance

Materials conform to the relevant requirements of FDA 21CFR Part 177, current EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.



Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

| Temperature | | Max Forward dP | |
|--------------|--------------|----------------|-------|
| °C | °F | (bar) | (psi) |
| 20 | 68 | 5.0 | 72.5 |
| 40 | 104 | 4.0 | 58.0 |
| 60 | 140 | 3.0 | 43.5 |
| 80 | 176 | 2.0 | 29.0 |
| 90 | 194 | 1.0 | 14.5 |
| >100 [steam] | >212 [steam] | 0.3 | 4.0 |

Effective Filtration Area (EFA)

10" (250 mm) Up to 0.5 m² (5.38 ft²)

Cleaning and Sterilization

PREPOR PP cartridges can be repeatedly steam sterilized in situ or autoclaved at up to 135 °C (275 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

Manufacturing Traceability

Each filter cartridge displays the product name, product code and lot number. Additionally, each module displays a unique serial number providing full manufacturing traceability.

Retention Characteristics

The retention characteristics of PREPOR PP have been determined by a combination of controlled laboratory tests and in-use monitoring for a number of organisms. Bacterial challenge testing is carried out to methods specified in ASTM F838-05.

| Organism | LRV when challenged with a minimum of 10 ⁷ cfu per cm ² | |
|---------------------------------|---|---|
| | B | D |
| <i>Saccharomyces cerevisiae</i> | 4 | 2 |
| <i>Escherichia coli</i> | 2 | - |
| <i>Oenococcus oenos</i> | 2 | - |
| <i>Serratia marcescens</i> | 2 | - |

Ordering Information

| PPP | | N | | A | |
|------|------------------|------|--------|--|------------------|
| Code | Length (Nominal) | Code | Micron | Code | Endcap (10 inch) |
| 1 | 10" (250 mm) | B | 0.6 µm | C | BF / 226 Bayonet |
| 2 | 20" (500 mm) | D | 1.0 µm | D | Fin / 222 |
| 3 | 30" (750 mm) | | | E | Flat Top / 222 |
| 4 | 40" (1000 mm) | | | G | Recess / 222 |
| | | | | H | UF Retrofit |
| | | | | R | BF / 222 Bayonet |
| | | | | Code | O-rings |
| | | | | S* | Silicone |
| | | | | E | EPDM |
| | | | | * Silicone o-ring supplied as standard | |

VSH & HSL range of Sanitary Beverage Housings



- Multi and single elements
- Designed specifically for the food & beverage industry
- 0.4µM Ra internal, 0.25µM Ra external
- High quality crevice free construction
- Available for up to 30 round filters
- Sanitary vent, tri-clamp connections as standard
- Sanitary tri-clamp body closure as standard