

Pleated Polyethersulfone (PES) Membrane Cartridge Filters



The Nucart® PES cartridge filters are available in 0.1µm, 0.22µm & 0.45µm ratings and are especially designed & developed for critical applications such as sterile filtration, high product recovery, biological samples filtration in the Pharmaceuticals, Biologicals, Beverages & Allied industries. Available in various size options (3"-40"), these filters offer better throughput and are best suited as final filters or point-of-use filters in diversified applications.

Special Features & Benefits

- ✓ 100% integrity tested
- ✓ Reusable after multiple sterilization cycles
- ✓ Broad Chemical Compatibility across organic and aqueous sample; 1-14 pH
- ✓ Offered with High-flux hydrophilic PES membrane

Key Applications

- Buffer Filtration
- Vaccine Filtration
- Final Sterile Grade Filtration
- LVPs
- Water for Injections (WFIs)
- Sterilization of Hormonal Injectables
- Microbial Retention & Stabilization

Our Nucart Cartridge filters are quality assured for retention efficiency, integrity test and flow rate and validated for Heat Stability, Beta ratio test, fiber particle release, extractables and biosafety

In Compliance with Global Standards

| | |
|-------------------------------|---|
| Bacterial Endotoxin | <i>The filtrate/Aqueous extraction from downstream of the filter exhibited endotoxin result < 0.25 EU/mL when tested as per USP <85> methodology</i> |
| Oxidizable Substances | <i>Oxidizable matter in filtered water meets the USP <1231> Oxidizable Substance Test requirements</i> |
| Non-fiber Releasing | <i>Meets the criteria for a "non-fiber releasing" filter as defined in 21 CFR 210.3(b)(6).</i> |
| Particle Shedding | <i>Meets Cleanliness per USP <788> for Particulates in Injectables</i> |
| Extractable with water | <i>Extractable passes within limit as specified by USP <661></i> |
| TOC/ Conductivity | <i>Meets the USP <643> for Total Organic Carbon Meets the USP <645> for Water Conductivity</i> |

- Manufactured in an ISO Class 8 Cleanroom Environment
- Complete Qualification Guide Available
- Critical raw material used for manufacturing are Compliant with FDA Indirect Food Additive requirements cited in 21 CFR 177.1520 & 21 CFR 177.2440
- Comply with USP <88> Reactivity Test for Class VI plastics
- Wide Chemical Compatibility
- 100% Integrity Tested

TECHNICAL SPECIFICATIONS

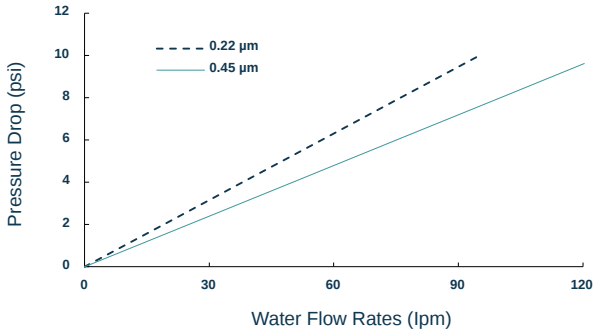


CONSTRUCTION MATERIALS

Filter Media: Polyethersulfone PES

Supporting Media: Polyester

Core & Cage: Polypropylene



MAXIMUM OPERATING DIFFERENTIAL PRESSURE AND TEMPERATURE

Max Temp 80 °C @ ≤ 2 Kg/cm²

Max Pressure 3.5 Kg/cm² @ 25 °C

Autoclavable 30 autoclave/steam sterilization cycles of 30 minutes at 121 °C/ 135 °C

INTEGRITY TEST DATA

Bubble Point:

0.10µm: ≥ 1931 mbar (28 psi) (70% IPA/ water wetted)

0.22µm: ≥ 3447 mbar (50 psi) (with water wetted)

0.45µm: ≥ 2206 mbar (32 psi) (with water wetted)

Max Air Diffusion Flow (for 10" Cartridge):

0.10µm: ≤ 30mL/min @3447 mbar (50 psi) (with water wetted)

0.22µm: ≤ 30 mL/min @ 2551 mbar (37 psi)

0.45µm: ≤ 35 mL/min @ 1655 mbar (24 psi)

Microbial Retention:

0.22µm: LRV > 7 for *Brevundimonas diminuta*

0.45µm: LRV > 7 for *Serratia marcescens*

ORDERING INFORMATION CODES:

| Type | | Size | | | Pore Size | | Adaptor | | Rings / Gaskets | |
|-------------------------|--------|--------|-------------------|------|-----------|------|----------|------|----------------------|------|
| Type | Code | Length | EFA | Code | Micron | Code | Type | Code | Ring | Code |
| Single Layer | CFPE | 3" | 0.2m ² | 03 | 0.10 µm | 010 | 7P | U | Silicone | SS |
| CFPE 0.8µm upstream | CFPER2 | 5" | 0.3m ² | 05 | 0.22 µm | 020 | BEO | V | Viton | SV |
| | | 9.75" | 0.7m ² | 9.75 | 0.45 µm | 045 | K SEAL | K | EPDM | SE |
| CFPE 0.65µm upstream | CFPER1 | 10" | 0.7m ² | 10 | | | Optiseal | X | Encapsulated PTFE | FV |
| | | 20" | 1.4m ² | 20 | | | 4463 | Y | | |
| CFPE 0.45µm upstream | CFPEQ | 30" | 2.1m ² | 30 | | | 4463B | Z | Synthetic Rubber | SR |
| | | 40" | 2.8m ² | 40 | | | M Disc | Q | | |
| 0.2µm upstream | CFPEP | | | | | | 222 | R | No Ring | XX |
| High temp. PES | CFPH | | | | | | 4440 | W | | |

EXAMPLE: CFPE10045USS

Note: Other Specification are available on request



Nupore Filtration Systems Pvt Ltd

H.O. Plot No. 7 Industrial Area Meerut Road, Ghaziabad, U.P.-201003, India

Branch: Plot No. 76 & 77, Sector-1, HSIIDC, Saha, Ambala Cantt 133104, India



+91120 - 6335825
+91120 - 6335826



sales@nupore.com