

The  
**STRAINRITE**  
Companies  
World Class Filtration



**Pleated Depth and Membrane Cartridges**

# Poly-*PLEAT* HSL

## High Solids Loading All Polypropylene Pleated Filter Cartridges

The Strainrite Companies continues its tradition of state-of-the-art advanced filtration innovation with the Poly-Maxx HSL. Poly-Maxx HSL is a unique polypropylene depth filter that utilizes long strand small and large diameter fibers to provide a high solids loading, absolute rated, pleated depth filter. This binder free depth media is excellent at removing gels, and with more than twice the surface area compared with industry standard non-pleated depth filters. The increased surface area provides higher flow rates at reduced pressure, resulting in increased filter life.

Our 100% polypropylene construction provides an excellent range of chemical compatibility for your most demanding applications. All polypropylene materials of construction are CFR 21 listed for direct food contact, which makes this filter ideal for a broad range of applications.

### Features and Benefits

- Absolute rated media provides reliable, consistent and repeatable filtration
- Low pressure drops yield higher flow rates and reduced processing time
- Maximized pleat design for greater surface area, ensuring longer service life, less downtime and reduced operating costs per cartridge
- 100% Polypropylene, FDA compliant with CFR 21
- Thermally bonded construction, eliminating particle bypass

### Product Specifications

#### Materials of Construction:

Filter Media:	Polypropylene
Support Material:	Polypropylene
Hardware:	Polypropylene
Sealing:	Thermal Bond
O-rings:	Buna N, Viton A, EPDM Teflon Encapsulated Viton

#### Dimensions:

Outside Dia:	2.55" (6.48cm)
Lengths:	10" (25.4cm), 20" (50.8cm), 30" (76.2cm), 40" (101.6cm)

### Applications

Cosmetics	High purity water
Electroplating	Pharmaceutical
Fermentation processes	Photochemical
Food and Beverage	RO pre-filtration



### Product Efficiency

<u>Poly-Pleat HSL</u>	<u>99.9% Efficiency</u>
HSLP 1.0	1.0um
HSLP 2.5	2.5um
HSLP 5.0	5.0um
HSLP 10.0	10.0um
HSLP 15.0	15.0um
HSLP 20.0	20.0um
HSLP 25.0	25.0um
HSLP 35.0	35.0um
HSLP 70.0	70.0um
HSLP 90.0	90.0um
HSLP 120.0	120.0um

Cartridge Series	Micron Rating	Length	End Cap Configurations	Gaskets/O-Ring Materials	Cartridge Grade
<b>HSLP</b>	<b>1.0</b>	<b>-10</b>	<b>C7</b>	<b>S</b>	
Poly-Pleat HSL	1.0	10	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - General
	2.5	20	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	5.0	30	C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	<b>Options</b>
	10.0	40	C4 - SOE flat closed end	E - EPDM	I - 316 Stainless Steel Insert
	15.0		C5 - SOE recessed cup, external 222 O-ring	T - Teflon	DIF - DI Flush
	20.0		C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	
	25.0		C7 - SOE fin end, external 226 O-ring		
	35.0		C8 - SOE fin end, external 222 O-ring		
	70.0				
	90.0				
	120.0				

# Poly-PLEAT

## High Performance 100% Polypropylene Filter Cartridges

Strainrite's Poly-PLEAT all Polypropylene Filter Cartridges are designed to optimize throughput, while achieving absolute and repeatable effluent quality. Our filter media is constructed on the latest continuous Micro-Fiber blowing equipment that accurately controls fiber diameter and integrity. Utilizing state-of-the-art, on-line monitoring equipment, Strainrite delivers the industry's most uniform and consistent media, ensuring unparalleled product consistency. Our 100% Polypropylene construction provides an expansive chemical compatibility range for your most demanding applications. All materials of construction meet the requirements of USP Class VI and CFR 21 for food and beverage contact.



### Features and Benefits

- Nominally rated media provides reliable, consistent and repeatable filtration
- Low pressure drops yield higher flow rates and reduced processing time
- Maximized pleat design for greater surface area, ensuring longer service life, less downtime and reduced operating costs per cartridge
- 100% Polypropylene, FDA, compliant with CFR 21 and USP Class VI compliant
- Thermally bonded construction, eliminating particle bypass

### Product Specifications

#### Materials of Construction:

Filter Media:	Polypropylene Microfiber
Support Material:	Polypropylene
Hardware:	Polypropylene
Cage:	Polypropylene
Sealing:	Thermal Bond
O-rings:	Buna N, Viton A, EPDM Teflon Encapsulated Viton

#### Dimensions:

Outside Dia:	2.55" (6.48cm)
Lengths:	10" (25.4cm), 20" (50.8cm), 30" (76.2cm), 40" (102cm)

### Product Efficiency

Poly-Pleat	99.98% Efficiency
PP 1.0	1.0um
PP 1.5	1.5um
PP 2.5	2.5um
PP 5.0	5.0um
PP 10.0	10.0um
PP 15.0	15.0um
PP 20.0	20.0um
PP 40.0	40.0um
PP 70.0	70.0um

Cartridge Series	Micron Rating	Length	End Cap Configurations	Gasket/O-Ring Materials	Cartridge Grade
<b>PP</b>	<b>1.0</b>	<b>-10</b>	<b>C7</b>	<b>S</b>	
Poly-Pleat	1.0	10	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - General
	1.5	20	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	2.5	30	C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	2 - Pharmaceutical
	5.0	40	C4 - SOE flat closed end	E - EPDM	<b>Options</b>
	10.0		C5 - SOE recessed cup, external 222 O-ring	T - Teflon	I - 316 Stainless Steel Insert
	15.0		C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	DIF - DI Flush
	20.0		C7 - SOE fin end, external 226 O-ring		
	40.0		C8 - SOE fin end, external 222 O-ring		
	70.0				

# Poly-*PLEAT* Select

## Absolute Rated Polypropylene Pleated Filter Cartridges

The Strainrite Companies continues its tradition of state-of-the-art advanced filtration innovation with the Poly-Pleat Select. Poly-Pleat Select is a unique, absolute rated, gradient density, polypropylene depth filter that utilizes the revolutionary Poly-Pleat HSL technology in combination with our high efficiency micro-fiber meltblown media. This "Select" filter combines high solids loading with absolute filtration to create one of the longest lasting, absolute rated, pleated polypropylene filters on the market.

All "Select" filters are manufactured without binders or resins, resulting in an extremely clean non-media migration filter. Poly-Pleat Select gradient density depth media is excellent at removing gels, compared to other pleated polypropylene filters. Our 100% polypropylene construction provides an excellent range of chemical compatibility for your most demanding applications. All polypropylene materials of construction are CFR 21 listed for direct food contact, which makes this filter ideal for a broad range of applications.



### Features and Benefits

- Absolute rated media provides reliable, consistent and repeatable filtration
- Low pressure drops yield higher flow rates and reduced processing time
- Maximized pleat design for greater surface area, ensuring longer service life, less downtime and reduced operating costs per cartridge
- 100% Polypropylene, FDA compliant with CFR 21
- Thermally bonded construction, eliminating particle bypass

### Product Specifications

#### Materials of Construction:

Filter Media: Polypropylene  
 Support Material: Polypropylene  
 Hardware: Polypropylene  
 Sealing: Thermal Bond  
 O-rings: Buna N, Viton A, EPDM  
 Teflon Encapsulated Viton

#### Dimensions:

Outside Dia: 2.55" (6.48cm)  
 Lengths: 10" (25.4cm), 20" (50.8cm),  
 30" (76.2cm), 40" (101.6cm)

### Product Efficiency

<u>Poly-Pleat Select</u>	<u>99.9% Efficiency</u>
SPP 1.0	1.0um
SPP 1.5	1.5um
SPP 3.0	3.0um
SPP 5.0	5.0um
SPP 10.0	10.0um
SPP 15.0	15.0um
SPP 20.0	20.0um
SPP 40.0	40.0um
SPP 70.0	70.0um
SPP 90.0	90.0um

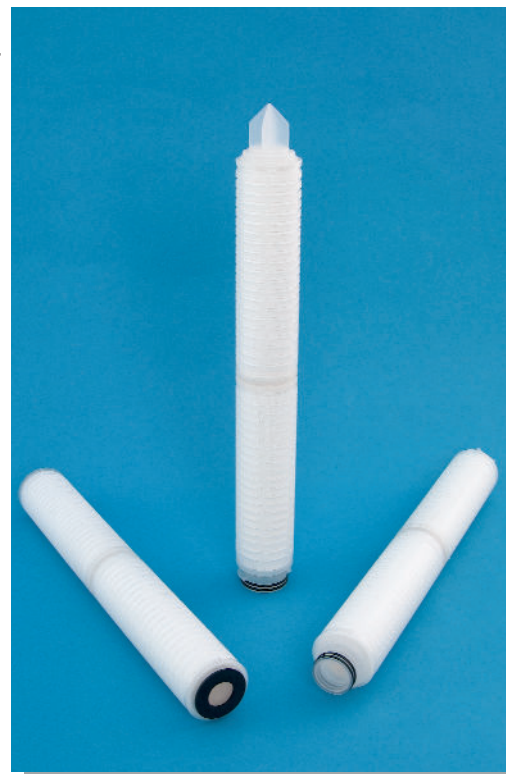
Cartridge Series	Micron Rating	Length	End Cap Configurations	Gasket/O-Ring Materials	Cartridge Grade
<b>SPP</b>	<b>1.0</b>	<b>-10</b>	<b>C7</b>	<b>S</b>	
Poly-Pleat Select	1.0	10	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - General
	1.5	20	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	3.0	30	C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	<b>Options</b>
	5.0	40	C4 - SOE flat closed end	E - EPDM	I - 316 Stainless Steel Insert
	10.0		C5 - SOE recessed cup, external 222 O-ring	T - Teflon	DIF - DI Flush
	15.0		C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	
	20.0		C7 - SOE fin end, external 226 O-ring		
	40.0		C8 - SOE fin end, external 222 O-ring		
	70.0				
	90.0				

# Glass-*PLEAT*

## High Performance Microfiberglass Filter Cartridges

Strainrite's Glass-*PLEAT* Pleated Filter Cartridges utilize a high surface area and high void volume media, incorporating Micro-Glass fibers in a uniform matrix, optimizing element flow rate and service life unattainable by other Micro-Fiber technologies. This revolutionary Micro-Fiber matrix optimizes the pore size geometry required to offer absolute rated filtration performance. Strainrite's non-calendered Micro-Glass, "Glass-*PLEAT*", cartridges exhibit significantly reduced resistance to flow when compared to similarly rated Micro-Fiber technologies.

Glass-*PLEAT* cartridges are an excellent choice for filtering beverages such as Beer and Wine, as they do not remove flavor enhancing proteins. Our materials of construction meet or exceed the requirements of CFR 21 for Food and Beverage contact. Competing elements utilize an epoxy binder, providing the Glass-*PLEAT* with an increased range of applications where chemical compatibility is critical.



### Features and Benefits

- Nominally rated media provides reliable pore size control, resulting in repeatable filtration performance
- Non fiber-releasing materials with minimal extractables, providing high purity filtrate
- Low pressure drops yield higher flow rates and reduced processing time
- Maximized pleat design, coupled with non-calendered Micro-Glass matrix, offers greater surface area, ensuring longer service life, less downtime and reduced operating costs per cartridge
- Industry grade utilizes an epoxy binder, FDA grade utilizes an acrylic binder
- Thermally bonded construction, eliminating particle bypass

### Product Specifications

#### Materials of Construction:

Filter Media:	Borosilicate Microfiberglass
Support Material:	Polyester or Polypropylene
Hardware:	Polypropylene
Cage:	Polypropylene
Sealing:	Thermal Bond
O-rings:	Buna N, Viton A, EPDM Teflon Encapsulated Viton

#### Dimensions:

Outside Dia:	2.55" (6.48cm)
Lengths:	10" (25.4cm), 20" (50.8cm), 30" (76.2cm), 40" (102cm)

#### Product Efficiency

<u>Glass Pleat</u>	99.98% Efficiency	90.00% Efficiency
GP 0.8	0.8um	0.25um
GP 0.9	0.9um	0.45um
GP 1.0	1.0um	0.65um
GP 2.0	2.0um	1.0um
GP 3.0	3.0um	1.5um
GP 5.0	5.0um	2.5um
GP 10.0	10.0um	5.0um
GP 15.0	15.0um	10.0um

Cartridge Series	Micron Rating	Length	Support Materials	End Cap Configurations	Gasket/O-Ring Materials	Cartridge Grade
<b>GP</b>	<b>0.8</b>	<b>-10</b>	<b>PE</b>	<b>C7</b>	<b>S</b>	
Glass-Pleat	0.8	10	PE - Polyester	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - Industrial Grade
	0.9	20	PP - Polypropylene	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	1	30		C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	2 - Pharmaceutical
	2	40		C4 - SOE flat closed end	E - EPDM	<b>Options</b>
	3			C5 - SOE recessed cup, external 222 O-ring	T - Teflon	I - 316 Stainless Steel Insert
	5			C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	DIF - DI Flush
	10			C7 - SOE fin end, external 226 O-ring		
	15			C8 - SOE fin end, external 222 O-ring		

# Mem-*PLEAT E*

## Pleated Polyethersulfone Hydrophilic Membrane Cartridges

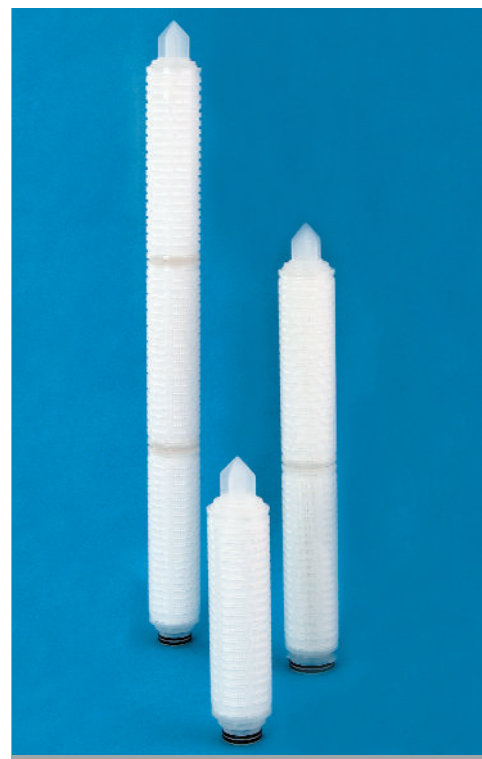
The Mem-*PLEAT E* was developed for the filtration of process fluids that require a high degree of particle retention, and/or Constant Bacterial Barrier for effective sterilization.

Hydrophilic Asymmetric Polyethersulfone Membrane provides: excellent flow rates, broad chemical compatibility, low protein binding, low extractability, mechanical strength, and temperature resistance, in a variety of applications in the Biopharmaceutical, MicroElectronics, Chemical, Food and Beverage industries.

The Mem-*PLEAT E* meets USP Biological Reactivity Test, in vivo for class VI-121°C plastics.

### Features and Benefits

- High surface area membrane offers excellent life and flux rates, while providing absolute-rated filtration
- Absolute rated membrane provides reliable, consistent and repeatable filtrate
- Low pressure drops yield higher flow rates and reduced processing time
- Non fiber-shedding Polyester and Polypropylene support materials, eliminating fiber migration
- Pleat design for greater surface area, ensuring longer service life, less downtime and reduced operating costs
- Thermally bonded construction eliminates non-welded extractables
- Low hold-up volumes
- Integrity tested
- High strength design, allowing for extended use and multi autoclave cycles



### Product Specifications

#### Materials of Construction:

Filter Media: E - Polyethersulfone  
 Support Material\*: PP - Polypropylene, PE - Polyester  
 Hardware: Polypropylene  
 Cage: Polypropylene  
 Sealing: Thermal Bond  
 O-rings: Buna N, Viton A, EPDM  
 Teflon Encapsulated Viton

#### Dimensions:

Outside Dia: 2.55" (6.48cm)  
 Lengths: 10" (25.4cm), 20" (50.8cm), 30" (76.2cm), 40" (102cm)

\*Wine grade cartridges utilize FDA compliant polyester support material

Cartridge Series	Micron Rating	Length	Support Materials / Hardware	End Cap Configurations	Gaskets/O-Ring Materials	Cartridge Grade
<b>MPE</b>	<b>0.45</b>	<b>-10</b>	<b>PP</b>	<b>C7</b>	<b>S</b>	
Mem-Pleat E	0.04	10	PP - Polypropylene	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - General
	0.10	20	PE - Polyester	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	0.20	30		C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	2 - Pharmaceutical
	0.45	40		C4 - SOE flat closed end	E - EPDM	4 - Wine*
	0.65			C5 - SOE recessed cup, external 222 O-ring	T -Teflon	5 - Water
	0.80			C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	<b>Options</b>
	1.20			C7 - SOE fin end, external 226 O-ring		I - 316 Stainless Steel Insert
				C8 - SOE fin end, external 222 O-ring		DIF - DI Flush

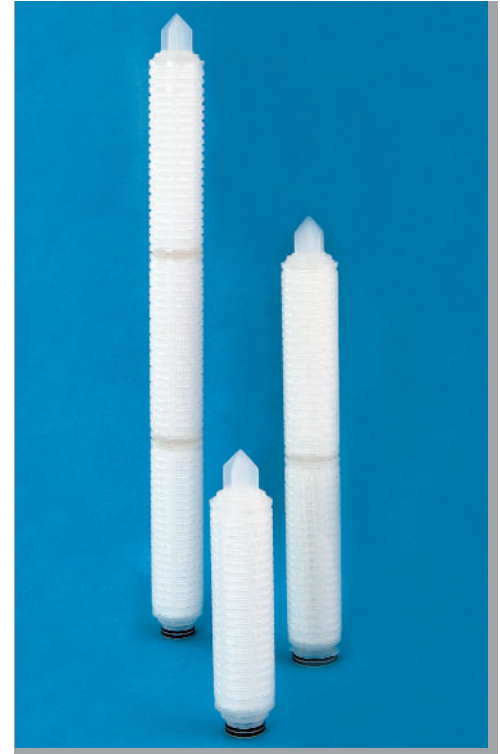
# Mem-PLEAT N

## Nylon66 Membrane Pleated Cartridges

Mem-PLEAT N pleated cartridges are highly retentive, naturally hydrophilic Nylon membrane filters that are specially designed for critical filtration requirements of aqueous fluids. The Nylon 66 membrane, in an all-polyester construction, provides excellent wet-out characteristics and superior flow performance per surface area as compared to other membrane cartridges. No additives, resins, surfactants or binders are used in the manufacturing process, which dramatically reduces: rinse up time, extractables and downtime. Mem-PLEAT N cartridges are perfectly suited for critical applications where superior flow, and particle removal efficiency between 0.1 and 1.2 micron is required.

### Features and Benefits

- 100% Hydrophilic materials of construction that are FDA listed as suitable for contact with food and beverage
- Absolute rated media provides reliable, consistent and repeatable filtration
- No adhesives, binders, resin or surfactants are used during manufacturing, resulting in superior downstream cleanliness
- High surface area, yielding lower pressure drops and longer filter life
- Lower filter extractables than other hydrophilic membranes
- Non fiber-shedding polyester support materials eliminate fiber migration
- IPA pre-wetting not required
- Manufactured in an ISO 9001 Certified Quality System Environment



### Product Specifications

#### Materials of Construction:

Membrane:	Nylon 66 cast on polyester
Support Material:	Polyester
Hardware:	Polyester
Cage:	Polyester
Sealing:	Thermal Bond
O-rings:	Buna N, Viton A, EPDM Teflon Encapsulated Viton

#### Dimensions:

Outside Dia:	2.55" (6.48cm)
Lengths:	10" (25.4cm), 20" (50.8cm), 30" (76.2cm), 40" (101.6cm)

Cartridge Series	Micron Rating	Length	Support Materials / Hardware	End Cap Configurations	Gaskets/O-Ring Materials	Cartridge Grade
<b>MPN</b>	<b>0.10</b>	<b>-10</b>	<b>PP</b>	<b>C7</b>	<b>S</b>	
Mem-Pleat N	0.10	10	PP - Polypropylene	C1 - DOE flat open ends	S - Silicone (standard O-rings)	Blank - General
	0.20	20	PE - Polyester	C2 - SOE recessed cup, internal 213 O-ring	B - Buna N (standard gaskets)	1 - FDA Grade
	0.45	30		C3 - SOE flat closed ends, external 222 O-ring	V - Viton A	2 - Pharmaceutical
	0.65	40		C4 - SOE flat closed end	E - EPDM	4 - Wine*
	0.80			C5 - SOE recessed cup, external 222 O-ring	T - Teflon	5 - Water
	1.20			C6 - SOE flat closed end, external 226 O-ring	TV - Teflon Encapsulated Viton	<b>Options</b>
				C7 - SOE fin end, external 226 O-ring		I - 316 Stainless Steel Insert
				C8 - SOE fin end, external 222 O-ring		DIF - DI Flush

# Service Locations

**Aqua-Tec Filter**  
12410 Clark Ave.  
Santa Fe Springs, CA 90670  
Tel: (562) 941-1203  
Fax: (562) 941-1202

**Oakland Engineering and Filtration**  
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Pontiac, MI 48342  
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Fax: (248) 334-2788

**Strainrite Southeast**  
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Auburn, ME 04210  
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