

LENN

[N6/N6,6 Zeta Charged Membrane]

- Combining mechanical sieving abilities with the charged attraction capacity of a positive zeta potential.
- Excellent particle removal efficiency, retention of negatively-charged biological and particulate contaminants including endotoxins.
- Broad compatibility to a wide pH range and chemical.
- Available in Retention Rating of 0.05, 0.1, 0.2, 0.45 Absolute(Beta Ratio of 10,000, >99.9% retention rating by standard latex bead challenge.)
- 100% Integrity testable
- Low extractable levels, no surfactants or adhesives used in manufacturing, fully thermal welded construction.
- Quick rinse-up
- Manufactured in a cleanroom environment, cartridge pre-flushed with 18megaohm UPW water.

Applications

UHP Water

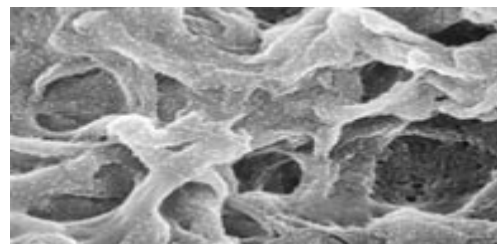
- Central PAD
- UPW Final Filter
- Polishing Stations
- Point-of-Use

UHP Chemical

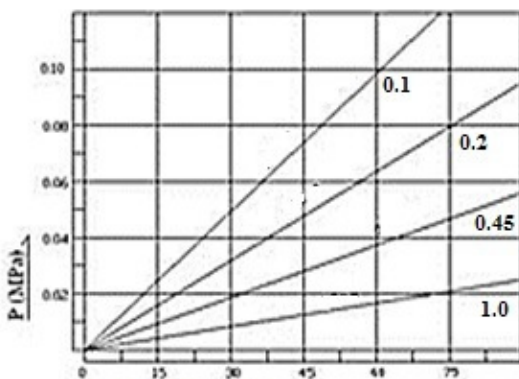
- Specialty Chemicals
- Point-of-Use
- Bulk Photoresists and Solvents

Microelectronics

- Semiconductor
- Optical Disks
- Printed Circuits
- Hard Disks



The SEM photograph (above) shows an Electropor charge-modified nylon 6,6 membrane with captured 0.021 micron mono-dispersed latex beads. The combination of Electrokinetic adsorption (positive charge) and mechanical sieving (pore size) provides for enhanced particle removal capability of submicron contaminants like colloidal silica and bacteria fragments.



Q (lpm/10" module)
Flow rate vs. dP for a 1 cps
liquid @ 73°F (23°C)

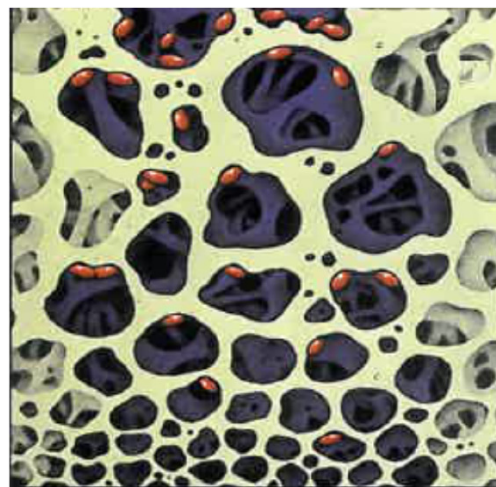


Illustration above shows the capture of minute particulate through electrical attraction to the charge sites on the membrane pores..

Product Specifications

Materials of constructions:

- ✓ Membrane: Nylon 6,6 positively charged
- ✓ Membrane Support/Drainage: Polypropylene
- ✓ Structural Components: Polypropylene
- ✓ Seal Material: various
- ✓ Sealing Method: thermal welding

Surface Area (10" cartridge):

- ✓ Minimum ≥ 0.7 m²

Integrity Test:

Bubble Point (As specified in National GMP, 25°C, Pure water):

- ✓ 0.05 μ m: > 4.2 bar
- ✓ 0.1 μ m: > 3.5 bar
- ✓ 0.2 μ m: > 2.8bar
- ✓ 0.45 μ m: > 1.2bar

Dimension:

- ✓ Outside Diameter: 2.5" (70 mm) [nominal]
- ✓ Lengths: 2-30 in (10-76 cm)

Recommended Operating Conditions:

■ Maximum Temperature:

- ✓ $\leq 80^{\circ}\text{C}$ (Differential Pressure: 0.2 Mpa)

■ Maximum Differential Pressure (25°C):

Forward:

- ✓ 60psi (4.2bar)

Reverse:

- ✓ 30 psi (2.1bar)

Performance Specifications

- ✓ Resistivity rinse-up to 18 megohm-cm: < 35 minutes
- ✓ Single digit ppb TOC rinse-up: < 35 minutes

Ordering Information	Micron rating Selections:	Endcaps :	Nominal Length	Seal Material	
LENN (e-Grade Hydrophilic N6.6 Membrane)	005	0.05 μ m	E – D.O.E	05 – 5"	F – PFA/Viton (e-Grade Standard)
	010	0.10 μ m	A – 222 o'ring/Fin	10 – 10"	S – Silicon
	020	0.20 μ m	B – 222 o'ring/Flat	20 – 20"	V - Viton
	045	0.45 μ m	C – 226 o'ring/Fin	30 – 30"	E - EPDM
			D – 226 o'ring/Flat	40 – 40"	

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