

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

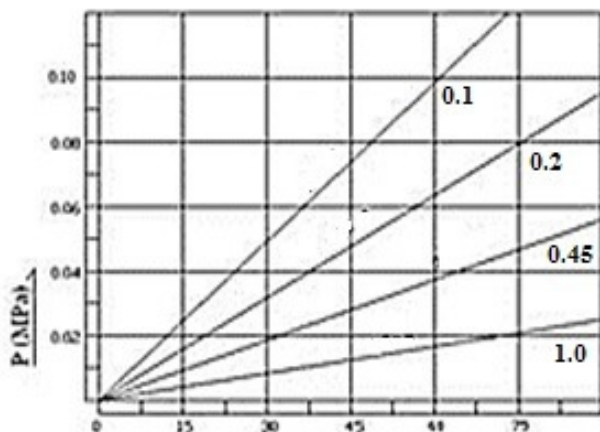
- ❑ Central PAD
- ❑ UPW Final Filter
- ❑ Polishing Stations
- ❑ Point-of-Use

UHP Chemical

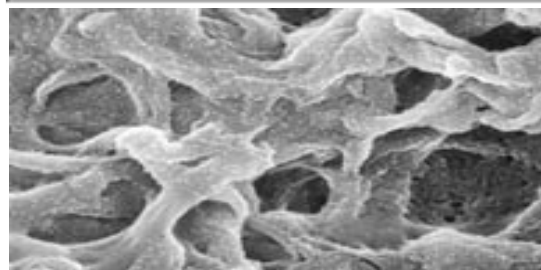
- ❑ Specialty Chemicals
- ❑ Point-of-Use
- ❑ Bulk Photoresists and Solvents

Microelectronics

- ❑ Semiconductor
- ❑ Optical Disks
- ❑ Printed Circuits
- ❑ Hard Disks



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



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.

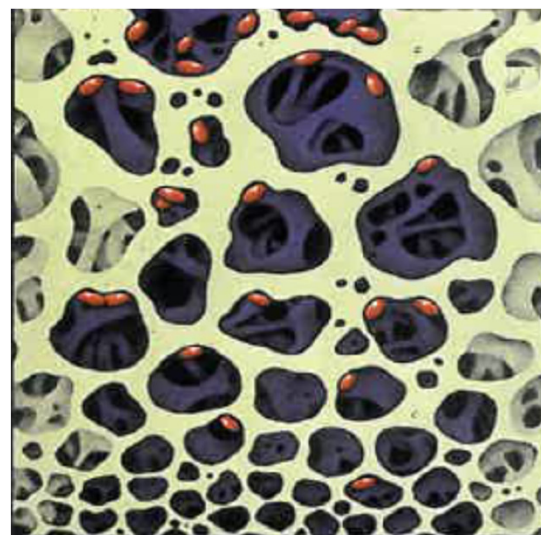


Illustration above shows the capture of minute particulate through electrical attraction to the charge sites on the membrane pores..

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		C – D.O.E			05 – 5"		F – PFA/Viton (e-Grade Standard)
	010		0.10 μ m		A – 222 o'ring/Flat			10 – 10"		S – Silicon
	020		0.20 μ m		B – 222 o'ring/Fin			20 – 20"		V - Viton
	045		0.45 μ m		E – 226 o'ring/Fin			30 – 30"		E - EPDM
								40 – 40"		



GFS INNOVATION (2006) PTE LTD
(Industrial Filtration Division)

No. 52, Ubi Ave 3, #05-36 Frontier, Singapore 408867

Tel: (65) 6846 4689 Fax: (65) 6846 4875

Email: enquiry@gfsfilter.com

Website: www.gfsfilter.com

