

RETHINKING HEMODIALYSIS



2025 www.NephroCan.com

CANADIAN LEADER IN HEMODIALYSIS

Canadian company headquartered in Vancouver, BC

Specialists in hemodialysis therapy products

> Fully integrated product and service company

As a trusted Canadian provider, we are committed to delivering high-quality hemodialysis consumables, machinery, and equipment worldwide. Our goal is to ensure that our offerings are accessible and enhance patient care. We are dedicated to pioneering innovative therapies that revolutionize renal therapy, improving outcomes and enhancing the quality of life for patients globally.

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Nephro + PES200R

High Flux

NephroCan

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LOT

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In-house design, technology and manufacturing

> Multiple manufacturing sites

Certified for CE and ISO standards

HIGH FLUX POLYETHERSULFONE HEMODIALYZER FILTERS

Polyethersulfone High Flux Hollow Fiber Hemodialyzer Specifications*

| Sterilized with Gamma Irradiation (R) | | | | | | |
|---|----------------------------|--------------------------------|---------------|---------------|---------------|---------------|
| Blood Flow Rate (mL/min) | | Blood Flow Rate (mL/min) | NephroPES130R | NephroPES160R | NephroPES180R | NephroPES200R |
| Clearances (mL/min) | Urea | QB= 200 | 197 | 196 | 198 | 199 |
| | | QB= 300 | 270 | 285 | 288 | 291 |
| | Creatinine | QB= 200 | 192 | 193 | 197 | 197 |
| | | QB= 300 | 255 | 269 | 279 | 286 |
| | Phosphate | QB= 200 | 181 | 189 | 194 | 196 |
| | | QB= 300 | 236 | 254 | 262 | 279 |
| | Vitamin B ₁₂ | QB= 200 | 147 | 160 | 165 | 172 |
| | | QB= 300 | 168 | 186 | 194 | 211 |
| | | QB= 200 | 107 | 120 | 127 | 132 |
| | main | QB= 300 | 116 | 134 | 144 | 154 |
| Surface Area (m ²) | | | 1.3 | 1.6 | 1.8 | 2.0 |
| Blood Priming Volume (mL) | | | 72 | 89 | 110 | 114 |
| Ultrafiltration Coefficient (mL/mmHg.Hr) | | | 58.3 | 67.0 | 84.2 | 87.5 |
| KoA (mL/ min) | | | 1140 | 1610 | 1770 | 1980 |

Membrane

| Membrane Material | Synthetic Polyethersulfone | |
|-----------------------|----------------------------|--|
| Wall Thickness (µm) | 30 ± 5 | |
| Inner Diameter (µm) | 200 ± 15 | |
| Maximum TMP (mmHg) | 500 | |
| Sieving Coefficient** | | |
| | | |

| β2-Microglobulin | > 0.5 |
|------------------|---------|
| Albumin | < 0.002 |
| | |

QB: Blood flow rate

QF: Ultrafiltration rate

QD: Dialysate flow rate

*Specifications and performance data at QB = 200/300 mL/min, QD = 500 mL/min, QF = 0 mL/min, T: 37 °C. Performance data was measured in vitro as according to standards BS EN ISO 8637-1:2020. Clearance data may vary depending on testing conditions. **Sieving coefficient is an absolute value that is related to the hollow membrane fiber.

REMOVAL OF UREMIC TOXINS IN HIGH FLUX DIALYZERS



Dialyzer Sizes, High Flux, Gamma Sterilization

Specifications and performance based on NephroCan's PES 1.8M² Polyethersulfone membranes. QB = 300 mL/min, QD = 500 mL/min, QF = 0 mL/min. *Specifications and performance based on public data available on competing hemodialyzers with Polyethersulfone membranes. QB = 300 mL/min, QD = 500 mL/min, QF = 10 mL/min

NEPHROFILTER CHARACTERISTICS

(01)

oohro*PES180R

D0101

| | | Designed to optimize di resulting in an increase | alysate distribution, of clearance values | |
|-------------------|-------------------------|---|--|------------|
| | Engin distrib | eered to achieve uniforr ution, reducing water and | nity in pore | |
| Th an | in wall m d 1.3 m² - | hembrane of 30 μm, - 2.0 m² for high flux | | |
| Profile biocor | e of mem npatibilit | branes built to increase ty | | Hephio Col |
| | | | | 42105h |

Pore width and uniform spatial distribution yields a steeper sieving curve and a high degree of selective solute removal

Sterilization available in Gamma Irradiation (R) and Ethylene Oxide Gas (EO)

LOW FLUX POLYETHERSULFONE **HEMODIALYZER FILTERS**

mL/min) Polyethersulfone Low Flux Hollow Fiber Hemodialyzer Specifications* Sterilized with Gamma Irradiation (R) \smile Φ **Blood Flow Rate** Nephro Nephro Nephro Nephro Nephro υ (mL/min) PES10R PES13R PES16R PES18R PES20R \Box σ 174 185 Q_B= 200 190 197 198 5 σ 237 283 Q_B= 300 220 251 277 Φ \overline{O} 0---200 150 172 100 187 100 σ Φ Ľ \supset

| Clearances (mL/min) | Creatinine | QB- 200 | 150 | 172 | 100 | 104 | 150 |
|--|-----------------------------------|----------------------|------|------|------|------|------|
| | | Q _B = 300 | 190 | 212 | 230 | 258 | 267 |
| | Phosphate | Q _B = 200 | 137 | 152 | 161 | 171 | 178 |
| | | Q _B = 300 | 157 | 180 | 192 | 212 | 228 |
| | Vitamin B ₁₂ Inulin | Q _B = 200 | 98 | 117 | 126 | 134 | 141 |
| | | Q _B = 300 | 107 | 131 | 141 | 152 | 159 |
| | | Q _B = 200 | - | - | - | - | - |
| | | Q _B = 300 | - | - | - | - | - |
| Surface Area (m ²) | | | 1.0 | 1.3 | 1.6 | 1.8 | 2.0 |
| Blood Priming Volume (mL) | | | 59 | 71 | 90 | 112 | 114 |
| Ultrafiltration Coefficient (mL/mmHg.hr) | | 8.8 | 10.9 | 12.7 | 17.9 | 20.7 | |
| KoA (mL/ min) | | | 556 | 689 | 836 | 1320 | 1530 |

Membrane

| Membrane Material | Synthetic Polyethersulfone |
|---------------------|----------------------------|
| Wall Thickness (µm) | 35 ± 5 |
| Inner Diameter (µm) | 200 ± 15 |
| Maximum TMP (mmHg) | 500 |
| | |

QB: Blood flow rate

QF: Ultrafiltration rate

Urea

QD: Dialysate flow rate

*Specifications and performance data at QB = 200/300 mL/min, QD = 500 mL/min, QF = 0 mL/min, T: 37 °C. Performance data was measured in vitro as according to standards BS EN ISO 8637-1:2020. Clearance data may vary depending on testing conditions.

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NEPHROFILTER CHARACTERISTICS

Designed to optimize dialysate distribution, resulting in an increase of clearance values Engineered to achieve uniformity in pore distribution, reducing water and protein loss Thin wall membrane of 35 µm. and 1.0 $m^2 - 2.0 m^2$ for high flux 180mocon Profile of membranes built to increase biocompatibility 4210321

Lephro PESIbe

LOT

Pore width and uniform spatial distribution yields a steeper sieving curve and a high degree of selective solute removal

Sterilization available in Gamma Irradiation (R) and Ethylene Oxide Gas (EO)





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