

Flat sheet membrane

DuraPES 450 flat sheet membrane

Product name: Thermo Scientific™ DuraPES™ 450 Flat Sheet Membrane

General

Intended use	Microfiltration
Available make-up configuration	Rolls

Chemical composition

Polymer	Polyethersulfone
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Membrane performance characteristics

Bubble point (water, 25°C)	m 3.45 bar (≈50.03 psi) ± 0.35 bar (≈5.07 psi)
Transmembrane flow (water, 25°C)	≥ 75 ml/(min cm ² bar) ≥ 4804.33 ml/(min sq ft psi) ≥ 33.36 ml/(min sq in psi)
Retention of bacteria (<i>Serratia marcescens</i>)	≥ 7 log reduction value

Typical physical properties

Thickness	m 140 µm (≈5.512 mil) ± 10 µm (≈0.394 mil)
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Tensile strength

Longitudinal	≥ 550 cN / 15 mm
Transversal	≥ 450 cN / 15 mm

Elongation at break

Longitudinal	≥ 10%
Transversal	≥ 15%

Change of length (steam, 121°C)	≤ 3%
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m = mean value

Intended Use: The DuraPES 450 flat sheet membranes are flat sheet liquid microfiltration membrane products intended for use by customers, such as OEMs, in the manufacture of liquid microfiltration cartridges and liquid microfiltration systems in various applications such as industrial, food and beverage, pharmaceutical and medical device, etc. requiring specialized liquid microfiltration in accordance with the product's use requirements and instructions.

Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the DuraPES membrane material is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the Thermo Scientific product in user's application for safety, regulatory compliance, performance and any other requirements.

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