

**3M™ MicroPES™ 1F M Series Flat Sheet Membrane****Model:** 1F M**Product Type:** Flat Sheet Filtration Membrane

**Description:** The 3M MicroPES flat sheet membrane is made from a partially sulfonated polyethersulfone polymer. Their asymmetric pore structure offers a perfect balance between highly selective filtration characteristics and high fluxes with minimized flux barriers. In order to enhance the mechanical stability, the membrane has a nonwoven backing.

**Available Make-up Configurations:** Rolls**Performance**

Parameter	Value
Transmembrane flow (water, 25° C)	≥ 7 ml/(min cm <sup>2</sup> bar) (≥ 448 ml / (min ft <sup>2</sup> psi)) (≥ 3.11 ml/(min in <sup>2</sup> psi))

**Materials of Construction**

Parameter	Value
Membrane	Polyethersulfone
Nonwoven	Polyolefine
Adhesive	Polyolefine
Wetting property	Hydrophilic

**Physical Properties**

Parameter	Value
Thickness	265 ± 50 µm (10.4 ± 2 mil)
Tensile strength	
Longitudinal	≥ 3000 cN / 15 mm
Transversal	≥ 2500 cN / 15 mm
Elongation at break	
Longitudinal	≥ 15%
Transversal	≥ 15%

All data is based on internal 3M testing procedures.

## Flushing Recommendation:

This product is known to contain residual manufacturing solvents. The customer is responsible for determining and implementing the appropriate transmembrane washing conditions to remove these residuals based on their assessment, requirements, and particular application needs.

Intended Use
<p>3M™ MicroPES™ Laminated Flat Sheet Membrane products are intended for further processing by OEMs into frames for microfiltration systems. Typical applications are Membrane Bioreactor for industrial wastewater and municipal wastewater where the product can be integrated in accordance with the product's use requirements and instructions.</p> <p>Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the 3M product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the 3M product in user's application for safety, regulatory compliance, performance and any other requirements.</p>
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<p>3M advises against the use of 3M™ MicroPES™ Laminated Flat Sheet Membrane products in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition.</p>
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