

Supported Syringe Filter Membranes in the Plastic Housing - Tech Information

Date: 22-APRIL-2012 Last Updated: 23-FEBRUARY-2026

Overview

Syringe filter membrane support varies depending on the membrane material and its structural integrity. Some membranes require reinforcement to maintain strength during filtration, while others naturally exhibit sufficient mechanical stability.

Understanding which AQ™ brand syringe filters include support layers ensures proper selection for your application and helps maintain consistent filtration performance.

Supported vs. Unsupported Membranes

Within the AQ™ syringe filter product line, only **PTFE (Teflon) membranes** require additional structural backing. All other membrane types used in these filters are inherently strong enough for routine laboratory filtration and therefore do not require extra support layers.

PTFE Syringe Filters (Supported)

PTFE membranes are chemically resistant and hydrophobic, but they are also mechanically delicate. For this reason:

- PTFE membranes are backed with an inert polypropylene support layer.
 - This reinforcement improves stability and prevents tearing or deformation during filtration.
 - The support layer does not interfere with filtration performance and maintains chemical compatibility.
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All Other Membrane Types (Unsupported)

The following membranes do not require additional support layers:

- Nylon
- Regenerated Cellulose (RC)
- Cellulose Acetate (CA)
- PVDF
- Other standard hydrophilic membranes

These materials are naturally robust enough to maintain structural integrity within the plastic housing, even under moderate pressure loads typical in syringe filtration.

Because they lack additional backing, these membranes offer:

- Faster flow rates
 - Lower hold-up volumes
 - Minimal extractables
 - Consistent performance across aqueous and organic applications (depending on membrane chemistry)
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Ordering Information

Click [HERE](#) to view ordering options and product images for **AQ™ brand syringe filters**.

Attachment: MICROSOLV Filters Equivalency Study pdf [Download File](#)

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