

Porex® PCR Inhibitor Removal Kit

A selection of sintered particle filters that can be used to remove PCR inhibitors from complex samples including sputum, stool, and blood.

Samples Included:

Name	Number	Material	Properties	Size	Technology	Thickness (in)	Pore Size (µm)	Pore Volume (%)
1/16" Hydrophobic Medium Pore Size Sheet	4900	Polyethylene	Hydrophobic	Sheet*	Sintered Particles	0.062	15 - 40	30 - 50
1/8" Hydrophobic Medium Pore Size Sheet	4901	Polyethylene	Hydrophobic	Sheet*	Sintered Particles	0.125	15 - 40	30 - 50
1/4" Hydrophobic Medium Pore Size Sheet	4902	Polyethylene	Hydrophobic	Sheet*	Sintered Particles	0.25	15 - 40	30 - 50

*4900, 4901, and 4902 samples come in 8.5" x 11" but are sold as 42" x 44"

Recommendations for Assembly and Testing:

Porex sintered particle materials can be tested with press fit in your preferred housing using a 3 – 8% compression on parts.

If testing for early-stage feasibility, Porex recommends:

- Remove the plunger from a 5 mL syringe.
- Cut the provided sheet material to a 12 mm diameter circle. Please note the diameter of the circle may need to be increased for the correct compression fit, depending on the brand of syringe used.
- Place the Porex filter in the bottom of the syringe, followed by placement of biological sample on the top.
- Place the plunger into the syringe and push the sample through the Porex filter. Although some leakage may occur around the filter edges, this proof-of-concept setup has proven beneficial for our customers in early material evaluation.

Notes on Performance:

The pore size of these materials has been used to successfully filter PCR inhibitors from complex samples like sputum. Unlike membrane filters, Porex sintered particle materials act as a depth filter, which have reduced backpressure and are less likely to clog. An additional characteristic of Porex depth filters is that you can expect increasing levels of filtration as you increase the depth of the filter. Thus, we have provided multiple thicknesses for material testing in this kit.