

Filter Selection Guide

Filter Membrane	Hydro – Phobic/Phobic*	Protein Binding	Chemical Resistance	Notes
Cellulose Nitrate (CN)	Hydrophobic	Very High	Low	For use when protein binding is not a concern
Cellulose Acetate (CA)	Hydrophilic	Very Low	Low	For applications requiring low protein binding
Nylon	Hydrophilic	Low to Moderate	Moderate to High	Resistant to alcohols and DMSO
Polyethersulfone (PES)	Hydrophilic	Very Low	Low	Faster flow than cellulose or nylon
Regenerated Cellulose (RC)	Hydrophilic	Low	Very High	Resistant to solvents including DMSO
Polytetrafluoroethylene (PTFE)	Available as Hydrophobic and Hydrophilic	High	Very High	Gas, air, strong acids and bases, and solvent filtration
Glass Fiber (GF)	Hydrophobic	Low	Very High	High particulate load capacity
Polyvinylidene Fluoride (PVDF)	Hydrophilic	Low	Very High	Extreme chemical resistance – useful for solvents

*Hydrophobic filters must be prewetted with a solvent such as alcohol, before aqueous solutions can be filtered. Some manufacturers add a small amount of wetting agent during manufacture to ensure proper wetting of the membrane. Check manufacturer information and instructions.

Sources:

http://csmedia2.corning.com/lifesciences/media/pdf/t_filtersselectionguide.pdf

<http://compoundingtoday.com/Filter/ChemMembraneList.cfm>