

Aqueous Filtration

Fast processing with efficient removal of particulates



Features

- ▶ **New well geometry** – Results in faster, more uniform filtration rates across the plate with reduced hold-up volume.
- ▶ **New outlet tip geometry** – Provides direct flow of samples into receiver plate without concerns of cross contamination.
- ▶ **Efficient particulate removal** – A range of membranes and pore sizes ensures optimal processing of particulate-laden samples.
- ▶ **Automation compatible** – Manufactured in accordance with SBS guidelines, allowing plates to be run in manual, semi-automated and automated processes.
- ▶ **Easy identification** – Allows for labeling on the smooth top surface and textured window, as well as provides easy usage orientation through the A1 corner notch.

Applications

- ▶ General sample prep
- ▶ Gross fractionation
- ▶ Cell harvesting
- ▶ Cell-based assays

Specifications

Materials of Construction

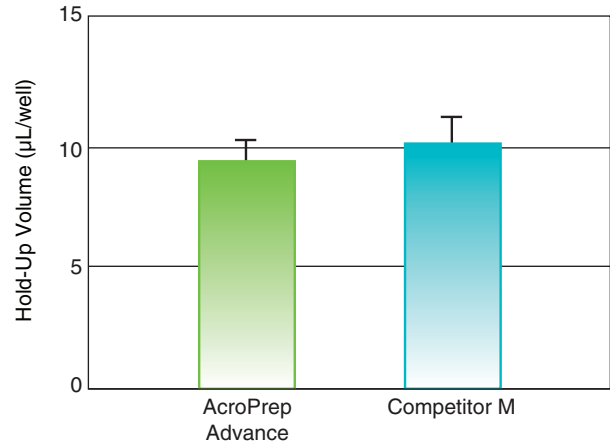
Filter Media: Supor (polyethersulfone), Glass Fiber (borosilicate glass without binder), and PP/PE non-woven (polypropylene/polyethylene) media

Typical Vacuum Filtration Performance

Membrane	Processing Time (sec.)	Hold-up Volume (µL)
0.2 µm Supor	9	8
0.45 µm Supor	5	6
1.2 µm Supor	2	5
1.0 µm Glass Fiber	2	19
30-40 µm PP/PE	1	4

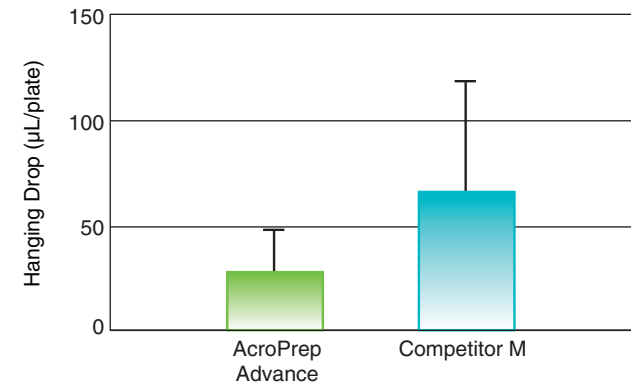
Performance

Lower Hold-Up Volume Improves Sample Recovery



Multiple plates of each type were evaluated for hold-up volume using a solution of Vitamin B12. After all wells were evacuated, wash fraction was collected into a solid bottom plate and read at OD₅₅₀ for concentration of Vitamin B12. All testing was completed in a 350 µL plate and used 96 wells/plate.

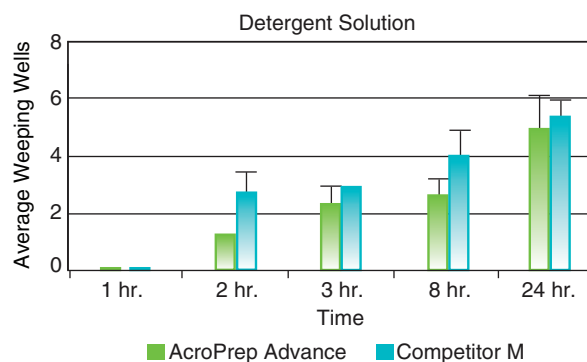
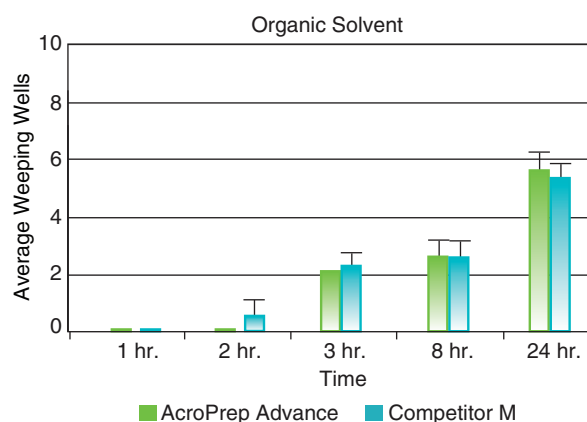
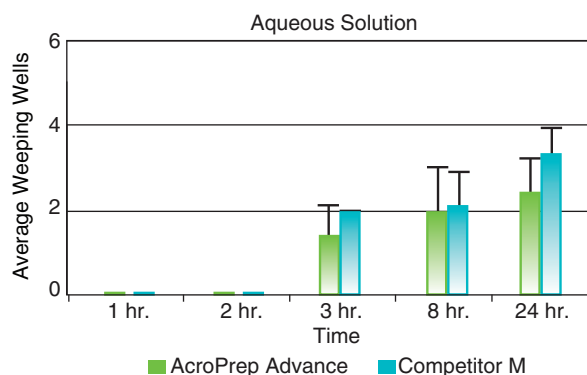
Reduction of Hanging Drops Reduces Potential Cross Contamination



Hanging drops were measured by evacuating wells of fluid, weighing the plate, and then blotting and re-weighing the plate. Three plates of each type (350 µL well volume) were tested and the averages calculated.

Performance *(continued)*

Reduced Weeping Minimizes Sample Loss and Provides Extended Incubations



350 μ L filter plates were filled with 200 μ L of the indicated solutions and incubated over receiver plates for 24 hours. Receiver plates were checked for the presence of fluid at 1, 2, 3, 8, and 24 hour intervals. Three plates of each variety were evaluated and the averages calculated. Aqueous solution consisted of PBS, 0.8% BSA, 0.4% Vitamin B12. Organic solution consisted of PBS, 0.8% BSA, 0.4% Vitamin B12, and 20% Ethanol. Detergent solution consisted of PBS, 0.8% BSA, 0.4% Vitamin B12, and 0.5% NP40. Vitamin B12 was used as a coloring agent to identify weeping wells.

Ordering Information

AcroPrep Advance Filter Plates for Aqueous Filtration

Part Number	Description	Pkg
8019	350 μ L, 0.2 μ m Supor membrane	10/pkg
8029	350 μ L, 0.45 μ m Supor membrane	10/pkg
8039	350 μ L, 1.2 μ m Supor membrane	10/pkg
8027	350 μ L, 30-40 μ m PP/PE non-woven media	10/pkg
8031	350 μ L, 1.0 μ m Glass Fiber	10/pkg
8119	1 mL, 0.2 μ m Supor membrane	5/pkg
8129	1 mL, 0.45 μ m Supor membrane	5/pkg
8130	1 mL, 1.2 μ m Supor membrane	5/pkg
8131	1 mL, 1.0 μ m Glass Fiber	5/pkg
8231	2 mL, 1.0 μ m Glass Fiber	5/pkg