

Material class: Wicking, filtration, pre-filtration

## Physical Properties

Grade Nomenclature	Particle Retention ( $\mu\text{m}$ )	Material Type	Thickness (mm)	Filtration Speed (sec.)	Basis Weight ( $\text{g}/\text{m}^2$ )
PP1	1.0 – 1.25	Polypropylene melt blown fiber	0.68	20	70

### Additional notes:

This media is a 100% high purity polypropylene melt blown fibrous depth filter. The fiber structure is very consistent and uniform in formation allowing even wicking and lateral migration. When used as a filtration media, it demonstrates very high flow rates with little back pressure, high loading capacities and has a Frazier air permeability  $>35\text{ft}^3/\text{min}$ .

The media is an excellent choice for microporous membrane prefiltration applications.

The PP fibers are ideal for structured devices as they bond, heat stake, ultrasonically weld and mechanically lock to other thermoplastics. The material has excellent thermal stability to  $166^\circ\text{C}$ . The material demonstrates minimal discoloration and negligible degradation post gamma sterilization (15kGy min - 30kGy).

Adhesive bonding is very difficult due to the chemical resistance of PP, but with a sufficiently viscous bonding solution it is possible by mechanically locking into the depth of the matrix. The material demonstrates a high tensile capacity and strong resistance to shear delamination.

*Please contact I.W. Tremont for more information and samples.*