Custom Multi-Dimensional Porous Polymer Medias

Polystar Technologies custom multi-dimensional porous polymer medias are manufactured from our unique and technologically advanced PolySmart™ manufacturing process and quality control analytics. The result is differentiated, high-quality, specialty porous polymer medias made to our customer’s exacting specifications for dimension, pore size, and void volume. Some typical applications include:

- Liquid filters for clarification of drugs, blood separation, and chemicals
- Filters for drinking water purification
- Fluid delivery components for printers, copiers, and fragrance wicks
- Air, dust, liquid, and fuel filters for power tools and appliances
- Wicks and absorbent media for diagnostic testing
- Vents and self-sealing valves for medical devices, caps and closures, and automotive batteries

Our cutting edge design capabilities and breakthrough manufacturing processes offer greater flexibility to meet the most challenging design and functionality requirements.

Polystar Technologies porous polymer medias are naturally hydrophobic but can be made hydrophilic. Our components have a typical pore size range of 10.0μ to 350.0 μ with typical void volumes from 30% to 50% and are manufactured from a broad spectrum of polymers such as:

- Ultra High Molecular Weight Polyethylene (UHMW-PE)
- High Density Polyethylene (HDPE)
- Polytetrafluoroethylene (PTFE)
- Polypropylene (PP)
- Polyvinylidene fluoride (PVDF)
- Nylon 6
- Polyethersulfone (PES)