

Aeos™ ePTFE Porous Tubing

Expanded PTFE Porous Tubing

Overview-

Perfect for applications that demand porosity, flexibility, and strength, Aeos™ ePTFE porous tubing products feature a unique structure of solid nodes interconnected by a matrix of fibrils, achieved by expanding PTFE under controlled conditions. Advanced extrusion and orientation techniques enable Zeus to manipulate the spacing between these microscopic structures, resulting in customizable microporous tubing tailored to your exact needs.

Alongside standard sized tubing, ultra-thin ePTFE Sub-Lite-Wall™ uniaxially oriented tubing and ePTFE biaxially oriented tubing are both available. These products can enhance strength and flexibility, balance elasticity, and provide a porous structure which can promote new tissue in-growth for accelerated healing. This, combined with Aeos™ ePTFE's biocompatibility and flexibility, mean Zeus tubing products are perfect for stent grafts or medical devices such as endoscopes.



Zeus Aeos™ ePTFE customizable microporous tubing can be tailored to your exact needs.

APPLICATIONS

- Stent coverings
- Vascular devices
- Endoscopic channels
- Medical equipment

AVAILABLE PRODUCTS

- Aeos™ ePTFE standard tubing
- Aeos™ ePTFE Sub-Lite-Wall™ tubing
- Aeos™ ePTFE biaxially oriented tubing

CAPABILITIES

- Biaxially or uniaxially stretched

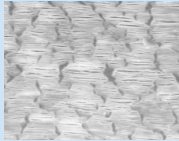
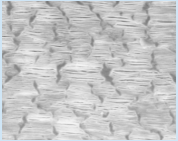
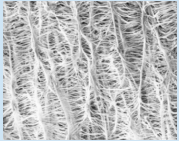
KEY PROPERTIES

- Microporous
- Highly customizable
- Biocompatible
- Chemically inert
- Lubricious
- Soft and flexible



Aeos™ ePTFE Porous Tubing

All Aeos™ ePTFE porous tubing products are produced based on customer specifications and the charts below are a general capability guide.

	Aeos™ ePTFE Tubing	Aeos™ ePTFE Sub-Lite-Wall™ Tubing	Aeos™ ePTFE Biaxial Oriented Tubing
AVAILABILITY	Customizable	Customizable	Customizable
SIZE CLASSIFICATION	Standard	Ultra-Thin	Ultra-Thin
ORIENTATION	Uniaxial	Uniaxial	Biaxial
DENSITY VALUE	Low To High (0.22 g/cm ³ - 1.52 g/cm ³)	Low To Moderate (0.22 g/cm ³ - 1.09 g/cm ³)	Low (0.22 g/cm ³ - 0.65 g/cm ³)
INTERNODAL DISTANCE (IND)	Low to High 10 µm - 100 µm	Moderate to High 30 µm - 100 µm	Moderate to High 30 µm - 100 µm
POROSITY VALUE (%)	Low to High	Moderate to High	High
MICROSTRUCTURE - SEM IMAGE COMPARISON	More Uniform Unidirectional Pores 1000x 	More Uniform Unidirectional Pores 1000x 	More Tortuous Path - Reduced Permeability - Pore Size 1000x 
INSIDE DIAMETER (ID) RANGE	0.005" - 1.250" (0.127 mm - 31.750 mm)	0.014" - 0.150" (0.356 mm - 3.810 mm)	0.10" - 0.80" (2.54 mm - 20.32 mm)
INSIDE DIAMETER (ID) TOLERANCE	± 0.005" (± 0.127 mm)	± 0.003" (± 0.076 mm)	± 0.010" (± 0.254 mm)
WALL THICKNESS	0.0050" - 0.0650" (0.1270 mm - 1.651 mm)	0.0020" - 0.0049" (0.0508 mm - 0.1245 mm)	0.0020" - 0.0050" (0.0508 mm - 0.1270 mm)
WALL TOLERANCE	± 0.002" (± 0.051 mm)	± 0.001 (± 0.025 mm)	± 0.002" (± 0.051 mm)
APPLICATIONS	Stent Coverings, Vascular Devices, Endoscopic Channels, Medical Equipment		

Additional Specification Options	
POROSITY RANGE	DENSITY RANGE
Low 30 - 50%	High 1.09 - 1.52 g/cm ³ ± 0.15
Medium 50 - 70%	Medium 0.65 - 1.09 g/cm ³ ± 0.15
High 70 - 90%	Low 0.22 - 0.65 g/cm ³ ± 0.15

