



Polygon Product Specification

PolyMed II UD Multi-Lumen Tubing

Product Description: PolyMed II UD Multi-Lumen tubing designates a unidirectional “E” glass fiber reinforced tubing material, with a vinyl ester resin matrix. PolyMed tubing is capable of withstanding multiple steam sterilizations with minimal loss of mechanical and electrical properties.



Physical Properties**

Flexural Strength @ 25 degree C, ASTM D790, ksi	- 100
Flexural Modulus @ 25 degree C, ASTM D790, Msi	- 6.0
Fiber Volume, % Minimum	- 50
Color	- black & gray

Electrical Properties**

Dielectric Strength, V/mil	- 1100
Water Absorption, % by weight, as produced	- 0.01
Number of part failures when subjected to 60 seconds @ 3000 volts @ 60 Hz	- none
Dielectric Strength after 16 hour water soak, V/mil	- 1000
Number of part failures when subjected to 60 seconds @ 3000 volts @ 60 Hz, after 16 hour water soak	- none
Water Absorption after 16 hour water soak, % by weight	- 0.12

@ 60 Hz after 20 autoclave cycles and 16 hour water soak - none Water Absorption after 20 autoclave cycles and 16 hour water soak, % by weight - 0.12 Color loss after 20 autoclave cycles - negligible

Dielectric Strength after 20 autoclave cycles and 16 hour water soak, V/mil - 750 Number of part failures when subjected to 60 seconds @ 3000 volts

*Autoclave cycle: 15 minutes steam at 30 PSI, 270 degrees F

**Note: The values above are the results of testing within Polygon’s analytical laboratories. These are typical properties and are not designed to provide definitive dielectric fallout information. Specific properties may vary depending on the composite design or the characteristics of the application’s environment.