

Greene Tweed Arlon® 1163 PEEK, Glass Filled

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK) , Polyetheretherketone, PEEK, Glass Fiber Filled

Material Notes:

Arlon® is a tough, high-temperature, semi-crystalline, thermoplastic presenting a unique combination of mechanical, thermal, chemical and electrical properties. Greene, Tweed uses several proprietary manufacturing and machining processes to ensure that Arlons properties consistently outperform the competition. Greene, Tweed offers several different Arlon materials, and all provide high tensile strength and elongation properties, excellent shear strength and creep resistance, outstanding fatigue resistance, broad chemical and radiation resistance, and no susceptibility to hydrolysis (steam/hot water). Our engineers work one on one with customers to find the right solution for each specific application. Information provided by Greene Tweed.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Greene-Tweed-Arlon-1163-PEEK-Glass-Filled.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.53 g/cc	1.53 g/cc	ASTM D792
Deformation	0.080 %	0.080 %	ASTM D621

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	107	107	ASTM D785
Hardness, Shore D	90	90	ASTM D2240
Tensile Strength at Break	186 MPa	27000 psi	ASTM D368
Elongation at Break	2.4 %	2.4 %	ASTM D638
Flexural Strength	262 MPa	38000 psi	ASTM D790
Flexural Modulus	10.3 GPa	1500 ksi	Flexural 0.5% Secant Modulus; ASTM D790
Compressive Yield Strength	>= 4.14 MPa	>= 600 psi	
Compressive Strength	241 MPa	35000 psi	ASTM D695
Shear Strength	80.7 MPa	11700 psi	Transverse; ASTM D732
	105 MPa	15300 psi	Axial; ASTM D732
Secant Modulus	11.86 GPa	1720 ksi	Tensile 0.5% Secant Modulus; ASTM D638
Coefficient of Friction, Dynamic	0.24	0.24	PV=12600 psi-ft./min.; ASTM G77
K (wear) Factor	353 x 10 ⁻⁸ mm ³ /N-M	175 x 10 ⁻¹⁰ in ³ -min/ft-lb-hr	ASTM G77

Thermal Properties	Metric	English	Comments
CTE, linear	25.2 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	14.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E228
	@Temperature ≤ 149 $\text{Å}^\circ\text{C}$	@Temperature ≤ 300 $\text{Å}^\circ\text{F}$	
	45.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	25.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E228
	@Temperature ≥ 149 $\text{Å}^\circ\text{C}$	@Temperature ≥ 300 $\text{Å}^\circ\text{F}$	

Descriptive Properties	Value	Comments
Color	Tan	

Contact Songhan Plastic Technology Co.,Ltd.

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