

Arlon[®] 1330 PTFE-Lubricated, Polyketone-Based, High-Performance Components

Plastic Components

Greene Tweed offers precision plastic components for a variety of demanding, semiconductor applications. These components are made from a full range of high-performance plastic materials, including Arlon® 1330. Ideal for applications requiring exceptional wear resistance and chemical compatibility, Arlon® 1330 provides good dimensional stability without the addition of carbon fibers.

Typical Properties	
Physical Properties	Typical
Color	Tan
Specific Gravity	1.38
Melt Point (Pellet), °F (°C)	649 (343)
Hardness, Shore D	85
Water Absorption, 24 Hours, %	0.35
Mechanical	
Tensile Break Strength, psi	12,600
Elongation, %	20
Flexural Strength, psi	21,100
Flexural 0.5% Secant Modulus, psi	535,000
Compressive Strength @ Break, psi	15,500
Coefficient of Dynamic Friction PV=12,600 psi ft/min.	0.15
Wear Factor, in. ³ -min./lb-ft-hr x 10 ⁻¹⁰	20
Shear Strength @ Room Temperature	
Axial, psi	11,250
Transverse, psi	Not Applicable
Shear Strength @ 450°F (232°C)	
Axial, psi	2,870
Transverse, psi	Not Applicable
Izod Impact Strength	
Notched, ft-lb/inch	1.06
Unnotched, ft-lb/inch	18.74



Typical Properties (continued)		
Thermal	Typical	
Heat Distortion Temperature Under Load, @ 264 psi, °F (°C)	330 (166)	
Coefficient of Thermal Expansion, <300°F (149°C), inch/inch per °F x 10 ⁻⁵	2.3	
Coefficient of Thermal Expansion, >300°F (149°C), inch/inch per °F x 10 ⁻⁵	8.2	

Features and Benefits

- Excellent chemical compatibility
- Low extractables
- · Good dimensional stability
- Superior wear properties

Applications

- CMP retainer Rings
- Guides
- Supports