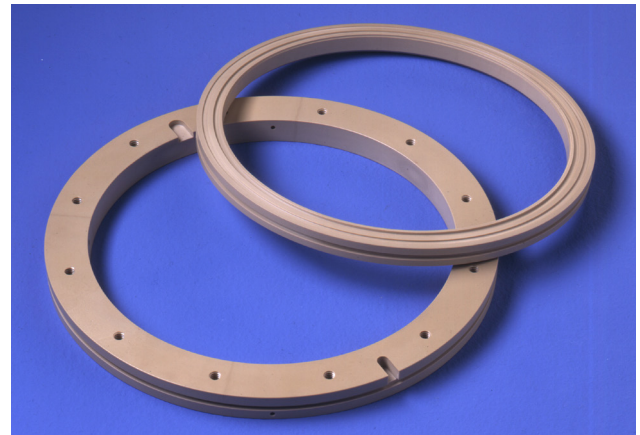


Arlon® 1000

Virgin 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 our Arlon® 1000, which is ideal for applications requiring wear resistance, dimensional stability, and chemical compatibility without the assistance of additives.



Typical Properties	
Physical Properties	Typical
Color	Natural
Specific Gravity	1.30
Melt Point (Pellet), °F (°C)	649 (343)
Hardness, Shore D	88
Water Absorption, 24 Hours, %	0.5
Mechanical	
Tensile Break Strength, psi	14,000
Elongation, %	35.0
Flexural Strength, psi	25,300
Flexural 0.5% Secant Modulus, psi	600,000
Compressive Strength @ Break, psi	19,000
Coefficient of Dynamic Friction PV=12,600 psi ft/min.	0.29
Wear Factor, in. ³ -min./lb-ft-hr x 10 ⁻¹⁰	52
Shear Strength @ Room Temperature	
Axial, psi	12,400
Transverse, psi	Not Applicable
Shear Strength @ 450°F (232°C)	
Axial, psi	3,300
Transverse, psi	Not Applicable
Izod Impact Strength	
Notched, ft-lb/inch	1.18
Unnotched, ft-lb/inch	No Break

Typical Properties (continued)	
Thermal	Typical
Heat Distortion Temperature Under Load, @ 264 psi, °F (°C)	350 (177)
Coefficient of Thermal Expansion, <300°F (149°C), inch/inch per °F x 10 ⁻⁵	2.6
Coefficient of Thermal Expansion, >300°F (149°C), inch/inch per °F x 10 ⁻⁵	7.5

Features and Benefits

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

Applications

- CMP retainer rings
- Guides
- Slides

Contact Us

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