

# Arlon® 1160

## Glass-Filled Polyketone



### Availability

Arlon® 1160 is available in custom injection-molded shapes, rods to .75 in. (1.9 cm), tubes from .5 in. (1.3 cm) ID to 6 in. (15.2 cm) OD (maximum cross-section .875 in. [2.2 cm]), and discs to 15 in. (38 cm).

### Thermoplastic Composite

Arlon® 1160 is a glass-reinforced version of Arlon® 1000 featuring significantly higher tensile strength and increased shear strength.

Arlon® 1160 is often selected when the operating temperature exceeds 300°Fz (149°C). The addition of glass raises the HDT and reduces the coefficient of thermal expansion. Other benefits include a lower coefficient of friction and improved wear properties.

Arlon® 1160 and related grades are successfully being used as sealing components, valve seats, bearings, back-up rings, and high-temperature insulators.

Typical Properties	
Physical Properties (ASTM Standard)	Typical
Color	Brown
Specific Gravity (D792)	1.55
Hardness, Shore D, Points (D2240)	91
Mechanical (ASTM Standard)	
Compressive Strength, psi (MPa) (D695)	22,400 (154)
Elongation @ Break, % (D638)	3.5
Flexural Modulus, ksi (MPa) (D790)	1,100 (7,580)
Flexural Strength, psi (MPa) (D790)	28,500 (197)
Tensile Modulus, ksi (MPa) (D638)	1,200 (8,270)
Tensile Strength @ Break, psi (MPa) (D638)	17,500 (121)
Water Absorption 24 Hours @ 73°F (23°C), %	0.06