



COMPOUND: ARYLEX® 745R

POLYMER: Polyetheretherketone (PEEK)

DESCRIPTION: Unfilled PEEK, Injection molded finish parts, stock shapes, and machined parts.

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	1.28 – 1.32	1.30	-
Hardness	ASTM D2240		85	SHORE-D
Tensile Strength at Yield	ASTM D638	13,053 (90.00) Minimum	14,500 (99.97)	PSI (MPa)
Tensile Strength at Break	ASTM D638		13,500 (93.08)	PSI (MPa)
Tensile Elongation at Break	ASTM D638	50 Minimum	60	%
Tensile Young's Modulus	ASTM D638		522 (3.60)	KSI (GPa)
Flexural Modulus	ASTM D790	464 (3.2)	530.8 (3.66)	KSI (GPa)
Flexural Strength	ASTM D790		24,700 (170.3)	PSI (MPa)
Izod Impact Strength, Notched	ASTM D256	60 Minimum	90	J/m
Water Absorption by Immersion Saturation at 23 °C Saturation at 100 °C	ISO 62-1		0.45 0.55	%
Coefficient of Friction	ICI		0.34	
Coefficient of Linear Thermal Expansion Average below T _g Average above T _g	ISO 11359		3.05 (5.5) 7.77 (14.0)	X 10 ⁻⁵ °F ⁻¹ (°C ⁻¹)
Heat Deflection Temperature, As molded @ 261 PSI (1.8 MPa) Annealed @ 392 °F(200 °C), 4 HRS	ISO 75-f		306 (152) 320 (160)	°F (°C)

REVISION HISTORY

REV. NONE – Initial Release 11/11/2020 – Raju K