

## **Material Data Sheet**

COMPOUND: 727

**POLYMER**: Polyamide (PA)

**DESCRIPTION:** 30% Glass Fiber Reinforced Nylon 6/6, Natural. Stock Shapes and Machined parts,

Property	Test Method	Typical Values	Units
Specific Gravity	ASTM D792	1.36	-
Water Absorption 24 HRS, Immersion Saturation, Immersion	ASTM D570	0.25 0.30	%
Hardness	ASTM D785	88	ROCKWELL M
Tensile Strength at Break Tensile Strength at Yield	ASTM D638	27,000 (186.16) 13,500 (93.08)	PSI (MPa)
Elongation at Break	ASTM D638	10	%
Compressive Strength @ 1% Strain @ 10% Strain @ Maximum Load	ASTM D695	2,900 (19.99) 17,000 (117.21) 24,000 (165.47)	PSI (MPa)
Compressive Modulus	ASTM D695	380,000 (2,620.0)	PSI (MPa)
Flexural Strength	ASTM D790	19,575 (134.96)	PSI (MPa)
Flexural Modulus	ASTM D790	700,000 (4,826.33)	PSI (MPa)
Shear Strength	ASTM D732	12,500 (86.18)	PSI (MPa)
Izod Impact Strength, Notched	ASTM D256	1.25	FT.LB/INCH
Coefficient of Linear Thermal Expansion	ASTM D696	2.70 (4.86)	X 10 <sup>-5</sup> °F <sup>-1</sup> (°C <sup>-1</sup> )
Heat Deflection Temperature @ 264 PSI (1.82 MPa)	ASTM D648	490 (254.4)	°F (°C)
Maximum Continuous Operating Temperature Intermittent Operating Temperature		230 (110) 338 (170)	°F (°C)

REVISION HISTORY
REV. NONE – Initial Release, 5-14-1989 BJ

REV. A – Updated data sheet format on new template. Added additional test data. 10-15-2020 RSK