

Material Data Sheet 700-7AX

COMPOUND: 700-7AX

POLYMER: Polytetrafluoroethylene (PTFE)

DESCRIPTION: Unfilled PTFE, Compression & Isostatic Molded Stock Shapes and Machined

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	2.13 – 2.19	2.16	-
Hardness	ASTM D2240	50 - 60	55	SHORE-D
Tensile Strength at Break	ASTM D1708	4,000 (27.58) Minimum	5,000 (34.47)	PSI (MPa)
Elongation at Break	ASTM D1708	300 Minimum	375	%
Tensile Modulus	ASTM D1708		80,000 (551.58)	PSI (MPa)
Compressive Strength @ 0.2% Offset @ Maximum load	ASTM D695		1,500 (10.34) 3,500 (24.13)	PSI (MPa)
Compressive Modulus	ASTM D695		70,000 (482.63)	PSI (MPa)
Flexural Strength	ASTM D790		No Break	PSI (MPa)
Flexural Modulus	ASTM D790		72,000 (496.42)	PSI (MPa)
Total Deformation Under Load @ 24 Hrs, 2,000 PSI, 70 °F	ASTM D621		12.5 (Axial) 12.7 (Radial)	%
Permanent Deformation after 24 Hrs Relaxation	ASTM D621		5.9 (Axial) 6.5 (Radial)	%
Coefficient of Linear Thermal Expansion	ASTM E831		7.5 X 10 ⁻⁵	INCH/INCH/°F
Service Temperature Range			-328 to 500 (-200 to +260)	°F (°C)

REVISION HISTORY
REV. NONE – Initial Release, 05-25-2018 RSK
REV. A – Modified typical property values, Deleted Applications/Compliance & Modified data sheet format, 6-26-2020 RSK