



COMPOUND: 700

POLYMER: Polytetrafluoroethylene (PTFE)

DESCRIPTION: Unfilled PTFE, Compression Molded Stock Shapes and Machined parts

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	2.13 – 2.19	2.15	-
Hardness	ASTM D2240	50 - 60	56	SHORE-D
Tensile Strength at Break	ASTM D1708	4,000 (27.58) Minimum	4,700 (32.41)	PSI (MPa)
Elongation at Break	ASTM D1708	300 Minimum	350	%
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, 06-15-2011, BJ

REV. A – Added Service Temperature Range, 02-04-2019 RSK

REV. B – Modified typical property values, Deleted Applications/Compliance & Modified data sheet format, 6-26-2020 RSK

The descriptions, design and performance information, and recommended uses for the products, tests and data described herein are based generally on our design and manufacturing experience, product testing in specific conditions, and industry standards. The foregoing information is for general guidance only and does not constitute a guaranty or warranty of design or warranty of performance. All warranties regarding the products described herein will be given in writing at the time of sale of such products. Each purchaser of such products must decide if the products are suitable to the intended use of such purchaser. Arylex®, CDI Energy Products®, OptiSeal® & OptiPak® are registered trademarks of J.H. Fenner & Co. Limited.