Lubrizol LifeScience Polymers

TECHNICAL DATA SHEET

Tecoplast® TPU Series

Type: Typical Physical Test Data – Clear and Opaque Grades

Features: Medical Grade Rigid Aromatic TPUs with excellent mechanical properties, very good chemical resistance, and can be color-matched

Process: Extrusion, Injection Molding, or Solution

Products & Properties	ASTM Test	Series TP-470/Clear Resins	Series OP-770/Opaque Resins
Durometer (Shore Hardness)	D2240	82D	82D
Specific Gravity	D792	1.18	1.19
Flexural Modulus (psi)	D790	300,000	250,000
Ultimate Tensile (psi)	D638	10,000	9,000
Ultimate Elongation (%)	D638	50%	50%
Drop Weight Impact	D3029 (G)		
Unannealed		30 in-lb	40 in-lb
Annealed*		>40 in-lb	>40 in-lb
Heat Deflection	D648		
264 psi, unannealed		150°F (65°C)	140°F (61°C)
264 psi, annealed*		165°F (75°C)	150°F (65°C)
Mold Shrinkage (in/in)	D955	.0014	.0014

^{*}Samples were annealed for 4 hours at 150°F (65°C)

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^{**}Note: These test results are based on small samples of Tecoplast® polyurethane and do not necessarily represent average results from larger test samples. This information should not be used for establishing engineering or manufacturing guidelines.