

Tecophilic™ TG Series TPU

Hydrogel Grade Thermoplastic Polyurethane

Type: Medical grade highly hydrophilic aliphatic polyether-based TPU

Features: This series of hydrophilic TPU is specially formulated to absorb equilibrium water contents of up to 900% of the weight of dry resin. The TG series of products absorb and transport significant levels of moisture. The products are designed to dissolve in various solvents for use in solution but they can also be melt coated or extruded.

Process: Solution methods, melt coating or extrusion

Products & Properties	ASTM Test	TG-500	TG2000
Durometer (Shore Hardness)	D2240	60D Dry	60D Dry
Specific Gravity	D792	1.16	1.16
Ultimate Tensile (psi)	D412		
Dry		1000	750
Wet		250	Weak Gel
Ultimate Elongation (%)	D412		
Dry		100	100
Wet		200	Weak Gel
Water Absorption (%)	Lubrizol Method	500	900

Note: These test results are based on small samples of Tecophilic™ polyurethanes and do not necessarily represent average results from larger test samples. This information should not be used for establishing engineering or manufacturing guidelines or specifications.

Handling and Processing Conditions:

Tecophilic™ TG series products may be dissolved in several solvents for use in processes such as coating, casting, dipping, spinning or spraying. Depending on the solvent system of choice, up to 10% water may be incorporated as a co-solvent to enhance dissolution. Further guidance is available at Lubrizol Life Science Health's (LLS Health) [Resource Hub](#) and by contacting our [technical solutions team](#).