

HiFill® TPU 50D

 Techmer Polymer Modifiers - *Thermoplastic Polyurethane Elastomer (Polyether)*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Appearance	<ul style="list-style-type: none"> Colors Available
Forms	<ul style="list-style-type: none"> Pellets
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.15		ASTM D792
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	8000	psi	ASTM D638
Flexural Strength	9000	psi	ASTM D790
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (50% Strain)	1500	psi	ASTM D412
Tensile Stress (100% Strain)	1900	psi	ASTM D412
Tensile Stress (300% Strain)	4200	psi	ASTM D412
Elongation Set After Break	490	%	ASTM D412
Tear Strength	725	lbf/in	ISO 34-1
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	12	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	50		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	248	°F	ASTM D1525
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	400	V/mil	ASTM D149

Notes
¹ Typical properties: these are not to be construed as specifications.
