

InStruc® TPUGF12 70D

Americhem - Thermoplastic Polyurethane Elastomer (Polyester)

General Information

Product Description

12% GLASS FIBER REINFORCED THERMOPLASTIC POLYURETHANE ELASTOMER

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 12% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	
Uses	• Connectors • Consumer Applications	• Electrical/Electronic Applications • Household Goods	• Industrial Applications • Industrial Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.32		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	265000	psi	ASTM D638
Tensile Strength	7600	psi	ASTM D638
Tensile Elongation (Break)	> 25	%	ASTM D638
Flexural Modulus	210000	psi	ASTM D790
Flexural Strength	7000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	5.0	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	70 to 75		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.030	%
Processing (Melt) Temp	420 to 460	°F
Mold Temperature	80 to 120	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

