

## InStruc® TPUGF10-70D

Americhem - Thermoplastic Polyurethane Elastomer (Polyester)

### General Information

#### Product Description

InStruc® TPUGF10-70D is a 10% glass fiber reinforced thermoplastic polyurethane elastomer. InStruc® TPUGF10-70D provides excellent tensile strength, stiffness, and chemical resistance.

#### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Filled • High Stiffness • Good Dimensional Stability • High Strength
Uses	• Connectors • Electrical/Electronic Applications • Industrial Applications • Consumer Applications • Household Goods • Industrial Parts
Forms	• Pellets
Processing Method	• Injection Molding

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.30		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	200000	psi	ASTM D638
Tensile Strength	5600	psi	ASTM D638
Tensile Elongation (Break)	> 25	%	ASTM D638
Flexural Modulus	150000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	4.2	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	65 to 70		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

