

InElec® TPUCF1050D
Americhem - Thermoplastic Polyurethane Elastomer
General Information
Product Description

10% CARBON FIBER REINFORCED TPU

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Stiffness • High Strength	• Permanent Antistatic
Uses	• Closures • 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	1.25		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 3.0E-3	in/in	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	7000	psi	ASTM D638
Tensile Elongation (Break)	> 25	%	ASTM D638
Flexural Modulus	170000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	9.0	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	50		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+3 to 1.0E+7	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	200	°F
Drying Time	4.0	hr
Rear Temperature	370 to 430	°F
Middle Temperature	370 to 430	°F
Front Temperature	370 to 430	°F
Processing (Melt) Temp	410	°F
Mold Temperature	60 to 150	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

