HiFill® PC 0144 TC-1

Techmer Polymer Modifiers - *Polycarbonate*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.44		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.0 to 5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	6600	psi	ASTM D638
Tensile Strength (Break)	6100	psi	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Flexural Modulus	850000	psi	ASTM D790
Flexural Strength	11400	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	0.45	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	115		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow	3.3E-5	in/in/°F	ASTM D696
Specific Heat	0.299	Btu/lb/°F	ASTM C351
Thermal Conductivity	21	Btu·in/hr/ft²/°F	ASTM C177
Thermal Diffusivity	0.0220		
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+12	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.08 in)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	575 to 600	°F
Middle Temperature	600 to 630	°F
Front Temperature	590 to 620	°F
Nozzle Temperature	590 to 620	°F
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	160 to 190	°F
Injection Rate	Moderate	
Back Pressure	0.00 to 100	psi

Injection Notes
Screw Speed: Medium Recommendations for Molding and Tool Conditions: Well vented mold Moisture Content, as received: Product is packaged at 0.2% or less.

Notes

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