

HiFill® PC 0151 TC-1

Polycarbonate

Techmer Engineered Solutions

Message:

HiFill® PC 0151 TC-1 is a polycarbonate (PC) product, which contains a 10% glass fiber reinforced material. It can be processed by injection molding and is available in North America. The main characteristics are: flame retardant/rated flame.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 10% filler by weight		
Appearance	Available colors		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.51	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.0 - 5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.40	%	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	115		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Fracture	43.4	MPa	ASTM D638
--	42.1	MPa	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	6550	MPa	ASTM D790
Flexural Strength	77.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	21	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	138	°C	ASTM D648
1.8 MPa, not annealed	132	°C	ASTM D648
CLTE - Flow	5.9E-5	cm/cm/°C	ASTM D696
Specific Heat	1250	J/kg/°C	ASTM C351
Thermal Conductivity	0.48	W/m/K	ASTM C177
Thermal Diffusivity	0.0220		
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+12	ohms · cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (2.00 mm)	V-1		UL 94

Injection	Nominal Value	Unit
Drying Temperature	121	°C
Drying Time	2.0 - 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	302 - 316	°C
Middle Temperature	316 - 332	°C
Front Temperature	310 - 327	°C
Nozzle Temperature	310 - 327	°C
Processing (Melt) Temp	304 - 327	°C
Mold Temperature	71.1 - 87.8	°C
Injection Rate	Moderate	
Back Pressure	0.00 - 0.689	MPa

Injection instructions

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

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

