

HiFill FR® J-50/30/FR

 Techmer Polymer Modifiers - *Polycarbonate*
General Information
Product Description

Molding Parameters:

4 hours recommended for high tensile strength and smooth surface finish, or for vacuum metalizing.

The dry temperature at 16 hours is 180°F.

For 2-zone machines, the rear temperature is 550-590°F, and the front temperature is 540-560°F.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Good Dimensional Stability • Good Stiffness • Good Toughness • High Heat Resistance
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.45		ASTM D792
Molding Shrinkage - Flow			ASTM D955
0.125 in	2.0E-3	in/in	
0.250 in	3.0E-3	in/in	
Water Absorption (24 hr)	0.17	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.10E+6	psi	ASTM D638
Tensile Strength (Break, 73°F)	16500	psi	ASTM D638
Tensile Elongation (Break, 73°F)	2.0	%	ASTM D638
Flexural Modulus (73°F)	1.20E+6	psi	ASTM D790
Flexural Strength (Break, 73°F)	23500	psi	ASTM D790
Compressive Strength	21000	psi	ASTM D695
Shear Strength	9500	psi	ASTM D732
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.250 in)	2.0	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	85		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	305	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
RTI Elec (0.06 in)	257	°F	UL 746B
RTI Imp (0.06 in)	239	°F	UL 746B
RTI Str (0.06 in)	257	°F	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		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	530 to 550 °F
Middle Temperature	550 to 590 °F
Front Temperature	540 to 560 °F
Nozzle Temperature	530 to 560 °F
Processing (Melt) Temp	540 to 570 °F
Mold Temperature	160 to 190 °F

Notes

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

