HiFill FR® PC IM FR

Techmer Polymer Modifiers - *Polycarbonate*

General Information

General		
Material Status	• Commercial: Active	
Availability	• North America	
Additive	• Impact Modifier	
Features	• Flame Retardant	• High Impact Resistance
Appearance	• Colors Available	
Forms	• Pellets	
Processing Method	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.13	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	8000	psi	ASTM D638
Tensile Elongation (Yield)	90	%	ASTM D638
Flexural Modulus	33000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	8.0	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	114		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	240	°F	ASTM D648
CLTE - Flow	3.7E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	440	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.12 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	540 to 560	°F
Middle Temperature	540 to 560	°F
Front Temperature	540 to 560	°F
Processing (Melt) Temp	510 to 560	°F
Mold Temperature	180 to 250	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm