

HiFill FR® PC FR SFX-ORANGE 1.0

Techmer Polymer Modifiers - *Polycarbonate*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• UV Stabilizer
Features	• Flame Retardant
Appearance	• Colors Available • Orange
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8000	psi	ASTM D638
Tensile Elongation (Break)	88	%	ASTM D638
Flexural Modulus	330000	psi	ASTM D790
Flexural Strength (Yield)	13000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	12	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	270	°F	ASTM D648
CLTE - Flow	3.8E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	ohms	ASTM D257
Volume Resistivity	1.0E+18	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	430	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

