

HiFill FR® ABS GF20 FR RD073

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Features	• Flame Retardant
Appearance	• Colors Available • Red
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.16	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	8700	psi	ASTM D638
Tensile Elongation (Break)	3.0 to 4.0	%	ASTM D638
Flexural Modulus	750000	psi	ASTM D790
Flexural Strength	11900	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.2	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	6.0	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	124		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	210	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	200	°F	ASTM D648
CLTE - Flow	2.2E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160 to 180	°F
Drying Time	2.0 to 16	hr
Rear Temperature	410 to 440	°F
Middle Temperature	420 to 450	°F
Front Temperature	400 to 420	°F
Nozzle Temperature	380 to 420	°F
Processing (Melt) Temp	440 to 490	°F
Mold Temperature	150 to 180	°F

Notes

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

