

HiFill FR® ABS FR UV

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• UV Stabilizer
Features	• Flame Retardant
UL File Number	• E157318
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	5900	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Flexural Modulus	340000	psi	ASTM D790
Flexural Strength	10300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	3.9	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	100		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	201	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	178	°F	ASTM D648
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.

