

# HiFill FR® PA6 GF15 FR-N

Polyamide 6  
Techmer Engineered Solutions

Message:

HiFill FR® PA6 GF15 FR-N is a Polyamide 6 (Nylon 6) product filled with 15% glass fiber. It can be processed by injection molding and is available in North America.

Characteristics include:

- Flame Rated
- Flame Retardant
- Halogen Free
- Heat Stabilizer
- Lubricated

General Information			
Filler / Reinforcement	Glass Fiber,15% Filler by Weight		
Additive	Heat Stabilizer Lubricant		
Features	Flame Retardant Halogen Free Heat Stabilized Lubricated		
Appearance	Colors Available Natural Color Red		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.26	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.70	%	ASTM D955
Water Absorption (24 hr)	1.4	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	96.5	MPa	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	3100	MPa	ASTM D790
Flexural Strength	145	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	53	J/m	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	213	°C	
1.8 MPa, Unannealed	196	°C	
CLTE - Flow	4.3E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength <sup>1</sup>	20	kV/mm	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	V-0		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	2.0 to 4.0	hr	
Rear Temperature	232 to 257	°C	
Middle Temperature	232 to 257	°C	
Front Temperature	232 to 257	°C	
Processing (Melt) Temp	238 to 266	°C	
Mold Temperature	65.6 to 93.3	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	30 to 60	rpm	
NOTE			

1. Method A (Short-Time)

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#### Recommended distributors for this material

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