# Hifill FR® PA6 FR IM

## Polyamide 6

## Techmer Engineered Solutions

#### Message:

HiFill FR® PA6 FR IM is a Polyamide 6 (Nylon 6) product. It can be processed by injection molding and is available in North America. Characteristics include: Flame Rated Flame Retardant Impact Modified Impact Resistant

Canaral Information			
General Information			
UL YellowCard	E253782-101773877		
Additive	Impact Modifier		
Features	Flame Retardant		
	High Impact Resistance		
Appearance	Colors Available		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	1.4	%	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	97		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	44.8	MPa	ASTM D638
Tensile Elongation (Break)	85	%	ASTM D638
Flexural Modulus	1520	MPa	ASTM D790
Flexural Strength	55.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	640	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8			
MPa, Unannealed)	57.2	°C	ASTM D648
CLTE - Flow	5.9E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+12	ohms	ASTM D257
Volume Resistivity	1.0E+14	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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