# HiFill® PA6/6 GF30 IM HS L

## Polyamide 66

## **Techmer Engineered Solutions**

#### Message:

HiFill®PA6/6 GF30 IM HS L is a polyamide 66 (nylon 66) product, which contains a 30% glass fiber reinforced material. It can be processed by injection molding and is available in North America. Features include: flame retardant/rated flame Impact modification Impact resistance heat stabilizer Lubrication

Filler / Reinforcement   Glass fiber reinforced material, 30% filler by weight     Additive   Impact modifier heat stabilizer Lubricant     Features   Impact resistance, high Thermal Stability Lubrication     Appearance   Available colors     Forms   Particle     Froms   Injection molding     Physical   Nominal Value   Unit     Specific Gravity   1.31   g/cm³   ASTM D792     Molding Shrinkage - Flow (3.18 mm)   0.50   %   ASTM D792     Marchanes   Nominal Value   Unit   Test Method     Rockwell Hardness (R-Scale)   111   Specific Gravity   ASTM D795     Mechanical   Nominal Value   Unit   Test Method     Rockwell Hardness (R-Scale)   111   Specific Gravity   ASTM D785     Marchanical   Nominal Value   Unit   Test Method     Rockwell Hardness (R-Scale)   145   MPa   ASTM D638     Tensile Strength (Break)   145   MPa   ASTM D638     Resural Modulus   6890   MPa   ASTM D638     Resural Modulus   6890   MPa   ASTM D556	General Information					
heistabilizer LukratFeaturesImpart resistance, high Thermal Stability LukrationApperanceAvailable colorsFormPractionProcessing MethodNoticonProcessing MethodNoticonProtessing MethodNoticonSpecific GravityInformationSpecific GravitySolonManala ValueVinanceMater Absorption (24 MethodSolonMarcha Schröfer MethodSolonMarcha Schröfer MethodNoticonMarcha Schröfer MethodNoticonMarcha Schröfer MethodSolonMarcha Schröfer MethodNoticonMarcha Schröfer MethodNoticonMarcha Schröfer MethodNoticonMarcha Schröfer MethodSolonMethodiaNoticonSchröfer MethodSolonSchröfer Method <td>Filler / Reinforcement</td> <td colspan="5">Glass fiber reinforced material, 30% filler by weight</td>	Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight				
Lubricant     Fetures   Impact resistance, high Thermal Stability Lubrication     Apperance   Available colors     Forms   Particle     Forms   Particle     Processing Method   Impact resistance, high Thermal Stability Lubrication     Protessing Method   Particle     Processing Method   Impact resistance, high Thermal Stability     Specific Gravity   Impact resistance, high Thermal Stability     Specific Gravity   Impact resistance, high Thermal Stability     Moding Shrinkage - Flow (31 Rum)   Impact resistance, high Thermal Stability     Moding Shrinkage - Flow (31 Rum)   Impact resistance, high Thermal Stability     Molding Shrinkage - Flow (31 Rum)   Impact resistance, high Thermal Stability     Molding Shrinkage - Flow (31 Rum)   Impact Resistance, high Thermal Stability     Molding Shrinkage - Flow (31 Rum)   Impact Resistance, high Thermal Stability     Morinal Value   Impact Resistance, high Thermal Stability   Markaton     Morinal Value   Impact Resistance, high Thermal Stability   Markaton     Morinal Value   Impact Resistance, high Thermal Stability   Markaton     Morinal Value   Impact Resistance, hight Thermal Numinal Value   Markaton	Additive	Impact modifier				
Fatures   Impact resistance, high Tremal Stability Lubrication     Appearance   Availabe colors     Forms   Particle     Forns   Injection molding     Processing Method   Injection molding     Physical   Nominal Value   Onin     Specific Gravity   1.31   Grav <sup>1</sup> Molding Shrinkage - Flow (3.18 mm)   0.50   %1   ASTM D792     Match Assorption (24 hr)   0.30   %1   ASTM D575     Match Assorption (24 hr)   0.30   %1   ASTM D576     March Assorption (24 hr)   0.10   Test Method     Rockwell Hardness (R-Scale)   11   Stor D785     Mechanical   Nominal Value   Unit   Test Method     Tensile Strength (Break)   4.5   MPa   ASTM D583     Tensile Longation (Break)   4.0   %2   ASTM D593     Flexural Modulus   6890   MPa   ASTM D593     Flexural Modulus   06   MPa   ASTM D593     Flexural Modulus   10   Method   Method     Flexural Modulus   6890   MPa   ASTM D593     Inpac		heat stabilizer				
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Forms     Particle       Processing Method     Injection molding       Physical     Nominal Value     Unit     Test Method       Specific Gravity     1.31     g/cm³     ASTM D792       Molding Shrinkage - Flow (3.18 mm)     0.50     %     ASTM D792       Water Absorption (24 hr)     0.30     %     ASTM D750       Hardness     Nominal Value     Unit     Test Method       Rockwell Hardness (R-Scale)     111     Set Method     Set Method       Mechanical     Nominal Value     Unit     Test Method       Tensile Elongation (Break)     145     MPa     ASTM D783       Flexural Modulus     6890     MPa     ASTM D790       Flexural Strength     206     MPa     ASTM D790       Inpact     Nominal Value     Unit     Test Method       Notched Izod Impact (23°C, 3.18 mm)     190     J/m     ASTM D790       Thermal     Nominal Value     Unit     Test Method       Notched Izod Impact (23°C, 3.18 mm)     190     J/m     ASTM D256       Thermal     Nominal Value						
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Notched Izod Impact (23°C, 3.18 mm)190J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load	Flexural Strength	206	MPa	ASTM D790		
Thermal Nominal Value Unit Test Method   Deflection Temperature Under Load  ASTM D648	Impact	Nominal Value	Unit	Test Method		
Deflection Temperature Under Load ASTM D648	Notched Izod Impact (23°C, 3.18 mm)	190	J/m	ASTM D256		
	Thermal	Nominal Value	Unit	Test Method		
0.45 MPa, not annealed 254 °C ASTM D648	Deflection Temperature Under Load			ASTM D648		
	0.45 MPa, not annealed	254	°C	ASTM D648		

1.8 MPa, not annealed	249	°C	ASTM D648
CLTE - Flow	7.9E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+12	ohms	ASTM D257
Volume Resistivity	1.0E+11	ohms•cm	ASTM D257
Dielectric Strength <sup>1</sup>	17	kV/mm	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.50 mm)	НВ		UL 94
Additional Information	Nominal Value		
TPCI #	9869101		
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.10	%	
Rear Temperature	282 - 293	°C	
Middle Temperature	288 - 299	°C	
Front Temperature	277 - 288	°C	
Nozzle Temperature	271 - 304	°C	
Processing (Melt) Temp	282 - 304	°C	
Mold Temperature	79.4 - 104	°C	
Injection Rate	Slow-Moderate		
Back Pressure	0.00 - 0.345	MPa	
Injection instructions			

Screw Speed: SlowRecommendations for Molding and Tool Conditions: Well vented moldMoisture Content, as received: Product is packaged at 0.2% or less.

NOTE

1.

Method A (short time)

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#### Recommended distributors for this material

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