

**HiFill® PA6/6 IM5 BK**

 Techmer Polymer Modifiers - *Polyamide 66*
**General Information**

<b>General</b>			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Heat Stabilizer	• Impact Modifier	• Lubricant
Features	• Heat Stabilized	• Impact Modified	• Lubricated
Appearance	• Colors Available		
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.09		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.016	in/in	ASTM D955
Water Absorption (24 hr)	1.8	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	8800	psi	ASTM D638
Tensile Elongation (Yield)	50	%	ASTM D638
Flexural Modulus	385000	psi	ASTM D790
Flexural Strength (Yield)	12000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact			ASTM D256
-40°F, 0.125 in	2.5	ft·lb/in	
73°F, 0.125 in	10	ft·lb/in	
Unnotched Izod Impact (0.125 in)	No Break		ASTM D4812
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	111		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	400	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	140	°F	ASTM D648
CLTE - Flow	4.4E-5	in/in/°F	ASTM D696

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	2.0 to 4.0	%
Rear Temperature	510 to 580	°F
Middle Temperature	510 to 580	°F
Front Temperature	510 to 580	°F
Processing (Melt) Temp	500 to 540	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

**Notes**
<sup>1</sup> Typical properties: these are not to be construed as specifications.
