HiFill® PA6 IM 40 Z

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General		
Material Status	• Commercial: Active	
Availability	• North America	
Additive	• Impact Modifier	• Lubricant
Features	• High Impact Resistance	• Lubricated
Appearance	• Colors Available	• Natural Color
Forms	• Pellets	
Processing Method	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.06		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.012	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	9900	psi	ASTM D638
Tensile Elongation (Break)	60	%	ASTM D638
Flexural Modulus	300000	psi	ASTM D790
Flexural Strength	14500	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	3.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	No Break		ASTM D4812
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	105		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	291	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	270	°F	ASTM D648
Melting Temperature	425	°F	
CLTE - Flow	5.5E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	2.0E+13	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	420	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	490 to 555	°F
Middle Temperature	490 to 555	°F
Front Temperature	490 to 555	°F
Processing (Melt) Temp	460 to 530	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm