

Technical Data Sheet

GAPEX® HPP40GR27HB BLACK

Polypropylene Homopolymer
Engineering Plastics



General			
Filler / Reinforcement	• Glass\Mineral, 40% Filler by Weight		
Features	• Chemically Coupled		
Appearance	• Black		
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.24	1.24 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.5 g/10 min	5.5 g/10 min	ASTM D1238
Molding Shrinkage			ASTM D955
Flow	4.0E-3 in/in	0.40 %	
Across Flow	8.0E-3 in/in	0.80 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	7700 psi	53.1 MPa	ASTM D638
Tensile Elongation (Break, 73°F (23°C))	3.5 %	3.5 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F (23°C)	890000 psi	6140 MPa	
Tangent : 73°F (23°C)	990000 psi	6830 MPa	
Flexural Strength (73°F (23°C))	15300 psi	105 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.3 ft·lb/in	69 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	6.0 ft·lb/in	320 J/m	ASTM D4812
Gardner Impact (73°F (23°C))	3.50 in·lb	0.395 J	ASTM D5420
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	315 °F	157 °C	
264 psi (1.8 MPa), Unannealed	290 °F	143 °C	

Additional Information			
Testing and measurements were performed at 73 +/-3°F and 50 +/-5% relative humidity unless otherwise noted.			

Notes

These are typical property values not to be construed as specification limits.

