

Technical Data Sheet

GAPEX® HPP40GR21HB 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)	7.5 g/10 min	7.5 g/10 min	ASTM D1238
Molding Shrinkage			ASTM D955
Flow	4.0E-3 in/in	0.40 %	
Across Flow	9.0E-3 in/in	0.90 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (73°F (23°C))	10200 psi	70.3 MPa	ASTM D638
Tensile Elongation (Break, 73°F (23°C))	3.0 %	3.0 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F (23°C)	976000 psi	6730 MPa	
Tangent : 73°F (23°C)	993000 psi	6850 MPa	
Flexural Strength (73°F (23°C))	15700 psi	108 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	1.2 ft·lb/in	64 J/m	ASTM D256
Unnotched Izod Impact (73°F (23°C))	7.1 ft·lb/in	380 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	305 °F	152 °C	
264 psi (1.8 MPa), Unannealed	285 °F	141 °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.