

SimPoly 40GF

PP



Product Description			
40% Glass reinforced, Chemically Coupled Homopolymer Polypropylene			
General Properties			
Appearance	Black, Natural, Colors		
Processing Methods	Injection Molding		
Applications	Automotive, Material Handling, Lawn & Garden		
Mechanical Properties	Test Method	English Units	S.I. Units
Tensile Strength (73°F (23°C))	ASTM D638	13,000 psi	90 MPa
Tensile Elongation (Yield, 73°F (23°C))	ASTM D638	4 %	4 %
Flexural Modulus - Tangent (73°F (23°C))	ASTM D790	1,070,000 psi	7,379 MPa
Notched Izod Impact (73°F)	ASTM D256	1.5 ft-lb/in	80 J/m
Physical Properties	Test Method	English Units	S.I. Units
Specific Gravity	ASTM D792	1.22 sp gr	1.22 sp gr
Melt Mass Flow Rate (230°C/2.16 kg)	ASTM D1238	12.0 g/10min	12.0 g/10min
Mold Shrink - Flow: 0.125 in (3.18 mm)	ASTM D955	1.0E-3 to 4.0E-3 in/in	1.0E-3 to 4.0E-3 mm/mm
Mold Shrink - Flow: 0.250 in (6.35 mm)	ASTM D955	1.0E-3 to 4.0E-3 in/in	1.0E-3 to 4.0E-3 %
Filler Content		40.0 %	40.0 %
Thermal Properties	Test Method	English Units	S.I. Units
Heat Deflection Temperature @ 66 psi	ASTM D648	325 °F	163 °C
Heat Deflection Temperature @ 264 psi	ASTM D648	305 °F	152 °C
Injection Molding		Value	
Drying Temperature		170	°F
Drying Time		2.0	hrs
Suggested Maximum Moisture		0.2	%
Suggested Shot Size		25 - 75	%
Rear Barrel Temperatures		350 - 400	°F
Middle Barrel Temperatures		360 - 410	°F
Front Barrel Temperatures		370 - 420	°F
Nozzle Temperature		370 - 420	°F
Melt (processing) Temperatures		380 - 420	°F
Mold Temperatures		90 - 160	°F
Back Pressure		25 - 100	psi
Screw speed		Slow - Medium	rpm
Vent Depth		0.0010 - 0.0015	in

These Data Sheet Values are Typical Values and are not intended for specification purposes. These values should only be used as a guide and no assurances by EnCom, Inc. can be granted that all molded articles will exhibit duplicate properties as those listed above. Each material user should perform their own testing for suitability.

EnCom Polymers, Inc.

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