

Optipro HP45G

The Materials Group - Polypropylene Homopolymer

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Features	• High Stiffness
Appearance	• Black • Natural Color
Forms	• Pellets

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.23	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3	in/in	ASTM D955
Ash Content	40	%	ASTM D5630
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	13200	psi	ASTM D638
Flexural Modulus	1.14E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.8	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	321	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	150 to 180	°F
Drying Time	1.0 to 2.0	hr
Drying Time, Maximum	8.0	hr
Suggested Max Moisture	0.040	%
Rear Temperature	410 to 460	°F
Middle Temperature	420 to 470	°F
Front Temperature	430 to 500	°F
Nozzle Temperature	440 to 500	°F
Processing (Melt) Temp	410 to 460	°F
Mold Temperature	80 to 120	°F
Back Pressure	50.0 to 150	psi

Notes

¹ Typical properties: these are not to be construed as specifications.

