Polifil® PP C-40

Polypropylene Homopolymer

The Plastics Group

Message:

Polifil® C series compounds are homopolymer polypropylene resins reinforced with fine particle size calcium carbonate. They combine high impact with stiffness, heat aging, good colorability, resistance to environmental stress-cracking, good surface, and low mold shrinkage. These compounds are used in appliances, electrical components, housewares, toys, automotive, and utility products. Standard processing techniques are applicable. Use this information as a guide to aid you in selecting the proper resin for your application. TPG will custom compound and fine-tune our formulations for your application.

General Information			
UL YellowCard	E84888-251658		
Filler / Reinforcement	Calcium Carbonate,40% Filler by Weight		
Features	Good Colorability Good Heat Aging Resistance Good Stiffness Good Surface Finish High ESCR (Stress Crack Resist.) Homopolymer Low Shrinkage		
Uses	Appliances Automotive Applications Electrical Parts Household Goods Toys		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.24	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	8.0 to 12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	1.0	%	ASTM D955
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	76		ASTM D1415
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2070	MPa	ASTM D638
Tensile Strength (23°C)	23.4	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield, 23°C	5.0	%	
Break, 23°C	25	%	

Flexural Modulus - Tangent (23°C)	2210	MPa	ASTM D790
Flexural Strength (23°C)	44.8	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	37	J/m	ASTM D256
Gardner Impact (23°C, 12.7 mm)	6.78	J	ASTM D3029
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	113	°C	
1.8 MPa, Unannealed	62.8	°C	
Injection	**Nominal Value**	**Unit**	
Drying Temperature	82.2 to 104	°C	
Drying Time	1.0 to 2.0	hr	
Rear Temperature	199 to 210	°C	
Middle Temperature	210 to 221	°C	
Front Temperature	221 to 232	°C	
Nozzle Temperature	227 to 232	°C	
Processing (Melt) Temp	204 to 260	°C	
Mold Temperature	10.0 to 26.7	°C	
Injection Rate	Fast		
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	50 to 100	rpm	

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China