

Borealis Borcom™ WG140AI Polypropylene

Category : Polymer , Thermoplastic , Polypropylene (PP)

Material Notes:

Borcom™ WG140AI is a polypropylene microcomposite intended for injection molding. This material has an excellent balance between impact strength and stiffness, high melt flow rate and gives a good surface quality. Applications: Borcom™ WG140AI has been developed especially for applications like: washing machine parts, control panels washing applications, dishwashers components, climate control housings, and air ducts. Information provided by Borealis AG

Order this product through the following link:

http://www.lookpolymers.com/polymer_Borealis-Borcom-WG140AI-Polypropylene.php

Physical Properties	Metric	English	Comments
Density	0.980 g/cc	0.0354 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.012 cm/cm	0.012 in/in	mold average, Borealis Method
Melt Flow	20 g/10 min @Load 2.16 kg, Temperature 230 °C	20 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	37.0 MPa	5370 psi	50mm/min; ISO 527-2
Elongation at Yield	5.0 %	5.0 %	ISO 527-2
Tensile Modulus	2.60 GPa	377 ksi	1mm/min; ISO 527-2
Charpy Impact Unnotched	2.50 J/cm ² @Temperature -20.0 °C	11.9 ft-lb/in ² @Temperature -4.00 °F	ISO 179/1eU
	7.00 J/cm ² @Temperature 23.0 °C	33.3 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.150 J/cm ² @Temperature -20.0 °C	0.714 ft-lb/in ² @Temperature -4.00 °F	ISO 179/1eA
	0.350 J/cm ² @Temperature 23.0 °C	1.67 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
Hot Ball Pressure Test	125 °C @Thickness 2.00 mm	257 °F @Thickness 0.0787 in	EN 60695-10-2
Deflection Temperature at 0.46 MPa	64.0 °C	147 °F	ISO 75-2

Thermal Properties	Metric	English	Comments
	120 °C	248 °F	ISO 75-2
Vicat Softening Point	94.0 °C @Load 5.10 kg	201 °F @Load 11.2 lb	ISO 527-2
	155 °C @Load 1.02 kg	311 °F @Load 2.25 lb	ISO 527-2
Flammability, UL94	HB @Thickness 2.00 mm	HB @Thickness 0.0787 in	
Flame Spread	23 mm/min @Thickness 3.00 mm	0.91 in/min @Thickness 0.118 in	FMVSS 302; DIN 75200
Glow Wire Test	800 °C @Thickness 2.00 mm	1470 °F @Thickness 0.0787 in	ignition temperature; EN 60695-2-13
	825 °C @Thickness 2.00 mm	1520 °F @Thickness 0.0787 in	flammability index; EN 60695-2-12

Optical Properties	Metric	English	Comments
Gloss	50 %	50 %	2mm plaque, 20° of arc; DIN 67530

Processing Properties	Metric	English	Comments
Processing Temperature	220 - 260 °C	428 - 500 °F	mass temperature
Feed Temperature	40.0 - 80.0 °C	104 - 176 °F	
Mold Temperature	30.0 - 50.0 °C	86.0 - 122 °F	
Injection Velocity	100 - 200 mm/sec	3.94 - 7.87 in/sec	
Hold Pressure	30.0 - 60.0 MPa	4350 - 8700 psi	

Descriptive Properties	Value	Comments
Back Pressure	low to medium	
Emission (µgC/g)	35	VDA 277
Fogging (mg)	1.4	100°C, 16h, DIN 75201
Screw Speed	low to medium	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China