

Shell Carilon® DB6G6A10 Polyketone, 30% Glass-Reinforced General-Purpose Injection Molding Grade (discontinue)

Category : Polymer , Thermoplastic , Polyketone , Polyketone, Glass Fiber Reinforced

Material Notes:

Shell announced in Feb. 2000 that the Carilon product line is being discontinued. CARILON Polymer DB6G6A10 is a 30 percent short glass-fiber-reinforced, general purpose injection molding grade, with mechanical properties that classify it as an engineering thermoplastic. This grade shows a unique balance of toughness and high modulus combined with good creep performance, strength and elevated temperature performance. Moreover this polymer exhibits a high resistance to hydrocarbons, solvents, salt solutions, weak acids and weak bases.

CARILON Polymer DB6G6A10 is easy to process on standard injection molding equipment. Cycle times are generally short and parts show good mold definition. CARILON Polymers' low moisture sensitivity means that no conditioning of parts before assembly or use is necessary. Data provided by Shell Chemical.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Shell-Carilon-DB6G6A10-Polyketone-30-Glass-Reinforced-General-Purpose-Injection-Molding-Grade-nbspdiscontinue.php

Physical Properties	Metric	English	Comments
Density	1.46 g/cc	0.0527 lb/in ³	ASTM D792
Water Absorption	0.42 %	0.42 %	24 hour immersion; ASTM D570
Moisture Absorption at Equilibrium	0.20 %	0.20 %	at 50% RH at Equilibrium; ASTM D570
Water Absorption at Saturation	1.8 %	1.8 %	at saturation; ASTM D570
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	ASTM D955
Linear Mold Shrinkage, Transverse	0.0070 cm/cm	0.0070 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	83	83	ISO 868
Tensile Strength, Ultimate	130 MPa	18900 psi	ASTM D638
Elongation at Break	3.1 %	3.1 %	ASTM D638
Tensile Modulus	8.30 GPa	1200 ksi	ASTM D638
Flexural Strength	190 MPa	27600 psi	at 5% strain; ASTM D790
Flexural Modulus	7.20 GPa	1040 ksi	ASTM D790
Izod Impact, Notched	1.40 J/cm	2.62 ft-lb/in	ASTM D256
	0.850 J/cm	1.59 ft-lb/in	
	@Temperature -40.0 °C	@Temperature -40.0 °F	

Impact Properties	Metric	English	Comments
Charpy Impact Unnotched	4.00 J/cm ² @Temperature -30.0 °C	19.0 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Charpy Impact, Notched	1.00 J/cm ² 0.900 J/cm ² @Temperature -30.0 °C	4.76 ft-lb/in ² 4.28 ft-lb/in ² @Temperature -22.0 °F	ISO 179

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	
Deflection Temperature at 0.46 MPa (66 psi)	218 °C	424 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	218 °C	424 °F	ASTM D648
Flammability, UL94	HB	HB	
Oxygen Index	20 %	20 %	ISO 4589

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	ASTM D257
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	ASTM D257
Dielectric Constant	5.2 @Frequency 1e+6 Hz	5.2 @Frequency 1e+6 Hz	ASTM D150
	6.3 @Frequency 1000 Hz	6.3 @Frequency 1000 Hz	ASTM D150
Dielectric Strength	24.0 kV/mm @Thickness 1.60 mm	610 kV/in @Thickness 0.0630 in	Short Term; ASTM D149
Dissipation Factor	0.010 @Frequency 1000 Hz	0.010 @Frequency 1000 Hz	ASTM D150
	0.040 @Frequency 1e+6 Hz	0.040 @Frequency 1e+6 Hz	ASTM D150
Comparative Tracking Index	600 V	600 V	UL 746A

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