

## Shell Carilon® DB6F5G40 Polyketone, Flame-Retarded (V-0), 20% Glass-Reinforced Injection Molding Grade (disco)

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 DB6F5G40 is a flame-retarded, 20 percent glass-fiber-reinforced, injection molding grade with mechanical properties which classify it as an engineering thermoplastic. This high-modulus grade offers a UL94 V-0 rating and high glow-wire index without the use of halogenated or red phosphorus flame retardants. The benign flame-retardant system used for CARILON Polymer DB6F5G40 ensures that the smoke density and toxicity are both low. Yet this grade retains the exceptional blend of properties of the base polymer, such as low moisture absorption, good toughness and high resistance to a wide range of chemicals. CARILON Polymer DB6F5G40 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-DB6F5G40-Polyketone-Flame-Retarded-V-0-20-Glass-Reinforced-Injection-Molding-Grade-nbspdisco.php](http://www.lookpolymers.com/polymer_Shell-Carilon-DB6F5G40-Polyketone-Flame-Retarded-V-0-20-Glass-Reinforced-Injection-Molding-Grade-nbspdisco.php)

Physical Properties	Metric	English	Comments
Density	1.60 g/cc	0.0578 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.30 %	0.30 %	24 hour immersion; ASTM D570
Moisture Absorption at Equilibrium	0.45 %	0.45 %	at 50% RH at Equilibrium; ASTM D570
Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	ASTM D955
Linear Mold Shrinkage, Transverse	0.010 cm/cm	0.010 in/in	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	110 MPa	16000 psi	ASTM D638
Elongation at Break	3.0 %	3.0 %	ASTM D638
Tensile Modulus	8.00 GPa	1160 ksi	ASTM D638
Flexural Modulus	6.40 GPa	928 ksi	ASTM D790
Izod Impact, Notched	1.12 J/cm	2.10 ft-lb/in	ASTM D256
Charpy Impact Unnotched	5.50 J/cm <sup>2</sup>	26.2 ft-lb/in <sup>2</sup>	ISO 179

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	
Deflection Temperature at 1.8 MPa	210 °C	410 °F	ASTM D648

<small>(264 psi)</small> Thermal Properties	Metric	English	Comments
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	ASTM D257
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	ASTM D257
Dielectric Constant	5.5 @Frequency 1e+6 Hz	5.5 @Frequency 1e+6 Hz	ASTM D150
Dielectric Strength	41.0 kV/mm @Thickness 0.800 mm	1040 kV/in @Thickness 0.0315 in	Short Term; ASTM D149
Dissipation Factor	0.030 @Frequency 1e+6 Hz	0.030 @Frequency 1e+6 Hz	ASTM D150
Arc Resistance	120 - 180 sec	120 - 180 sec	UL-746A rating 5 (120-180 sec)
Comparative Tracking Index	250 V	250 V	UL746A

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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