

Menzolit MenzolitÂ® BMC 0390 Unsaturated Polyester UP

Category : Polymer , Thermoset , Polyester, TS , Thermoset Polyester Glass Filled BMC

Material Notes:

BMC 0390 is a low profile DMC/BMC. Because of its low shrinkage, the material shows good surface quality as well as very low warpage. The product is suitable for applications if a better surface quality is necessary that cannot be achieved with low shrink material. Because of the low shrinkage, tool design is more difficult and the user should take care to allow proper part ejection from mould. Typical applications are housings or covers that call for improved surface quality and dimensional stability. Because of this painting may be desired. Paint adhesion of appropriate paint systems is very good. Chrome plating of punch and cavity surfaces is recommended. Information Provided by Menzolit

Order this product through the following link:

http://www.lookpolymers.com/polymer_Menzolit-Menzolit-BMC-0390-Unsaturated-Polyester-UP.php

Physical Properties	Metric	English	Comments
Density	1.90 g/cc	0.0686 lb/inÂ³	ISO 1183
Water Absorption	<= 0.50 %	<= 0.50 %	ISO 62
Linear Mold Shrinkage	-0.000300 cm/cm	-0.000300 in/in	ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	36.0 MPa @Temperature 22.0 Â°C	5220 psi @Temperature 71.6 Â°F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	36.0 MPa @Temperature 22.0 Â°C	5220 psi @Temperature 71.6 Â°F	25mm flat samples, compression moulded; ISO 527-4
Elongation at Yield	0.00 %	0.00 %	tensile rupture strain; ISO 527-4
Modulus of Elasticity	14.0 GPa	2030 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	120 MPa @Temperature 22.0 Â°C	17400 psi @Temperature 71.6 Â°F	25 mm wide 100 mm long, flat samples; ISO 14125
Flexural Modulus	11.0 GPa @Temperature 22.0 Â°C	1600 ksi @Temperature 71.6 Â°F	25 mm wide 100 mm long, flat samples; ISO 14125
Poissons Ratio	0.30	0.30	
Shear Modulus	5.40 GPa	783 ksi	in plane
Charpy Impact, Notched	3.00 J/cmÂ²	14.3 ft-lb/inÂ²	ISO 179

Mechanical Properties	Metric	English	Comments
Thermal Properties	Metric	English	Comments
CTE, linear	10.0 $\mu\text{m/m-}^{\circ}\text{C}$	5.56 $\mu\text{in/in-}^{\circ}\text{F}$	ISO 11359-2
Specific Heat Capacity	1.10 J/g- $^{\circ}\text{C}$	0.263 BTU/lb- $^{\circ}\text{F}$	
Thermal Conductivity	0.700 W/m-K	4.86 BTU-in/hr-ft 2 - $^{\circ}\text{F}$	
Maximum Service Temperature, Air	165 $^{\circ}\text{C}$	329 $^{\circ}\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	≥ 150 $^{\circ}\text{C}$	≥ 302 $^{\circ}\text{F}$	ISO 75-2
Minimum Service Temperature, Air	-40.0 $^{\circ}\text{C}$	-40.0 $^{\circ}\text{F}$	
Glass Transition Temp, Tg	170 $^{\circ}\text{C}$	338 $^{\circ}\text{F}$	ISO 11357-2
Flammability, UL94	HB @Thickness 3.00 mm	HB @Thickness 0.118 in	
Oxygen Index	22 %	22 %	ISO 4589-2
Glow Wire Test	750 $^{\circ}\text{C}$	1380 $^{\circ}\text{F}$	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	IEC 60093
Dielectric Constant	4.0	4.0	IEC 60250
Dielectric Strength	30.0 kV/mm	762 kV/in	IEC 60243-1
Dissipation Factor	0.010	0.010	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Processing Properties	Metric	English	Comments
Processing Temperature	135 - 160 $^{\circ}\text{C}$	275 - 320 $^{\circ}\text{F}$	Injection moulding, matched metal die

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