

Menzolit Menzolit[®] BMC 1100 Unsaturated Polyester UP

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

Material Notes:

BMC 1100 is a special BMC for high strength application. The glass content is set to a level that provides sufficient mouldability with high strength and stiffness properties. The selection of the resin and glass fibres provide good properties at high mechanical loads even if they are cyclic or impact like. The fire retardancy level HB according to the UL 94 is achieved. Typical applications are functional components for the automotive industry and chemical engineering. The material is especially suited for highly loaded or fast moving components. Information Provided by Menzolit

Order this product through the following link:

http://www.lookpolymers.com/polymer_Menzolit-Menzolit-BMC-1100-Unsaturated-Polyester-UP.php

Physical Properties	Metric	English	Comments
Density	1.80 g/cc	0.0650 lb/in ³	ISO 1183
Water Absorption	<= 0.30 %	<= 0.30 %	ISO 62
Linear Mold Shrinkage	0.00030 cm/cm	0.00030 in/in	ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	40.0 MPa @Temperature 22.0 °C	5800 psi @Temperature 71.6 °F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	40.0 MPa @Temperature 22.0 °C	5800 psi @Temperature 71.6 °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	13.0 GPa	1890 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	130 MPa @Temperature 22.0 °C	18900 psi @Temperature 71.6 °F	25 mm wide 100 mm long, flat samples; ISO 14125
Flexural Modulus	9.00 GPa @Temperature 22.0 °C	1310 ksi @Temperature 71.6 °F	25 mm wide 100 mm long, flat samples; ISO 14125
Poissons Ratio	0.30	0.30	
Shear Modulus	5.00 GPa	725 ksi	in plane
Charpy Impact, Notched	3.50 J/cm ²	16.7 ft-lb/in ²	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	10.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	5.56 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
Specific Heat Capacity	1.10 J/g- $\text{Å}^\circ\text{C}$	0.263 BTU/lb- $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.700 W/m-K	4.86 BTU-in/hr-ft Å^2 - $\text{Å}^\circ\text{F}$	
Maximum Service Temperature, Air	170 $\text{Å}^\circ\text{C}$	338 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	$\geq 150 \text{ Å}^\circ\text{C}$	$\geq 302 \text{ Å}^\circ\text{F}$	ISO 75-2
Minimum Service Temperature, Air	-40.0 $\text{Å}^\circ\text{C}$	-40.0 $\text{Å}^\circ\text{F}$	
Glass Transition Temp, Tg	162 $\text{Å}^\circ\text{C}$	324 $\text{Å}^\circ\text{F}$	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 $\text{Å}^\circ\text{C}$	1380 $\text{Å}^\circ\text{F}$	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 $\text{Å}^\circ\text{C}$	275 - 320 $\text{Å}^\circ\text{F}$	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