

## Menzolit Menzolit<sup>®</sup> BMC 0410 Unsaturated Polyester UP

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

### Material Notes:

BMC 0410 is a low profile BMC with zero shrinkage and low coefficient of thermal expansion. It is especially suited for precision mouldings in office and communication equipment. The combination of well-balanced mould ability with dimensional stability enables the design of complex shapes with highest dimension accuracy. To improve moulding we strongly recommend chrome-plated steel moulds and injector pins on male and female part. Information Provided by Menzolit

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Menzolit-Menzolit-BMC-0410-Unsaturated-Polyester-UP.php](http://www.lookpolymers.com/polymer_Menzolit-Menzolit-BMC-0410-Unsaturated-Polyester-UP.php)

Physical Properties	Metric	English	Comments
Density	1.90 g/cc	0.0686 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.50 %	<= 0.50 %	ISO 62
Linear Mold Shrinkage	-0.000500 cm/cm	-0.000500 in/in	ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	27.0 MPa @Temperature 22.0 °C	3920 psi @Temperature 71.6 °F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	27.0 MPa @Temperature 22.0 °C	3920 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	14.0 GPa	2030 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	60.0 MPa @Temperature 22.0 °C	8700 psi @Temperature 71.6 °F	25 mm wide 100 mm long, flat samples; ISO 14125
Flexural Modulus	11.0 GPa @Temperature 22.0 °C	1600 ksi @Temperature 71.6 °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	1.70 J/cm <sup>2</sup>	8.09 ft-lb/in <sup>2</sup>	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 $\text{Å}^2$ - $\text{Å}^\circ\text{F}$	
Maximum Service Temperature, Air	165 $\text{Å}^\circ\text{C}$	329 $\text{Å}^\circ\text{F}$	
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	170 $\text{Å}^\circ\text{C}$	338 $\text{Å}^\circ\text{F}$	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](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