

## Menzolit Menzolit<sup>®</sup> SMC 0600 Unsaturated Polyester UP

Category : Polymer , Thermoset , Polyester, TS , Thermoset Polyester Glass SMC

### Material Notes:

SMC 0600 is a specially formulated SMC for reduced moulding pressure (< 30 bar). The glass level has been selected to combine good mouldability with strength and stiffness. Even without a specific fire retardant a fire retardancy level of HB according to UL 94 is achieved. The product may be used if the available press tonnage is not sufficient to mould a given component . An additional area of applications is prototype production in KIRKSITE or aluminum moulds. Another typical application is moulding on presses that have been originally designed for wet- or cold- press-moulding. Information Provided by Menzolit

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Menzolit-Menzolit-SMC-0600-Unsaturated-Polyester-UP.php](http://www.lookpolymers.com/polymer_Menzolit-Menzolit-SMC-0600-Unsaturated-Polyester-UP.php)

Physical Properties	Metric	English	Comments
Density	1.60 g/cc	0.0578 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.50 %	<= 0.50 %	ISO 62
Linear Mold Shrinkage	0.00080 cm/cm	0.00080 in/in	ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	50.0 MPa @Temperature 22.0 °C	7250 psi @Temperature 71.6 °F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	50.0 MPa @Temperature 22.0 °C	7250 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	10.0 GPa	1450 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	133 MPa @Temperature 22.0 °C	19300 psi @Temperature 71.6 °F	25 mm wide 100 mm long, flat samples; ISO 14125
Flexural Modulus	7.00 GPa @Temperature 22.0 °C	1020 ksi @Temperature 71.6 °F	25 mm wide 100 mm long, flat samples; ISO 14125
Poissons Ratio	0.30	0.30	
Shear Modulus	3.80 GPa	551 ksi	in plane
Charpy Impact, Notched	6.00 J/cm <sup>2</sup>	28.6 ft-lb/in <sup>2</sup>	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	12.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	6.67 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	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)	$\geq 200 \text{ Å}^\circ\text{C}$	$\geq 392 \text{ Å}^\circ\text{F}$	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	20.0 kV/mm	508 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	120 - 150 $\text{Å}^\circ\text{C}$	248 - 302 $\text{Å}^\circ\text{F}$	Compression 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