

Menzolit Menzolit® SMC 0410 Unsaturated Polyester UP

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

Material Notes:

SMC 0410 is a Premium Class-A SMC for on-line painted exterior body applications on cars developed with CCC technology. These compounds mould to parts with excellent surface quality for on-line painted body panels at high bake temperatures (190- 200 °C). The parts have to be primed with a conductive primer before e-coating. Moulded parts comply with all regulations of the automotive industry including low C-emissions. Surface defects like waviness, fibre patterns and orange peel are not existent with this product. To achieve the highest surface quality, we recommend that tool surfaces are mirror polished. The parts show very good adhesion to paint or In Mould Coating (IMC). Information Provided by Menzolit

Order this product through the following link:

http://www.lookpolymers.com/polymer_Menzolit-Menzolit-SMC-0410-Unsaturated-Polyester-UP.php

Physical Properties	Metric	English	Comments
Density	1.90 g/cc	0.0686 lb/in ³	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	90.0 MPa @Temperature 22.0 °C	13100 psi @Temperature 71.6 °F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	90.0 MPa @Temperature 22.0 °C	13100 psi @Temperature 71.6 °F	25mm flat samples, compression moulded; ISO 527-4
Elongation at Yield	1.5 %	1.5 %	tensile rupture strain; ISO 527-4
Modulus of Elasticity	12.0 GPa	1740 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	190 MPa @Temperature 22.0 °C	27600 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
Compressive Yield Strength	100 MPa	14500 psi	ISO 14126
Poissons Ratio	0.30	0.30	
Shear Modulus	4.60 GPa	667 ksi	in plane

Mechanical Properties	Metric	English	Comments
Charpy Impact, Notched	0.60 J/cm ²	40.0 ft-lb/in ²	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	10.0 Åµm/m-Å°C	5.56 Åµin/in-Å°F	ISO 11359-2
Specific Heat Capacity	1.10 J/g-Å°C	0.263 BTU/lb-Å°F	
Thermal Conductivity	0.700 W/m-K	4.86 BTU-in/hr-ftÅ²-Å°F	
Maximum Service Temperature, Air	165 Å°C	329 Å°F	
Deflection Temperature at 1.8 MPa (264 psi)	>= 200 Å°C	>= 392 Å°F	ISO 75-2
Minimum Service Temperature, Air	-40.0 Å°C	-40.0 Å°F	
Glass Transition Temp, Tg	200 Å°C	392 Å°F	ISO 11357-2
Flammability, UL94	HB	HB	
	@Thickness 3.00 mm	@Thickness 0.118 in	
Oxygen Index	22 %	22 %	ISO 4589-2
Glow Wire Test	750 Å°C	1380 Å°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	24.0 kV/mm	610 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	145 - 155 Å°C	293 - 311 Å°F	Compression 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