

Menzolit Menzolit[®] SMC 1400 Unsaturated Polyester UP

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

Material Notes:

SMC 1400 is a special SMC being used in the environment of a combustion engine. The glass level has been selected to combine good mouldability with good stiffness and strength properties. The product shows an excellent resistance to common fuels, lubricants, cooling liquids and cleaning materials. Because of its specific matrix resin it is suitable for cyclic loads at higher service temperatures. Typical applications are valve covers, camshaft drive covers, gear box covers as well as oil pans or housings for auxiliary drive systems. Information Provided by Menzolit

Order this product through the following link:

http://www.lookpolymers.com/polymer_Menzolit-Menzolit-SMC-1400-Unsaturated-Polyester-UP.php

Physical Properties	Metric	English	Comments
Density	1.90 g/cc	0.0686 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	130 MPa @Temperature 22.0 Â°C	18900 psi @Temperature 71.6 Â°F	25mm flat samples, compression moulded; ISO 527-4
Tensile Strength, Yield	130 MPa @Temperature 22.0 Â°C	18900 psi @Temperature 71.6 Â°F	25mm flat samples, compression moulded; ISO 527-4
Elongation at Yield	1.6 %	1.6 %	tensile rupture strain; ISO 527-4
Modulus of Elasticity	10.0 GPa	1450 ksi	25mm flat samples, compression moulded; ISO 527-4
Flexural Strength	250 MPa @Temperature 22.0 Â°C	36300 psi @Temperature 71.6 Â°F	25 mm wide 100 mm long, flat samples; ISO 14125
Flexural Modulus	10.0 GPa @Temperature 22.0 Â°C	1450 ksi @Temperature 71.6 Â°F	25 mm wide 100 mm long, flat samples; ISO 14125
Compressive Yield Strength	140 MPa	20300 psi	ISO 14126
Poissons Ratio	0.30	0.30	
Shear Modulus	3.80 GPa	551 ksi	in plane

Charpy Impact, Notched Mechanical Properties	10.0 J/cm ² Metric	47.6 ft-lb/in ² English	ISO 179 Comments
---	----------------------------------	---------------------------------------	---------------------

Thermal Properties	Metric	English	Comments
CTE, linear	12.0 Åµm/m-Å°C	6.67 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-ftÅ ² -Å°F	
Maximum Service Temperature, Air	170 Å°C	338 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	162 Å°C	324 Å°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 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	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 Å°C	275 - 320 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