Menzolit® SMC 1100

Thermoset Polyester

Menzolit Ltd (UK)

Message:

Menzolit® SMC 1100 is a sheet moulding compound based on unsaturated polyester resin. The product is glass fibre reinforced and contains mineral fillers. In case of fire the product doesn't melt, neither does it form droplets nor is smoke generation excessive. The material is compression moulded in heated steel moulds. It is recommended to work with chrome plated tools. The product contains no halogens nor heavy metals.
Menzolit® SMC 1100 is a special vinylester SMC for high strength applications. The reinforcement has been put to a level that combines mouldability with high strength and stiffness properties. The specific resin and a higher amount of glass fibers results in high mechanical strength. Durability is improved as well. Even without a specific fire retardant, the fire retardancy level HB according UL 94 is achieved. Typical applictions are structural components within the automotive industry or mechanical engineering. It is suitable for load carrying applications or fast moving and accelerated components.

General Information			
UL YellowCard	E120779-100101997		
Filler / Reinforcement	Glass\Mineral,45% Filler by Weight		
Features	Flame Retardant Good Moldability Good Stiffness Halogen Free High Heat Resistance High Strength Low Smoke Emission		
Uses	Automotive Applications Engineered Applications		
Appearance	Colors Available		
Forms	SMC - Sheet Molding Compound		
Processing Method	Compression Molding		
Part Marking Code (ISO 11469)	>UP-(MD+GF)70<		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.80	g/cm³	ISO 1183
Molding Shrinkage			
-- [1]	0.0	%	DIN 53464
--	0.040	%	ISO 2577
Water Absorption (Saturation, 23°C)	< 0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Compression Molded)	13000	MPa	ISO 527-2
Tensile Stress (Yield, Compression Molded)	150	MPa	ISO 527-2
Tensile Strain (Break, Compression Molded)	1.6	%	ISO 527-2
Flexural Modulus (Compression Molded)	13000	MPa	ISO 178

Flexural Stress (Compression Molded)	280	MPa	ISO 178
Compressive Stress	120	MPa	ISO 14126
Poisson's Ratio	0.30		Internal Method
Matrix Crazing Strain	0.60	%	Internal Method
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (Compression Molded)	130	kJ/m^2	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	> 200	°C	ISO 75-2/A
Continuous Use Temperature	170	°C	Internal Method
Glass Transition Temperature	162	°C	DSC
CLTE - Flow	1.2E-5	cm/cm/°C	ISO 11359-2
Flammability	**Nominal Value**		**Test Method**
Flame Rating (3.00 mm)	HB		UL 94
Injection	**Nominal Value**	**Unit**	
Mold Temperature	135 to 160	°C	
Injection Pressure	8.00 to 10.0	MPa	
NOTE			
1.	Post Molding Shrinkage		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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Phone: +86 13424755533

Email: sales@su-jiao.com

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