Menzolit® SMC 0412

Thermoset Polyester

Menzolit Ltd (UK)

Message:

Menzolit® SMC 0412 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.
Menzolit® SMC 0412 is a premium Class-A SMC for on-line painted conductive exterior body applications on cars. These compounds mould to parts with excellent surface quality and low surface conductivity for e-coating of on-line painted body panels. Therefore parts do not require priming with a conductive primer before e-coating. The moulded parts provide an excellent surface quality. 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 excellent temperature resistance allows online painting at high bake temperatures (190- 200 °C). The parts show very good adhesion to paint or In Mould Coating (IMC). Because of its zero shrink properties warpage is eliminated and parts follow exactly the dimensions of the cold mould.

General Information			
Filler / Reinforcement	Glass\Mineral,30% Filler by Weight		
Features	Electrically Conductive Good Surface Finish Halogen Free Low Smoke Emission Paintable		
Uses	Automotive Exterior Parts		
Appearance	Colors Available		
Processing Method	Compression Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.90	g/cm³	ISO 1183
Molding Shrinkage			
-- [1]	0.0	%	DIN 53464
--	-0.050	%	ISO 2577
Water Absorption (23°C, 24 hr)	< 0.50	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	11000	MPa	ISO 527-4
Tensile Stress (Break)	90.0	MPa	ISO 527-4
Flexural Modulus	10000	MPa	ISO 14125
Flexural Stress	180	MPa	ISO 14125
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength	80	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	> 200	°C	ISO 75-2/A
Continuous Use Temperature	165	°C	

Glass Transition Temperature	200	°C	ISO 11357-2
CLTE - Flow	1.0E-5	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Comparative Tracking Index	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (3.00 mm)	HB		UL 94
Glow Wire Ignition Temperature	750	°C	IEC 60695-2-13
Oxygen Index	22	%	ISO 4589-2
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Fiber Content	30	%	ISO 1172
Glow Bar	BH 2 <=95		IEC 60707-3
Material Designation	>UP-(MD+GF)75<		EN 14598-1
Injection	**Nominal Value**	**Unit**	
Mold Temperature	140 to 160	°C	
Injection Pressure	8.00 to 10.0	MPa	
NOTE			
1.	Post Molding Shrinkage		

Recommended distributors for this material

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