



CALCIUM CARBONATE REINFORCED PP

SINPOLENE CPP5540

Provisional data sheet (July' 09)

SINPOLENE CPP5540 is premium 40% CaCO₃ reinforced polypropylene thermoplastic moulding compound. It has a good balance of mechanical and physical properties together with easy flow characteristics and good UV stability.

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	UNITS	TYPICAL VALUES
<u>MECHANICAL</u>			
Tensile Yield strength	D-638	MPa	21
Elongation @ Break	D-638	%	77
Flexural Strength	D-790	MPa	34
Flexural Modulus	D-790	MPa	1960
Notched Izod Impact Strength @ 23°C	D-256	J/m	26
<u>THERMAL</u>			
Heat Distortion Temperature @0.46 MPa	D-648	°C	118
Vicat Softening Point @1 kg	D-1525	°C	148
<u>PHYSICAL</u>			
Specific Gravity	D-792	--	1.22
Melt Flow Index	D-1238	g/10min	13
<u>PROCESSING</u>			
Mold Shrinkage	D-955	%	0.8 – 1.0

The properties of SINPOLENE material may be affected by moulding conditions and mould design. These factors should be taken into consideration when designing components.

APPLICATIONS:

Appliances' base, Speaker frames, Industrial components and boxes

Custom colors are available upon request.

PROCESSING

The optimum cylinder temperature will depend upon the size and complexity of the moulding.

Cylinder Temperature : 220 - 260 °C

Mould Temperature : 40 - 60 °C

Mould Design

Moulds should be designed to obtain rapid filling and multiple gates for large are mouldings are recommended with the gates positioned to avoid the possible formation of weld lines.

Machine and Mould Wear

The intensive compounding action which takes place during the manufacture of SINPOLENE materials ensures encapsulation of the reinforcement in polymer. This tends to minimize wear on injection screws and moulds. There is no evidence to show that any SINPOLENE materials causes corrosion of mould steels.

Pre-Drying

Pre-drying : 95°C for 2 to 4 hours in a shallow tray is recommended.

Excess moisture may show as splash marks on the surface of the finished mouldings.

Use of Regrind

Runners, sprues and scrap mouldings can be reground and blended with virgin material. Regrind additions should not exceed 10% by weight of the virgin material, otherwise some reduction in properties may be experienced.

Health and Safety

Owing to the heat retention properties of calcium carbonate reinforced polypropylene, circumstances can arise when freak ignition may take place. It is recommended, therefore, that this factor be borne in mind when disposing of purgings and to avoid any fire hazard, the waste material should be cooled in water.

The information presented in this data sheet is believed to be reliable and accurate. Since the conditions under which these materials are used are beyond our control, all suggestions and recommendations are made without guarantee. Values presented are typical and intended to serve as guides only. These values should not be considered as limits to the specifications.