

# ZENITE® SEA10B

Zenite® SEA 10B is a 30% mineral filled grade. It offers thermal conductivity, excellent mechanical strength, surface appearance, low warpage, and excellent dimensional stability. Application for this grade is for a part with thin wall design in automotive and electronics.

## Rheological properties

|                                    |       |                 |
|------------------------------------|-------|-----------------|
| Moulding shrinkage, parallel       | 0.1 % | ISO 294-4, 2577 |
| Moulding shrinkage range, parallel | 0.1 % | ISO 294-4, 2577 |
| Moulding shrinkage, normal         | 0.6 % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal   | 0.6 % | ISO 294-4, 2577 |

## Typical mechanical properties

|                                      | dry/cond. |                   |              |
|--------------------------------------|-----------|-------------------|--------------|
| Tensile Modulus                      | 14000 / - | MPa               | ISO 527-1/-2 |
| Stress at break, 5mm/min             | 143 / -   | MPa               | ISO 527-1/-2 |
| Strain at break, 5mm/min             | 2.7 / -   | %                 | ISO 527-1/-2 |
| Flexural Modulus                     | 13000 / - | MPa               | ISO 178      |
| Flexural Strength                    | 160 / -   | MPa               | ISO 178      |
| Charpy impact strength, 23°C         | 29 / -    | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23°C | 10 / -    | kJ/m <sup>2</sup> | ISO 179/1eA  |

## Thermal properties

|                                             |          |                |
|---------------------------------------------|----------|----------------|
| Temp. of deflection under load, 1.8 MPa     | 240 °C   | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 8 E-6/K  | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 60 E-6/K | ISO 11359-1/-2 |

## Electrical properties

|                             | dry/cond. |       |               |
|-----------------------------|-----------|-------|---------------|
| Relative permittivity, 1MHz | 3.63 / -  |       | IEC 62631-2-1 |
| Dissipation factor, 1MHz    | 0.028 / - | E-4   | IEC 62631-2-1 |
| Volume resistivity          | >1E13 / - | Ohm.m | IEC 62631-3-1 |
| Surface resistivity         | >1E14 / - | Ohm   | IEC 62631-3-2 |
| Electric strength           | 30 / -    | kV/mm | IEC 60243-1   |

## Other properties

|                          |                        |                |
|--------------------------|------------------------|----------------|
| Humidity absorption, 2mm | 0.03 %                 | Sim. to ISO 62 |
| Density                  | 1640 kg/m <sup>3</sup> | ISO 1183       |

## Injection

|                                 |             |
|---------------------------------|-------------|
| Drying Temperature              | 150 °C      |
| Drying Time, Dehumidified Dryer | 6 h         |
| Processing Moisture Content     | 0.01 %      |
| Max. mould temperature          | 80 - 140 °C |
| Injection speed                 | medium-fast |



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## Characteristics

Additives

Mineral Filler

