

ZENITE® 451P

Zenite® 451P 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

Tensile Modulus	14000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	155 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.3 %	ISO 527-1/-2
Flexural Modulus	13000 MPa	ISO 178
Flexural Strength	166 MPa	ISO 178
Charpy impact strength, 23°C	50 kJ/m²	ISO 179/1eU

Thermal properties

Temp. of deflection under load, 1.8 MPa	243 °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

Flammability

Burning Behav. at thickness h	V-0 class	UL 94
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Electrical properties

Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E14 Ohm	IEC 62631-3-2

Other properties

Humidity absorption, 2mm	0.03 %	Sim. to ISO 62
Density	1640 kg/m³	ISO 1183

