

ZENITE® ZE55205 - LCP

Description

Zenite® ZE55205 is a black reinforced LCP resin with a high dielectric constant.

Physical properties	Value	Unit	Test Standard
Density	1890	kg/m ³	ISO 1183
Molding shrinkage, parallel	0,1	%	ISO 294-4, 2577
Molding shrinkage, normal	0,6	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	14260	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	125	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	2,5	%	ISO 527-2/1A
Flexural modulus, 23°C	12200	MPa	ISO 178
Flexural strength, 23°C	190	MPa	ISO 178
Charpy impact strength, 23°C	36	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	30	kJ/m ²	ISO 179/1eA
Izod impact notched, 23°C	29	kJ/m ²	ISO 180/1A
Izod impact unnotched, 23°C	35	kJ/m ²	ISO 180/1U

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	276	°C	ISO 75-1, -2

Electrical properties	Value	Unit	Test Standard
Relative permittivity, 1MHz	4,52	-	IEC 60250
Dissipation factor, 1MHz	190	E-4	IEC 60250

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0,01	%	-
Drying time	5	h	-
Drying temperature	≥150	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 30	°C	-
Feeding zone temperature	40 - 60	°C	-
Zone1 temperature	320 - 330	°C	-
Zone2 temperature	335 - 345	°C	-
Zone3 temperature	335 - 345	°C	-
Zone4 temperature	335 - 345	°C	-
Nozzle temperature	335 - 345	°C	-
Melt temperature	330 - 350	°C	-
Mold temperature	80 - 120	°C	-
Pressure	Value	Unit	Test Standard
Injection pressure	500 - 1500	bar	-
Hold pressure	500 - 1500	bar	-
Back pressure max.	30	bar	-

Characteristics

Product Categories

Specialty

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