

CELANEX® J600

40% glass-fiber / mineral filled PBT+PET blend; impact modified low warpage grade; good surface gloss
 Celanex J-600 is a 40% glass/mineral reinforced resin providing excellent warpage resistance, surface gloss and good mechanical properties. Celanex J-600 is particularly suited to applications requiring flatness and good surface appearance in large parts, such as exterior automotive components.

Product information

Part Marking Code (PBT-I+PET)-(GF+MD)40 ISO 11469

Rheological properties

Melt volume-flow rate	18 cm ³ /10min	ISO 1133
Melt mass-flow rate	11 g/10min	ISO 1133
Temperature	265 °C	
Load	2.16 kg	
Melt mass-flow rate, Temperature	265 °C	
Melt mass-flow rate, Load	2.16 kg	
Viscosity number	55 cm ³ /g	ISO 307, 1157, 1628
Moulding shrinkage range, parallel	0.4 - 0.9 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.6 - 1.2 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	11000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	95 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.1 %	ISO 527-1/-2
Flexural Modulus	11000 MPa	ISO 178
Flexural Strength	155 MPa	ISO 178
Charpy impact strength, 23°C	38 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	40 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6.5 kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	5.1 kJ/m ²	ISO 180/1A
Izod impact strength, 23°C	30 kJ/m ²	ISO 180/1U
Hardness, Rockwell, M-scale	69	ISO 2039-2

Thermal properties

Melting temperature, 10°C/min	225 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	190 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220 °C	ISO 75-1/-2
Temp. of deflection under load, 8 MPa	80 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	205 °C	ISO 306
Coeff. of linear therm. expansion, parallel	20 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	68 E-6/K	ISO 11359-1/-2

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Flammability

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	0.82 mm	UL 94
Oxygen index	22 %	ISO 4589-1/-2

Electrical properties

Relative permittivity, 100Hz	5.1	IEC 62631-2-1
Relative permittivity, 1MHz	4.4	IEC 62631-2-1
Dissipation factor, 100Hz	100 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	220 E-4	IEC 62631-2-1
Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15 Ohm	IEC 62631-3-2
Electric strength	35 kV/mm	IEC 60243-1
Comparative tracking index	PLC 2 PLC	UL 746A

Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1620 kg/m ³	ISO 1183

Injection

Drying Temperature	120 - 130 °C
Drying Time, Dehumidified Dryer	4 h
Processing Moisture Content	0.02 %
Max. mould temperature	65 - 96 °C
Injection speed	medium-fast

Processing Texts

Pre-drying To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40°F (-40°C) at 250°F (121°C) for 4 hours.

Longer pre-drying times/storage For subsequent storage of the material in the dryer until processed (<= 60 h) it is necessary to lower the temperature to 100° C.

Other Approvals

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OEM	Specification	Additional Information
Stellantis - Chrysler	CPN 2666	Black
Stellantis - Chrysler	CPN 2810	Natural