CELANEX® J600

CELANEX® PBT

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

Resin Identification	(PBT+PET)-I-(GF+MD)40	ISO 1043
Part Marking Code	>(PBT+PET)-I-(GF+MD)40<	ISO 11469

Rheological properties

Melt volume-flow rate	18	cm^3/10min	ISO 1133
Temperature	509	°F	
Load	4.76	lb	
Melt mass-flow rate	11	g/10min	ISO 1133
Melt mass-flow rate, Temperature	509	°F	
Melt mass-flow rate, Load	4.76	lb	
Viscosity number	1520	in^3/lb	ISO 307, 1628
Molding shrinkage range, parallel	0.4 - 0.9	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.6 - 1.2	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1.6E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	13800	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.1	%	ISO 527-1/-2
Flexural modulus	1.6E6	psi	ISO 178
Flexural strength	22500	psi	ISO 178
Charpy impact strength, 23°C	18.1	ftlb/in^2	ISO 179/1eU
Charpy impact strength, -30°C	19	ftlb/in^2	ISO 179/1eU
Charpy notched impact strength, 23°C	3.09	ftlb/in^2	ISO 179/1eA
Charpy notched impact strength, -30°C	3.09	ftlb/in^2	ISO 179/1eA
Izod notched impact strength, 23°C	2.43	ftlb/in^2	ISO 180/1A
Izod impact strength, 23°C	14.3	ftlb/in^2	ISO 180/1U
Hardness, Rockwell, M-scale	69		ISO 2039-2

Thermal properties

Melting temperature, 10°C/min	500	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	374	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	428	°F	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	176	°F	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	401	°F	ISO 306
Coefficient of linear thermal expansion (CLTE), parallel	0.11	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.378	E-4/°F	ISO 11359-1/-2

CELANEX® J600

CELANEX® PBT

Flammability

Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.0323	in	IEC 60695-11-10
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	889	kV/in	IEC 60243-1
Comparative tracking index	350		IEC 60112
Arc Resistance	118	s	UL 746B

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.4	%	Sim. to ISO 62
Water absorption, Immersion 24h	0.07	%	Sim. to ISO 62
Density	0.0585	lb/in^3	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	248	°F
Drying Time, Dehumidified Dryer	4	h
Processing Moisture Content	≤0.02	%
Melt Temperature Optimum	509	°F
Min. melt temperature	491	°F
Max. melt temperature	527	°F
Max. screw tangential speed	0.1 - 0.3	m/s
Mold Temperature Optimum	176	°F
Min. mold temperature	140	°F
Max. mold temperature	266	°F

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Stellantis	B62 0300 / 61/218E/215M/C1/C1B	01378_20_04238, CPN2666 BLACK, CPN2810 NATURAL
Stellantis - Chrysler	MS.50103 / CPN-2666	Black
Stellantis - Chrysler	MS.50103 / CPN-2810	Natural

Revised: 2025-07-04 Source: Celanese Materials Database

CELANEX® J600

CELANEX® PBT

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, Low Warpage

Additional information

Processing Notes

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.

Storage

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

Revised: 2025-07-04 Source: Celanese Materials Database

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values. Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.
Copyright © 2026 Celanese or its affiliates. All rights reserved.
Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates.