

ZENITE® 6130L

Liquid Crystal Polymer

Zenite® 6130L is a lubricated 30% glass reinforced LCP resin. It is well suited for use in automotive, electrical/electronic, telecommunications, and aerospace industries.

Product information

Resin Identification	LCP-GF30	ISO 1043
Part Marking Code	>LCP-GF30<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0.1 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.8 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	13000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	130 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Flexural modulus	12000 MPa	ISO 178
Charpy impact strength, 23°C	35 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	25 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 ^[C]	

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	335 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	265 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	3 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	70 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.38 mm	IEC 60695-11-10
UL recognition	yes	UL 94

Electrical properties

Relative permittivity, 1MHz	4	IEC 62631-2-1
Relative permittivity, 1GHz	4.2	IEC 61189-2-721
Dissipation factor, 1MHz	310 E-4	IEC 62631-2-1
Volume resistivity	1E14 Ohm.m	IEC 62631-3-1
Surface resistivity	1E16 Ohm	IEC 62631-3-2
Electric strength	36 kV/mm	IEC 60243-1
Comparative tracking index	175	IEC 60112
Dissipation factor, printed circuits and boards, 2.5 GHz	50 E-4	IEC 61189-2-721

ZENITE® 6130L

Liquid Crystal Polymer

Physical/Other properties

Density	1620 kg/m ³	ISO 1183
Bulk density	750 kg/m ³	ISO 60

Injection

Drying Recommended	yes
Drying Temperature	150 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.01 %
Melt Temperature Optimum	355 °C
Min. melt temperature	350 °C
Max. melt temperature	360 °C
Screw tangential speed	0.2 - 0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Back pressure	3 MPa
Ejection temperature	290 °C

Characteristics

Processing	Injection Moulding
Special characteristics	Flame retardant, Heat stabilised or stable to heat, High Flow, Lead-free soldering resistant

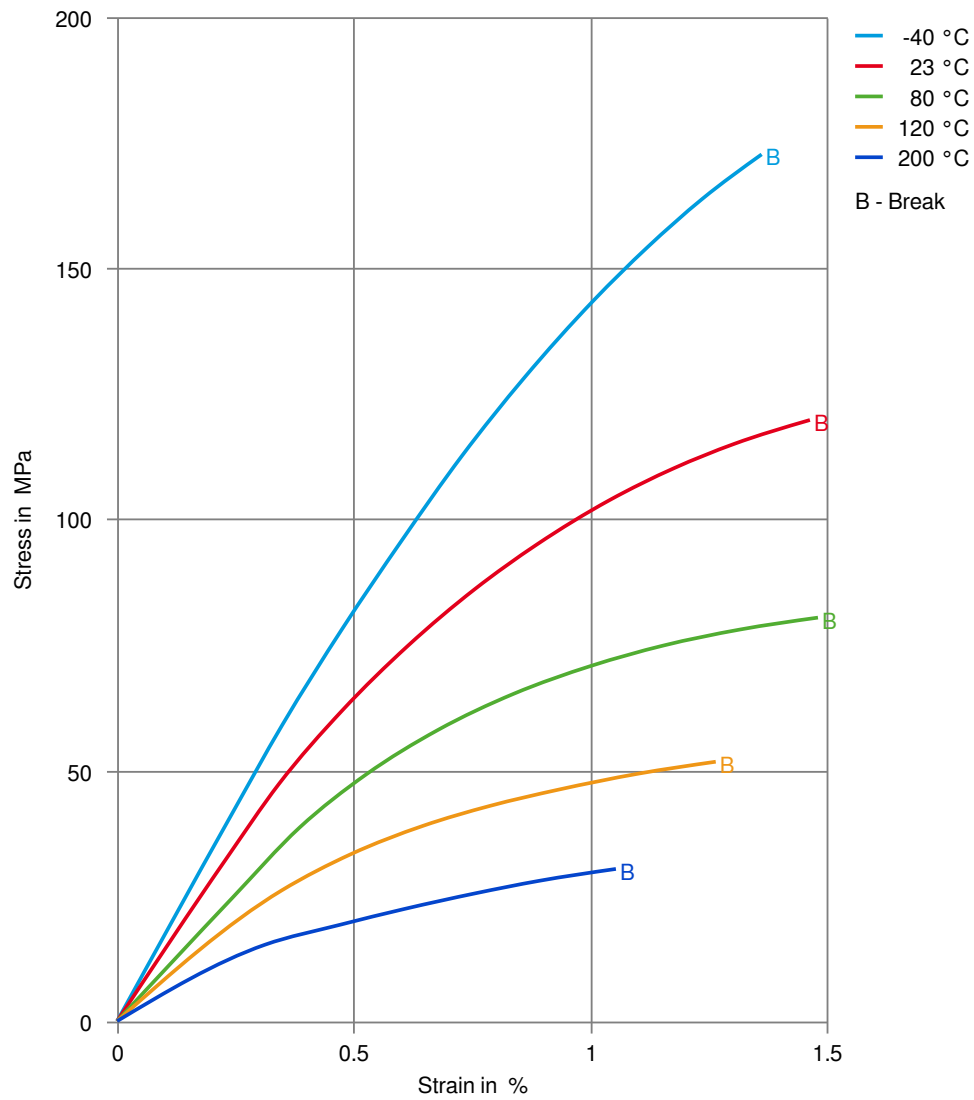
Automotive

OEM	ADDITIONAL INFORMATION
General Motors	Special Parts Approval, See Your CE Account Representative for Further Details.

ZENITE® 6130L

Liquid Crystal Polymer

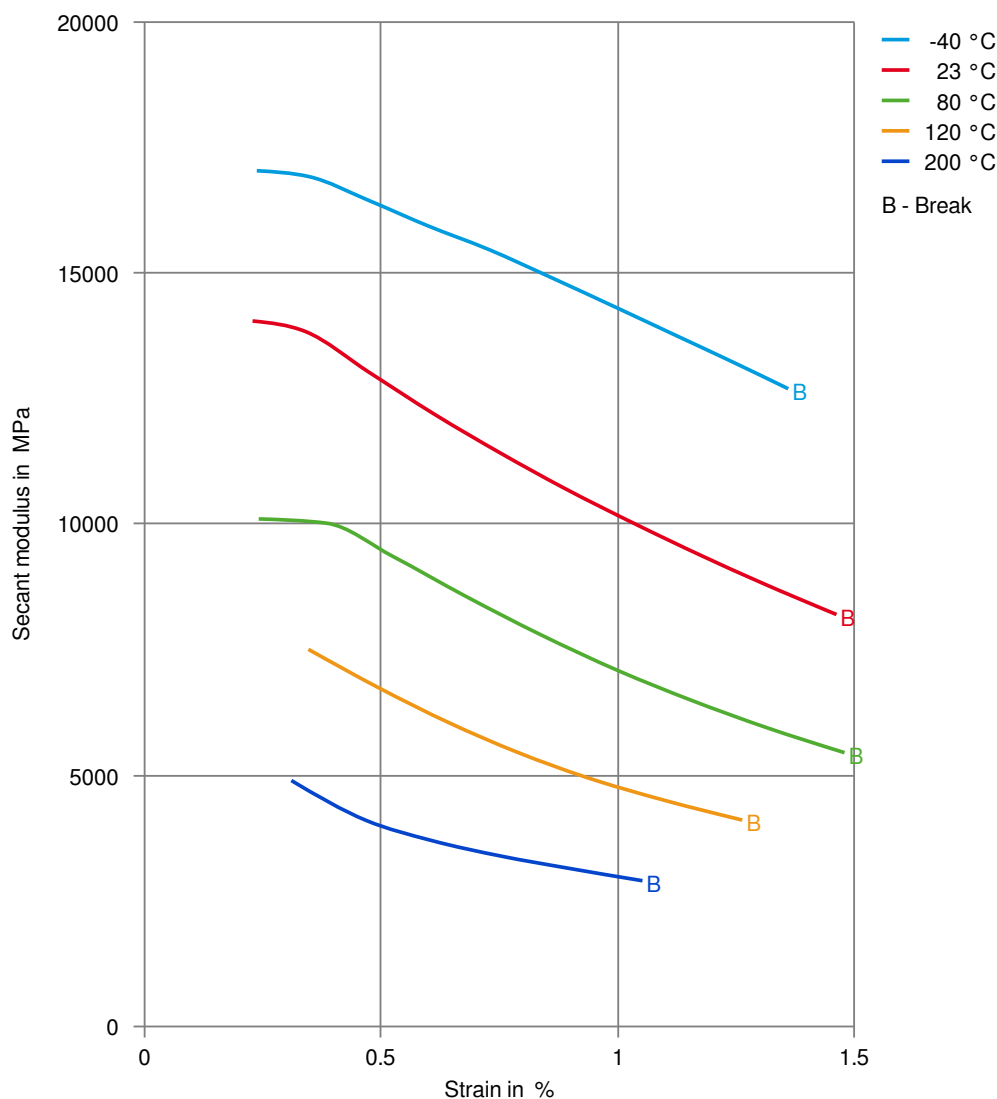
Stress-strain



ZENITE® 6130L

Liquid Crystal Polymer

Secant modulus-strain



Printed: 2025-09-03

Page: 4 of 4

Revised: 2025-08-08 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. Colourants or other additives may cause significant variations in data values. Properties of moulded 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 © 2025 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.