

# ZENITE® 6130LX

30% glass reinforced, lubricated, improved weldline strength

Zenite® 6130LX is a 30% glass fiber reinforced liquid crystal polymer for injection molding. and It is well suited for all kinds of demanding applications.

## Rheological properties

|                                    |       |                 |
|------------------------------------|-------|-----------------|
| Moulding shrinkage range, parallel | 0.1 % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal   | 0.6 % | ISO 294-4, 2577 |

## Typical mechanical properties

|                                        |                      |              |
|----------------------------------------|----------------------|--------------|
| Tensile Modulus                        | 15000 MPa            | ISO 527-1/-2 |
| Stress at break, 5mm/min               | 145 MPa              | ISO 527-1/-2 |
| Strain at break, 5mm/min               | 2 %                  | ISO 527-1/-2 |
| Flexural Modulus                       | 12800 MPa            | ISO 178      |
| Flexural Strength                      | 220 MPa              | ISO 178      |
| Charpy impact strength, 23°C           | 40 kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength, 23°C   | 15 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy notched impact strength, -30 °C | 15 kJ/m <sup>2</sup> | ISO 179/1eA  |

## Thermal properties

|                                             |          |                |
|---------------------------------------------|----------|----------------|
| Melting temperature, 10 °C/min              | 335 °C   | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 280 °C   | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 3 E-6/K  | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 73 E-6/K | ISO 11359-1/-2 |

## Flammability

|                                      |           |               |
|--------------------------------------|-----------|---------------|
| Burning Behav. at 1.5mm nom. thickn. | V-0 class | UL 94         |
| Thickness tested                     | 1.5 mm    | UL 94         |
| Burning Behav. at thickness h        | V-0 class | UL 94         |
| Thickness tested                     | 0.75 mm   | UL 94         |
| UL recognition                       | yes       | UL 94         |
| Burning Behav. 5V at thickness h     | 5VA class | UL 94         |
| Thickness tested                     | 1.0 mm    | UL 94         |
| Oxygen index                         | 51 %      | ISO 4589-1/-2 |

## Electrical properties

|                             |             |               |
|-----------------------------|-------------|---------------|
| Relative permittivity, 1MHz | 4           | IEC 62631-2-1 |
| Dissipation factor, 1MHz    | 310 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           | 34 kV/mm    | IEC 60243-1   |
| Comparative tracking index  | PLC 3 PLC   | UL 746A       |



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## Other properties

|              |                        |          |
|--------------|------------------------|----------|
| Density      | 1660 kg/m <sup>3</sup> | ISO 1183 |
| Bulk density | 820 kg/m <sup>3</sup>  | ISO 60   |

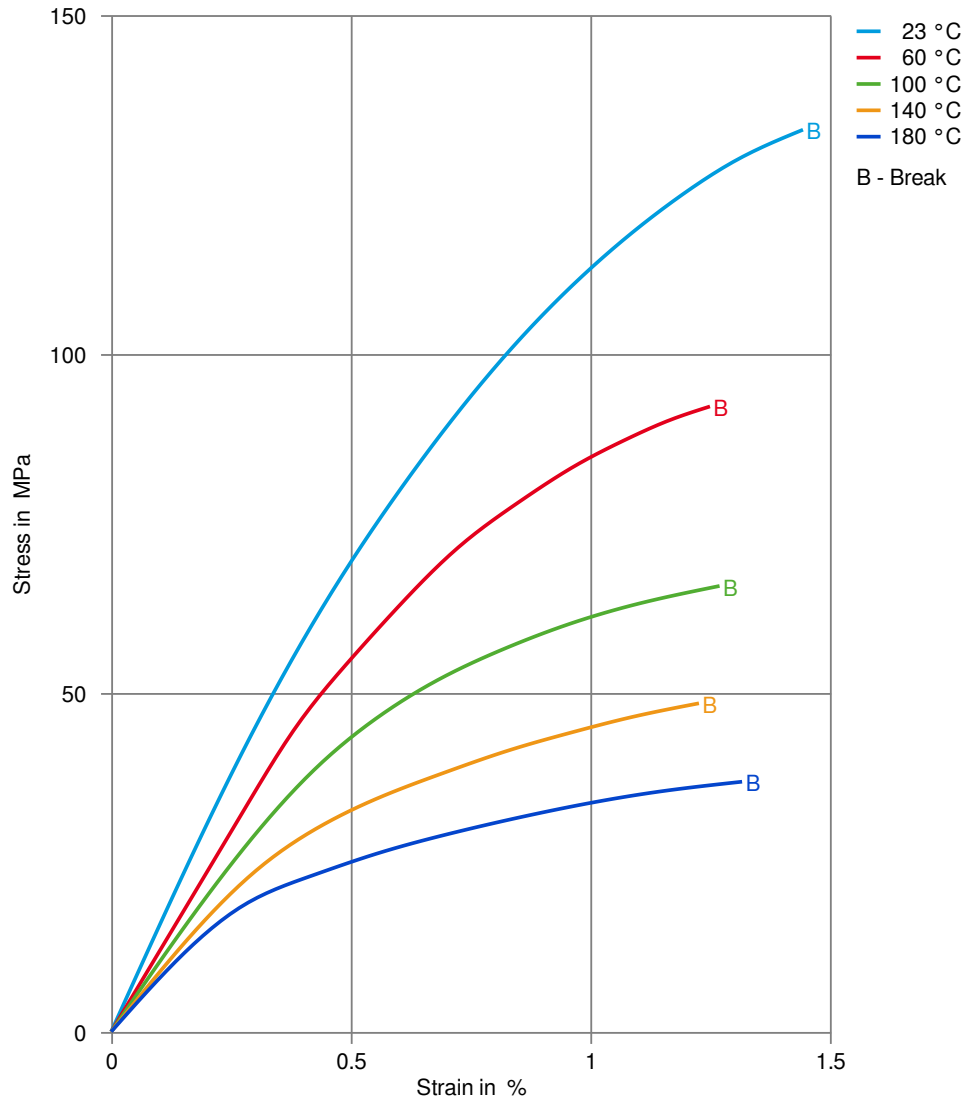
## Injection

|                                 |             |
|---------------------------------|-------------|
| Drying Temperature              | 150 °C      |
| Drying Time, Dehumidified Dryer | 3 h         |
| Processing Moisture Content     | 0.01 %      |
| Max. mould temperature          | 80 - 120 °C |
| Back pressure                   | 3 MPa       |



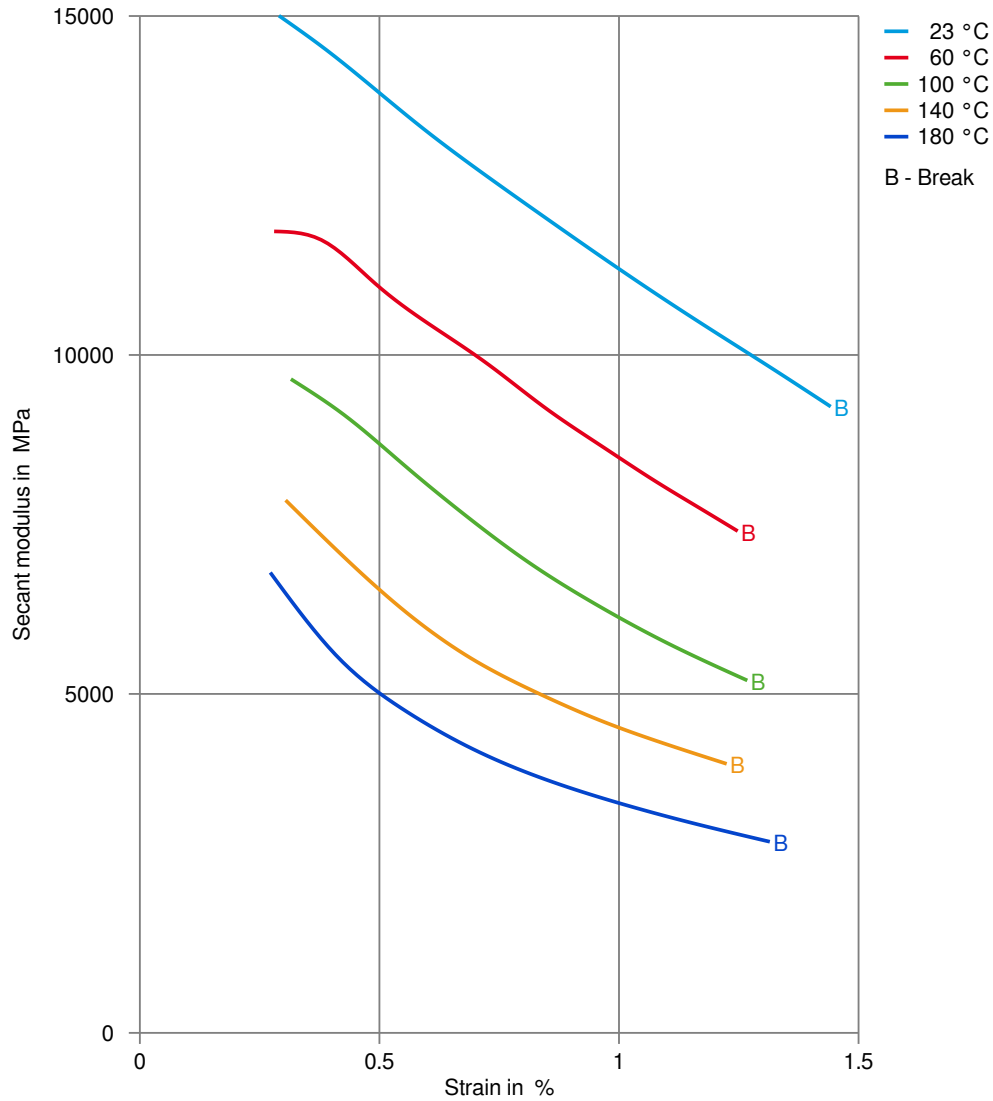
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## Stress-strain



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## Secant modulus-strain



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## True stress-strain

