

# VECTRA® E130G

30% glass fiber filled/low injection pressure

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Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant UL-Listing V-0 in natural and black at 0.75mm thickness per UL 94 flame testing. Relative-Temperature-Index (RTI) according to UL 746B: electricals 130°C, mechanicals 130°C. UL = Underwriters Laboratories (USA)

## Typical mechanical properties

|                                       |                      |              |
|---------------------------------------|----------------------|--------------|
| Tensile Modulus                       | 13000 MPa            | ISO 527-1/-2 |
| Stress at break, 5mm/min              | 150 MPa              | ISO 527-1/-2 |
| Strain at break, 5mm/min              | 3 %                  | ISO 527-1/-2 |
| Flexural Modulus                      | 13000 MPa            | ISO 178      |
| Flexural Strength                     | 170 MPa              | ISO 178      |
| Charpy notched impact strength, -30°C | 46 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Izod notched impact strength, 23°C    | 30 kJ/m <sup>2</sup> | ISO 180/1A   |

## Thermal properties

|                                             |          |                |
|---------------------------------------------|----------|----------------|
| Melting temperature, 10°C/min               | 335 °C   | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 245 °C   | ISO 75-1/-2    |
| Temp. of deflection under load, 0.45 MPa    | 273 °C   | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 5 E-6/K  | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 67 E-6/K | ISO 11359-1/-2 |

## Flammability

|                               |           |       |
|-------------------------------|-----------|-------|
| Burning Behav. at thickness h | V-0 class | UL 94 |
| Thickness tested              | 0.75 mm   | UL 94 |

## Electrical properties

|                     |             |               |
|---------------------|-------------|---------------|
| Volume resistivity  | >1E13 Ohm.m | IEC 62631-3-1 |
| Surface resistivity | >1E14 Ohm   | IEC 62631-3-2 |

## Other properties

|         |                        |          |
|---------|------------------------|----------|
| Density | 1610 kg/m <sup>3</sup> | ISO 1183 |
|---------|------------------------|----------|

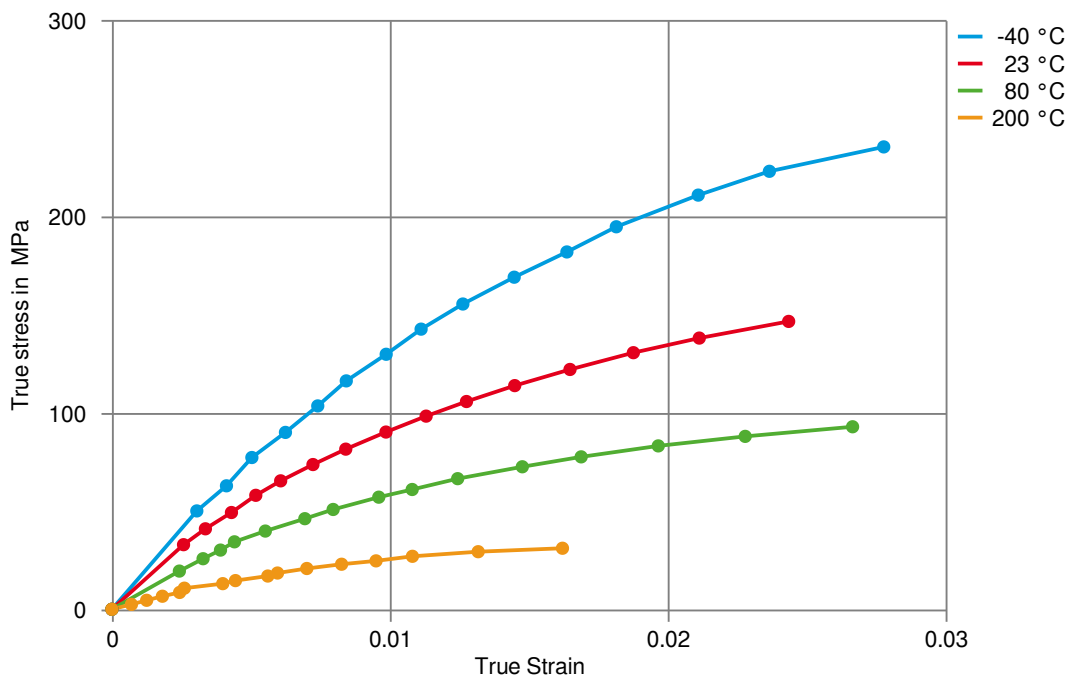
## Injection

|                                 |                 |
|---------------------------------|-----------------|
| Drying Temperature              | 150 - 170 °C    |
| Drying Time, Dehumidified Dryer | 4 h             |
| Processing Moisture Content     | 0.01 %          |
| Screw tangential speed          | 0.17 - 0.18 m/s |
| Max. mould temperature          | 80 - 120 °C     |
| Injection speed                 | very fast       |



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## True stress-strain



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## Processing Texts

### Pre-drying

VECTRA should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be  $\leq -40^{\circ}\text{C}$ . The time between drying and processing should be as short as possible.

