

# ZENITE® 7755

55% glass/mineral-reinforced

Zenite 7755 is a 55% glass/mineral-reinforced liquid crystal polymer resin for injection molding. It has good impact resistance, excellent temperature resistance, and is suitable for applications in diverse industries.

## Rheological properties

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

## Typical mechanical properties

|                                      |                     |              |
|--------------------------------------|---------------------|--------------|
| Tensile Modulus                      | 17700 MPa           | ISO 527-1/-2 |
| Stress at break, 5mm/min             | 100 MPa             | ISO 527-1/-2 |
| Strain at break, 5mm/min             | 0.7 %               | ISO 527-1/-2 |
| Flexural Modulus                     | 18500 MPa           | ISO 178      |
| Flexural Strength                    | 161 MPa             | ISO 178      |
| Charpy notched impact strength, 23°C | 5 kJ/m <sup>2</sup> | ISO 179/1eA  |

## Thermal properties

|                                             |          |                |
|---------------------------------------------|----------|----------------|
| Melting temperature, 10°C/min               | 350 °C   | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 295 °C   | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 9 E-6/K  | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 39 E-6/K | ISO 11359-1/-2 |

## Flammability

|                               |           |       |
|-------------------------------|-----------|-------|
| Burning Behav. at thickness h | V-0 class | UL 94 |
| Thickness tested              | 1.50 mm   | UL 94 |
| UL recognition                | yes       | UL 94 |

## Other properties

|                          |                        |                |
|--------------------------|------------------------|----------------|
| Humidity absorption, 2mm | 1.1 %                  | Sim. to ISO 62 |
| Density                  | 1890 kg/m <sup>3</sup> | ISO 1183       |

## 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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