

# ZENITE® 350 LDS

## Liquid Crystal Polymer

This LCP is designed for Laser Direct Structuring, low dielectric constant, and low dissipation factor

### Product information

|                      |            |           |
|----------------------|------------|-----------|
| Resin Identification | LCP-GF15   | ISO 1043  |
| Part Marking Code    | >LCP-GF15< | ISO 11469 |

### Rheological properties

|                              |       |                 |
|------------------------------|-------|-----------------|
| Moulding shrinkage, parallel | 0.2 % | ISO 294-4, 2577 |
| Moulding shrinkage, normal   | 0.9 % | ISO 294-4, 2577 |

### Typical mechanical properties

|                                  |                      |              |
|----------------------------------|----------------------|--------------|
| Tensile modulus                  | 11000 MPa            | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 134 MPa              | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 3.1 %                | ISO 527-1/-2 |
| Flexural modulus                 | 10000 MPa            | ISO 178      |
| Flexural strength                | 160 MPa              | ISO 178      |
| Charpy impact strength, 23 °C    | 51 kJ/m <sup>2</sup> | ISO 179/1eU  |
| Poisson's ratio                  | 0.34 <sup>[C]</sup>  |              |

[C]: Calculated

### Thermal properties

|                                               |        |             |
|-----------------------------------------------|--------|-------------|
| Temperature of deflection under load, 1.8 MPa | 240 °C | ISO 75-1/-2 |
|-----------------------------------------------|--------|-------------|

### Flammability

|                               |           |                 |
|-------------------------------|-----------|-----------------|
| Burning Behav. at thickness h | V-0 class | IEC 60695-11-10 |
| Thickness tested              | 0.8 mm    | IEC 60695-11-10 |
| UL recognition                | yes       | UL 94           |

### Electrical properties

|                                                          |        |                 |
|----------------------------------------------------------|--------|-----------------|
| Relative permittivity, 1GHz                              | 3.7    | IEC 61189-2-721 |
| Dissipation factor, printed circuits and boards, 2.5 GHz | 60 E-4 | IEC 61189-2-721 |

### Injection

|                                 |               |
|---------------------------------|---------------|
| Drying Recommended              | yes           |
| Drying Temperature              | 150 °C        |
| Drying Time, Dehumidified Dryer | 4 - 6 h       |
| Processing Moisture Content     | ≤0.01 %       |
| Melt Temperature Optimum        | 340 °C        |
| Min. melt temperature           | 335 °C        |
| Max. melt temperature           | 345 °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        |

# ZENITE® 350 LDS

Liquid Crystal Polymer

## Characteristics

Processing

Injection Moulding

Special characteristics

Flame retardant, Platable, High impact or impact modified, Heat stabilised or stable to heat, Specialty appearance, High Flow, Improved weld line, Laser Direct Structurable, Lead-free soldering resistant