

# KEPITAL® F25-03HT LOF

POM, low emission, a friction & wear-resistance (medium-viscosity) grade for general injection molding

- Kepital® F25-03HT LOF is a friction & wear-resistance (medium-viscosity) grade for general injection molding.
- Suitable for applications requiring reduced impact noise and good friction and wear resistance.
- A low-emission grade featured improved heat stability.

## Product information

|                   |         |           |
|-------------------|---------|-----------|
| Part Marking Code | > POM < | ISO 11469 |
|-------------------|---------|-----------|

## Rheological properties

|                                    |       |                 |
|------------------------------------|-------|-----------------|
| Moulding shrinkage range, parallel | 2.0 % | ISO 294-4, 2577 |
|------------------------------------|-------|-----------------|

## Typical mechanical properties

|                                       |                     |              |
|---------------------------------------|---------------------|--------------|
| Tensile Modulus                       | 2700 MPa            | ISO 527-1/-2 |
| Yield stress, 50mm/min                | 64 MPa              | ISO 527-1/-2 |
| Yield strain, 50mm/min                | 9 %                 | ISO 527-1/-2 |
| Nominal strain at break               | 30 %                | ISO 527-1/-2 |
| Flexural Modulus                      | 2600 MPa            | ISO 178      |
| Flexural Strength                     | 90 MPa              | ISO 178      |
| Charpy notched impact strength, 23°C  | 6 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy notched impact strength, -30°C | 5 kJ/m <sup>2</sup> | ISO 179/1eA  |

## Thermal properties

|                                             |           |                |
|---------------------------------------------|-----------|----------------|
| Melting temperature, 10°C/min               | 170 °C    | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.8 MPa     | 100 °C    | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 120 E-6/K | ISO 11359-1/-2 |

## Flammability

|                               |          |       |
|-------------------------------|----------|-------|
| Burning Behav. at thickness h | HB class | UL 94 |
|-------------------------------|----------|-------|

## Electrical properties

|                     |            |               |
|---------------------|------------|---------------|
| Volume resistivity  | 1E12 Ohm.m | IEC 62631-3-1 |
| Surface resistivity | 1E16 Ohm   | IEC 62631-3-2 |
| Electric strength   | 19 kV/mm   | IEC 60243-1   |

## Other properties

|                          |                        |                |
|--------------------------|------------------------|----------------|
| Humidity absorption, 2mm | 0.2 %                  | Sim. to ISO 62 |
| Density                  | 1410 kg/m <sup>3</sup> | ISO 1183       |

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## Injection

|                                 |            |
|---------------------------------|------------|
| Drying Temperature              | 80 - 90 °C |
| Drying Time, Dehumidified Dryer | 3 - 4 h    |
| Processing Moisture Content     | 0.1 %      |
| Max. mould temperature          | 60 - 80 °C |
| Back pressure                   | 2 MPa      |

## Additional information

|                   |                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Injection molding | mold temperature: 60°C ~ 80°C (140°F ~ 176°F)<br>barrel temperature: 170°C ~ 190°C (338°F ~ 374°F)<br>screw speed: 150mm/s ~ 200mm/s<br>back pressure: max. 20 bar |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Processing Texts

|                   |                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-drying        | It is recommended to dry material at 80°C ~ 90°C (176°F ~ 194°F) for 3h ~ 4h if necessary.<br>suggest max. moisture: 0.1%                                          |
| Injection molding | mold temperature: 60°C ~ 80°C (140°F ~ 176°F)<br>barrel temperature: 170°C ~ 190°C (338°F ~ 374°F)<br>screw speed: 150mm/s ~ 200mm/s<br>back pressure: max. 20 bar |

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