

# POM | KEPITAL F40-03 | Standard grade

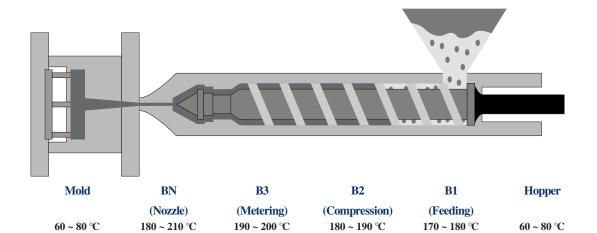
- A standard unfilled(extremely low-viscosity) grade for general injection molding
- Suitable for multi-cavity molds and thin-walled precision parts

| <b>General information</b>              | <b>Test Standard</b> | Unit                   | Value              |
|---|----------------------|------------------------|--------------------|
| Polymer abbreviation                    | ISO 1043             | -                      | POM                |
| Physical properties                     | Test Standard        | Unit                   | Value              |
| Water absorption(23 °C, 50 %RH)         | ISO 62               | %                      | 0.2                |
| Density                                 | ISO 1183             | g/cm <sup>3</sup>      | 1.41               |
| Melt flow rate                          | ISO 1133             | g/10min                | 45                 |
| Thermal properties                      | Test Standard        | Unit                   | Value              |
| Heat deflection temperature (1.8 MPa)   | ISO 75               | $^{\circ}\mathrm{C}$   | 101                |
| Flammability                            | UL 94                | _                      | НВ                 |
| Coefficient of linear thermal expansion | ISO 11359            | X 10 <sup>-5</sup> /°C | 12                 |
| Melting point                           | ISO 11357            | $^{\circ}\mathrm{C}$   | 165                |
| Mechanical properties                   | Test Standard        | Unit                   | Value              |
| Tensile modulus                         | ISO 527              | MPa                    | 2,900              |
| Tensile stress                          | ISO 527              | MPa                    | 65                 |
| Tensile strain at yield                 | ISO 527              | %                      | 7.0                |
| Nominal strain at break                 | ISO 527              | %                      | 20                 |
| Flexural strength                       | ISO 178              | MPa                    | 93                 |
| Flexural modulus                        | ISO 178              | MPa                    | 2,750              |
| Charpy impact strength(Notched) @ 23°C  | ISO 179/1eA          | kJ/m <sup>2</sup>      | 5.0                |
| Charpy impact strength(Notched) @ -30°C | ISO 179/1eA          | kJ/m <sup>2</sup>      | 4.0                |
| Electrical properties                   | Test Standard        | Unit                   | Value              |
| Surface resistivity                     | IEC 60093            | Ω                      | $1 \times 10^{16}$ |
| Volume resistivity                      | IEC 60093            | Ω·cm                   | $1x10^{14}$        |
| Dielectric strength                     | IEC 60243-1          | kV/mm                  | 19                 |
| Other                                   | Test Standard        | Unit                   | Value              |
|   | ISO 294-4            | %                      | 2.0                |

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# **Injection molding condition**



 $374 \sim 392 \,^{\circ}F$ 

## **Screw Speed**

150 mm/s ~ 200 mm/s

**Back Pressure** 

Maximum 20 bar

#### Contact information

 $140 \sim 176 \,^{\circ}\text{F}$ 

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 $356 \sim 374 \,^{\circ}\mathrm{F}$ 

 $338 \sim 356 \,^{\circ}\text{F}$ 

140 ~ 176 °F

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356 ~ 410 °F

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### Disclaimer

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