

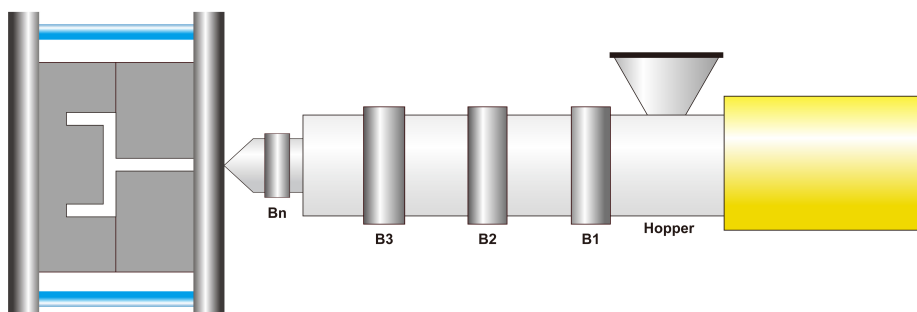
## POM | KEPITAL F25-03 | Standard grade

- A medium-low viscosity grade for general injection molding

| General information                       | Test Standard | 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                | 13                 |
| Thermal properties                        | Test Standard | Unit                   | Value              |
| Heat deflection temperature (1.8 MPa)     | ISO 75        | °C                     | 100                |
| Flammability                              | UL 94         | –                      | HB                 |
| Coefficient of linear thermal expansion   | ISO 11359     | X 10 <sup>-5</sup> /°C | 12                 |
| Melting point                             | ISO 11357     | °C                     | 165                |
| Mechanical properties                     | Test Standard | Unit                   | Value              |
| Tensile modulus                           | ISO 527       | MPa                    | 2750               |
| Tensile stress                            | ISO 527       | MPa                    | 65                 |
| Tensile strain at yield                   | ISO 527       | %                      | 9                  |
| Nominal strain at break                   | ISO 527       | %                      | 31                 |
| Flexural strength                         | ISO 178       | MPa                    | 90                 |
| Flexural modulus                          | ISO 178       | MPa                    | 2650               |
| Charpy impact strength(Notched) @ 23°C    | ISO 179/1eA   | kJ/m <sup>2</sup>      | 6.0                |
| Charpy impact strength(Notched) @ -30°C   | ISO 179/1eA   | kJ/m <sup>2</sup>      | 5.5                |
| Electrical properties                     | Test Standard | Unit                   | Value              |
| Surface resistivity                       | IEC 60093     | Ω                      | 1x10 <sup>16</sup> |
| Volume resistivity                        | IEC 60093     | Ω/ cm                  | 1x10 <sup>14</sup> |
| Dielectric strength                       | IEC 60243-1   | kV/mm                  | 19                 |
| Other                                     | Test Standard | Unit                   | Value              |
| Mold shrinkage (flow direction, t = 2 mm) | ISO 294-4     | %                      | 2.0                |

Revision No : 7 (2020-04-03)

## Injection molding condition



### Pre-drying (Suggested max. moisture : 0.1%)

Pre-drying : 80 °C ~ 90 °C 3 h ~ 4 h

### Temperature

Mold temperature : 60 °C ~ 80 °C(140 °F ~ 176 °F)

Barrel temperature : 170 °C ~ 210 °C(338 °F ~ 410 °F)

| Mold         | Bn(Nozzle)   | B3(Metering) | B2(Compression) | B1(Feeding)  | Hopper       |
|--------------|--------------|--------------|-----------------|--------------|--------------|
| 60 ~ 80 °C   | 180 ~ 210 °C | 190 ~ 200 °C | 180 ~ 190 °C    | 170 ~ 180 °C | 60 ~ 80 °C   |
| 140 ~ 176 °F | 356 ~ 410 °F | 374 ~ 392 °F | 356 ~ 374 °F    | 338 ~ 356 °F | 140 ~ 176 °F |

### Plastification

Screw speed : 150 mm/s ~ 200 mm/s

Back pressure : Maximum 20 bar

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