

## POM | KEPITAL F10-01 | Standard grade

- A high-viscosity grade for extrusion of round bars, sheets and tubes
- Suitable for extrusion molding of thick-walled, void-free, and sink mark-reduced parts

| 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           | 3.0   |

| Thermal properties                      | Test Standard | Unit                   | Value |
|-----------------------------------------|---------------|------------------------|-------|
| Heat deflection temperature (1.8 MPa)   | ISO 75        | °C                     | 96    |
| Flammability                            | UL 94         | -                      | HB    |
| Coefficient of linear thermal expansion | ISO 11359     | X 10 <sup>-5</sup> /°C | 12    |
| Melting point                           | ISO 11357     | °C                     | 165   |

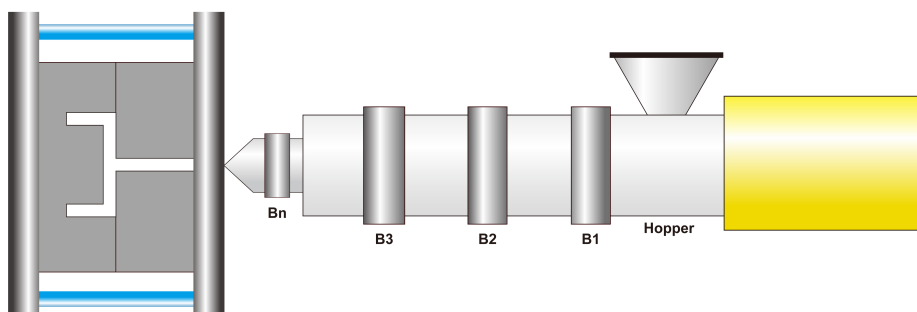
| Mechanical properties                   | Test Standard | Unit              | Value |
|-----------------------------------------|---------------|-------------------|-------|
| Tensile modulus                         | ISO 527       | MPa               | 2500  |
| Tensile stress                          | ISO 527       | MPa               | 63    |
| Tensile strain at yield                 | ISO 527       | %                 | 10    |
| Nominal strain at break                 | ISO 527       | %                 | 32    |
| Flexural strength                       | ISO 178       | MPa               | 83    |
| Flexural modulus                        | ISO 178       | MPa               | 2350  |
| Charpy impact strength(Notched) @ 23°C  | ISO 179/1eA   | kJ/m <sup>2</sup> | 8.0   |
| Charpy impact strength(Notched) @ -30°C | ISO 179/1eA   | kJ/m <sup>2</sup> | 6.5   |

| 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

### Contact information

#### Headquarters

T Tower 10F, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea (04637)  
TEL: +82-2-6952-8377

#### KPAC China

Room T2-903C, No.2 building. SOHO Tianshan Plaza.  
No.1717 Tianshan Rd. Changning District. Shanghai. China  
Tel +86 21 6237-1972, Telefax +86 21 6237-1803

#### Research Center

Wavetech B/D, 7F, 15, Iljik-ro 94gil, Anyang city, Republic of Korea (13901)  
TEL: +82-31-436-1300

### Disclaimer

Notice to users : The information contained in this data sheet is based on our current knowledge and experience, so it may change as new knowledge and experience becomes available. This information is based on only above-mentioned product produced in Korea Polyacetal Co., Ltd. ("KPAC") through relevant test methods and conditions and doesn't relate to any products made of this product with the inclusion of other additives, such as processing aids or colorants. This information should not be construed as a promise or guarantee of specific properties of this product described or its suitability for a particular application, so users make their own determination as to its suitability to their purposes prior to use this product. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of this product. This product is not intended for use in medical and dental implants and users should meet all safety and health standards. KPAC makes no warranty and assumes no liability in connection with any use of this information.