

PPA | KEPAMID 6145GHM8 | Glass fiber/mineral filler reinforced grade

- KEPAMID-PPA 6145GHM8 is a glass fiber/mineral filler 45%-reinforced and wear resistance PPA grade.
- It is suitable for automotive, electrical & electronics, and consumer parts requiring excellent mechanical strength, dimensional stability, and heat resistance.

| Physical properties | Test Standard | Unit | Value |
|--|---------------|------|---------|
| Filler contents | ISO 1172 | % | 45 |
| Specific gravity | ISO 1183 | - | 1.60 |
| Water absorption(23 °C, 50 %RH) | ISO 62 | % | 0.4 |
| Mold shrinkage(Flow direction, Φ = 100 mm, t = 3 mm) | ISO 294 | % | 0.4~0.7 |

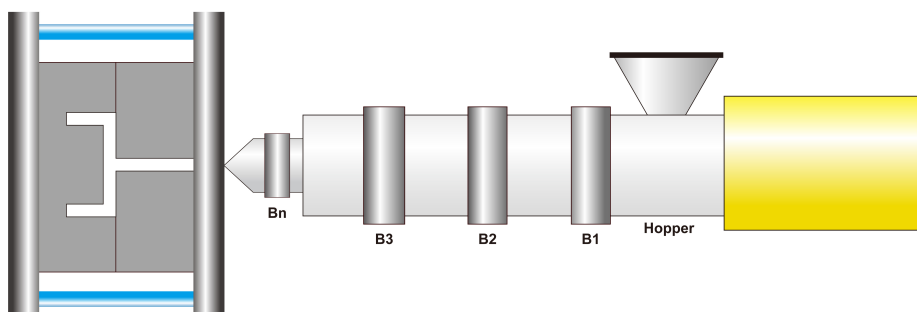
| Thermal properties | Test Standard | Unit | Value |
|---|---------------|------------------------|-------|
| Melting point(10 °C/min) | ISO 11357 | °C | 310 |
| Coefficient of linear thermal expansion | ISO 11359 | X 10 ⁻⁵ /°C | - |
| Heat deflection temperature(1.8 MPa) | ISO 75 | °C | 282 |
| Flammability(t = 0.8 mm) | UL 94 | Class | HB |

| Mechanical properties | Test Standard | Unit | Value |
|-------------------------|---------------|------|-------|
| Tensile stress | ISO 527 | MPa | 180 |
| Tensile strain at yield | ISO 527 | % | 1.6 |
| Nominal strain at break | ISO 527 | % | 260 |
| Flexural strength | ISO 178 | MPa | 14100 |
| Flexural modulus | ISO 178 | MPa | 5.5 |

| Electrical properties | Test Standard | Unit | Value |
|--------------------------|---------------|-------|-------|
| Permittivity(1 MHz) | IEC 60250 | - | - |
| Dissipation factor(1MHz) | IEC 60250 | - | - |
| Surface resistivity | IEC 60093 | Ω | - |
| Volume resistivity | IEC 60093 | Ω/ cm | - |
| Dielectric strength | IEC 60243 | KV/mm | - |

Revision No : 1 (2015-02-13)

Injection molding condition



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

It is recommend to dry material at 90°C(194°F) for 8 h at dehumidified dryer.

It is recommend to dry material at 120°C(248°F) for 4 h at dehumidified dryer.

Temperature

Mold temperature : 130 °C ~ 150 °C(266 °F ~ 302 °F)

Barrel temperature : 310 °C ~ 340 °C(590 °F ~ 644 °F)

| Mold | Bn(Nozzle) | B3(Metering) | B2(Compression) | B1(Feeding) | Hopper |
|--------------|--------------|--------------|-----------------|--------------|--------------|
| 130 ~ 150 °C | 320 ~ 340 °C | 315 ~ 340 °C | 310 ~ 335 °C | 310 ~ 330 °C | 60 ~ 80 °C |
| 266 ~ 302 °F | 608 ~ 644 °F | 599 ~ 644 °F | 590 ~ 635 °F | 590 ~ 626 °F | 140 ~ 176 °F |

Plastification

Screw speed :

Back pressure :

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 Engineering Plastics Co., Ltd. ("KEP") 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. KEP makes no warranty and assumes no liability in connection with any use of this information.