

PA6 | KEPAMID 1300CRH | Mold release grade

- KEPAMID 1300CRH is an unfilled, lubricated, and fast-cycled PA6 grade.
- It is suitable for automotive, electrical & electronics, and consumer parts requiring a quick cycle time.

| Physical properties | Test Standard | Unit | Value |
|---------------------------------|---------------|------|---------|
| Filler contents | ISO 1172 | % | - |
| Specific gravity | ISO 1183 | - | 1.13 |
| Water absorption(23 °C, 50 %RH) | ISO 62 | % | 1.5~1.9 |

| Mechanical properties | Test Standard | Unit | Value |
|---|---------------|-------------------|-------|
| Tensile stress | ISO 527 | MPa | 80 |
| Elongation at break | ISO 527 | % | 20 |
| Tensile modulus | ISO 527 | MPa | 2450 |
| Flexural strength | ISO 178 | MPa | 115 |
| Flexural modulus | ISO 178 | MPa | 2850 |
| Charpy impact strength(Notched) @ 23°C | ISO 179/1eA | kJ/m ² | 4.5 |
| Charpy impact strength(Notched) @ -30°C | ISO 179/1eA | kJ/m ² | 3.0 |
| Rockwell Hardness(R-Scale) | ISO 2039 | - | 120 |

| Thermal properties | Test Standard | Unit | Value |
|---------------------------------------|---------------|--------------|-------|
| Melting point(10 °C/min) | ISO 11357 | $^{\circ}$ C | 220 |
| Heat deflection temperature(0.45 MPa) | ISO 75 | °C | 185 |
| Heat deflection temperature(1.8 MPa) | ISO 75 | °C | 60 |
| Flammability(t = 0.8 mm) | UL 94 | Class | НВ |

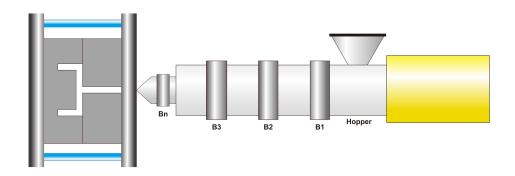
| Electrical properties | Test Standard | Unit | Value |
|-----------------------|---------------|-------|------------------|
| Permittivity(1 MHz) | IEC 60250 | - | 3.4 |
| Volume resistivity | IEC 60093 | Ω/ cm | 10 ¹⁵ |

Revision No: 1 (2015-02-13)

Print Date: 2019-12-31



Injection molding condition



Pre-drying (Suggested max. moisture: 0.05%)

It is recommend to dry material at $80^{\circ}\text{C}(176^{\circ}\text{F})$ for 4 h ~ 6 h at dehumidified dryer.

It is recommend to dry material at $90^{\circ}\text{C}(194^{\circ}\text{F})$ for 6 h ~ 8 h at dryer.

Temperature

Mold temperature : $70 \,^{\circ}\text{C} \sim 90 \,^{\circ}\text{C} (158 \,^{\circ}\text{F} \sim 194 \,^{\circ}\text{F})$ Barrel temperature : $230 \,^{\circ}\text{C} \sim 240 \,^{\circ}\text{C} (446 \,^{\circ}\text{F} \sim 464 \,^{\circ}\text{F})$

| Mold | Bn(Nozzle) | B3(Metering) | B2(Compression) | B1(Feeding) | Hopper |
|--------------|------------|--------------|-----------------|-------------|--------------|
| 70 ~ 90 °C | 240 °C | 240 °C | 240 °C | 230 °C | 60 ~ 80 °C |
| 158 ~ 194 °F | 464 °F | 464 °F | 464 °F | 446 °F | 140 ~ 176 °F |

Plastification

Screw speed: 80 ~ 120 rpm Back pressure: 5 ~ 10 kgf/cm²

Disclaimer

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Print Date: 2019-12-31