

Kocetal® K300HRD

POM

Kolon Industries

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|-----------------|-------------------|----------------------|
| ISO Data | | | |
| Melt flow index, MFI | 10 | g/10min | ISO 1133 |
| Temperature | 190 | °C | - |
| Load | 2.16 | kg | - |
| Molding shrinkage, parallel | 2.0 | % | ISO 294-4, 2577 |
| ASTM Data | | | |
| Melt Flow Index, MFI | 11 | g/10min | ASTM D 1238 |
| Temperature | 190 | °C | - |
| Load | 2.16 | kg | - |
| Mold Shrinkage, MD | 0.02 | mm/mm | ASTM D 955 |
| Mechanical properties | | | |
| ISO Data | | | |
| Tensile Strength | 61 | MPa | ISO 527 |
| Strain at break | 40 | % | ISO 527 |
| Flexural modulus, 23°C | 2400 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 7 | kJ/m ² | ISO 179/1eA |
| Rockwell hardness | M 80 | - | ISO 2039-2 |
| ASTM Data | | | |
| Tensile Strength | 62 | MPa | ASTM D 638 |
| Elongation at Break | 50 | % | ASTM D 638 |
| Flexural Modulus | 2400 | MPa | ASTM D 790 |
| Flexural Strength | 85 | MPa | ASTM D 790 |
| Rockwell Hardness | M 80 | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | 65 | J/m | ASTM D 256 |
| Thermal properties | | | |
| ISO Data | | | |
| Melting temperature, 10°C/min | 166 | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | 89 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| UL 94 Flame rating | HB | - | UL 94 |
| Thickness tested | 0.8 | mm | - |
| Coefficient of Thermal Expansion, MD | 130 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 158 | °C | ASTM D 648 |
| DTUL @ 264 psi | 110 | °C | ASTM D 648 |
| Melting Temperature | 166 | °C | ASTM D 3418 |
| Electrical properties | | | |
| ISO Data | | | |
| Volume resistivity | 1E12 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| Electric strength | 19 | kV/mm | IEC 60243-1 |
| ASTM Data | | | |
| Dielectric Strength, Short Time | 19 | kV/mm | ASTM D 149 |
| Dissipation Factor, 1 MHz | 0.06 | - | ASTM D 150 |
| Dielectric Constant, 1 MHz | 3.7 | - | ASTM D 150 |
| Surface Resistivity | 1E13 | Ohm | ASTM D 257 |
| Volume Resistivity | 1E11 | Ohm*cm | ASTM D 257 |
| Other properties | | | |
| Density | 1410 | kg/m ³ | ISO 1183 |
| Water Absorption, 24hr | 0.22 | % | ASTM D 570 |
| Density | 1410 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|----------------|------|---------------|
| Pre-drying - Temperature | 80 - 90 | °C | - |
| Pre-drying - Time | 3 | h | - |
| Melt temperature | ≤220 | °C | - |
| Mold temperature | 60 - 80 | °C | - |
| Zone 1 | 180 | °C | - |
| Zone 2 | 190 | °C | - |
| Zone 3 | 190 | °C | - |
| Nozzle temperature | 200 | °C | - |

Characteristics

Processing

Injection Molding

Regional Availability

North America, Asia Pacific

Special Characteristics

U.V. stabilized or stable to weather, Heat stabilized or stable to heat