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|--|------------|-----------|
| | Grade | WP-1100 |
| | Resin Type | PC/ABS/GF |

Automotive

| Item | Measuring Method | Condition | Unit | Value |
|---|------------------|---------------------------|-------------------|-------|
| Physical | | | | |
| Specific Gravity | ISO 1183 | Natural or representative | - | 1.21 |
| Melt Flow Index | ISO 1133 | 250ℓ, 10kg | g/10min | 41 |
| ASH content | ISO 3451 | - | % | 10 |
| Mechanical | | | | |
| Tensile Strength at Yield | ISO 527 | 5mm/min | MPa | 83 |
| Tensile Strain at break | ISO 527 | 5mm/min | % | 4.4 |
| Tensile Modulus | ISO 527 | 5mm/min | MPa | 3200 |
| Tensile Strength at Break | ISO 527 | 5mm/min | MPa | 90 |
| Flexural Strength | ISO 178 | 2mm/min | MPa | 135 |
| Flexural Modulus | ISO 178 | 2mm/min | MPa | 4300 |
| Izod Impact Strength (notched) | ISO 180 1A | at 23°C, 4mm | kJ/m ² | 9.5 |
| Izod Impact Strength (unnotched) | ISO 180 1A | at -30°C, 4mm | kJ/m ² | 6.3 |
| Charpy Impact Strength (V-notched) | ISO 179 1eA | at 23°C, 4mm | kJ/m ² | 11.5 |
| Charpy Impact Strength (V-notched) | ISO 179 1eA | at -30°C, 4mm | kJ/m ² | 10 |
| Charpy Impact Strength (V-notched) | ISO 179 1eA | at 23°C, 4mm | kJ/m ² | 58 |
| Charpy Impact Strength (Unnotched) | ISO 179 1eA | at -30°C, 4mm | kJ/m ² | 55 |
| Rockwell Hardness | ISO 2039-2 | R-scale | - | - |
| Thermal properties | | | | |
| Heat Deflection Temperature(Unannealed) | ISO 75-2 | 1.8MPa, 4.0mm | °C | 119 |
| Heat Deflection | ISO 75-2 | 0.45MPa, 4.0mm | °C | 129 |

Thermal properties

| Temperature(Unannealed) | | | | |
|-----------------------------|----------------|--------------------|----------------------------|------|
| VICAT Softening Temperature | ISO 306 | B/50 | °C | 131 |
| Linear Thermal Coefficient | ISO 11359-1/-2 | Flow at 40~100°C | x10 ⁻⁵ cm/cm/°C | 0.39 |
| Linear Thermal Coefficient | ISO 11359-1/-2 | X-Flow at 40~100°C | x10 ⁻⁵ cm/cm/°C | 0.65 |

1. The above figures are the representative values based on NP, which may vary from color to color, and can be used as a reference only for the purpose of selecting materials.
2. The above figures are basic guidelines for selecting materials; therefore, they are not regarded as the official specifications for materials involved, and cannot be used for the purpose of designing a mold.
3. The above values can be adjusted in accordance with processing conditions, and the specific change in value is allowed only within a limited range in which adjustment has no adverse or negative impact on the final product.

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