

Product Texts

NORYL GTX™ 910 resin is non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). NORYL GTX910 resin exhibits excellent chemical resistance and is an excellent candidate for automotive applications such as plastic/metal hybrid components, rail extensions, crash cans, wheel covers, and energy absorbers.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 10 | cm ³ /10min | ISO 1133 |
| Temperature | 280 | °C | - |
| Load | 5 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2200 | MPa | ISO 527 |
| Yield stress | 55 | MPa | ISO 527 |
| Yield strain | 8 | % | ISO 527 |
| Stress at break | 50 | MPa | ISO 527 |
| Strain at break | 25 | % | ISO 527 |
| Flexural modulus | 1900 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 25 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 12 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, +23°C, 4mm | 25 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 4mm | 12 | kJ/m ² | ISO 180/1A |
| Ball indentation hardness | 115 | MPa | ISO 2039-1 |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|---------|----------------|
| ISO Data | | | |
| Vicat softening temperature, A | 238 | °C | ISO 306 |
| Vicat softening temperature, B | 195 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 195 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 90 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 90 | E-6/K | ISO 11359-1/-2 |
| Thermal Conductivity | 0.23 | W/(m K) | DIN 52616 |

| Other properties | Value | Unit | Test Standard |
|---------------------|-------|-------------------|----------------|
| Water absorption | 3.5 | % | Sim. to ISO 62 |
| Humidity absorption | 1 | % | Sim. to ISO 62 |
| Density | 1100 | kg/m ³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 100 - 120 | °C | - |
| Pre-drying - Time | 2 - 3 | h | - |
| Processing humidity | ≤0.07 | % | - |
| Melt temperature | 280 - 310 | °C | - |
| Mold temperature | 80 - 120 | °C | - |
| Feed temperature | 60 - 80 | °C | - |
| Zone 1 | 260 - 280 | °C | - |
| Zone 2 | 270 - 290 | °C | - |
| Zone 3 | 280 - 300 | °C | - |

Characteristics

Processing

Injection Molding

Regional Availability

Europe

Applications

Automotive