

NORYL GTX™ RESIN GTX6011

REGION ASIA

DESCRIPTION

NORYL GTX6011 resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high heat resistance and excellent chemical resistance. NORYL GTX6011 resin may be an excellent candidate for Automotive exterior and industrial applications.

| GENERAL INFORMATION | |
|-----------------------|--|
| Features | Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, High stiffness/Strength, High temperature resistance, Impact resistant, No PFAS intentionally added |
| Fillers | Unreinforced |
| Polymer Types | Polyphenylene Ether + PA (PPE+Nylon) |
| Processing Techniques | Injection Molding |
| INDUSTRY | SUB INDUSTRY |
| Automotive | Automotive Exteriors |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|------------------|-------|----------------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, yield | 45 | MPa | SABIC - Japan Method |
| Tensile Strain, break | 150 | % | SABIC - Japan Method |
| Flexural Stress | 74 | MPa | ASTM D790 |
| Flexural Modulus | 1860 | MPa | ASTM D790 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, notched, 23°C | 843 | J/m | ASTM D256 |
| THERMAL ⁽¹⁾ | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 180 | °C | ASTM D648 |
| CTE, -30°C to 30°C | 0.00008 – 0.0001 | 1/°C | TMA |
| PHYSICAL ⁽¹⁾ | | | |
| Specific Gravity | 1.07 | - | ASTM D792 |
| Water Absorption, (23°C/24hrs) | 0.6 | % | ASTM D570 |
| Mold Shrinkage, flow, 3.2 mm ⁽²⁾ | 1.1 – 1.3 | % | SABIC method |
| INJECTION MOLDING ⁽³⁾ | | | |
| Drying Temperature | 140 | °C | |
| Drying Time | 3 – 4 | Hrs | |
| Melt Temperature | 280 – 310 | °C | |
| Nozzle Temperature | 280 – 310 | °C | |
| Front - Zone 3 Temperature | 280 – 310 | °C | |
| Middle - Zone 2 Temperature | 270 – 290 | °C | |
| Rear - Zone 1 Temperature | 260 – 280 | °C | |
| Mold Temperature | 80 – 120 | °C | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---------------|----------------|-------|--------------|
| Screw Speed | 30 – 80 | rpm | |
| Back Pressure | 0.5 – 1.5 | MPa | |

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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