ASTALON™ GS2010R

Polycarbonate

Marplex Australia Pty. Ltd.

Message:

ASTALON[™] GS2010R is a 10% glass fibre filled Polycarbonate and offers an exceptional combination of product rigidity and strength, heat resistance, dimensional stability, flame retardancy, creep resistance and processability with a mould release agent (R) to assist with moulded part ejection. Typical applications of ASTALON[™] GS2010R include metal substitution such as automotive interior structural brackets, camera frames, industrial electrical switch housings, electrical power tool casings and mounting chassis for electronics devices such as computer printers, laptop computers and VTR units.

| Filler / ReinforcementGlass Fiber, 10%. Filler by WeightAdditiveMold ReleaseFaturesFame RetardantGood Creep ResistanceGood Creep ResistanceGood Dimensional StabilityGood ProcessabilityGood StiffnessGood StrengthMedium Heat ResistanceGood StrengthMedium Heat ResistanceKatomotive ApplicationsElectrical/Electronic ApplicationsElectrical/Electronic ApplicationsBient ApplicationsElectrical/Electronic ApplicationsHousingsIndustrial ApplicationsHousingsIndustrial ApplicationsProcessing MethodNormal ValueOpendromotion (Signer)Industrial ApplicationsProcessing MethodNormal ValueSpecific Gravity17Moting Strinkage - Flow (3.00 mm)QiA0Methams- Flow Rate (MFR) (300°C/12 kg)11Moting Strinkage - Flow (3.00 mm)QiA0Methams- Flow Rate (MFR) (300°C/12 kg)11Methams- Flow Rate (MFR) (300°C/12 kg)11Methams- Flow Rate (MFR) (300°C/12 kg)11Methams- Flow Rate (MFR) (300°C/12 kg)12Moting Strinkage - Flow (3.00 mm)QiA0Methams- Flow Rate (MFR) (300°C/12 kg)12Methams- Flow Rate (MFR) (300°C/12 kg)14Methams- Flow Rate (MFR) (300°C/12 kg)12Methams- Flow Rate (MFR) (300°C/12 kg)14Methams- | General Information | | | |
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| Tensile Elongation ² (Break, 3.20 mm) 7.0 % ASTM D638 | Mechanical | Nominal Value | Unit | Test Method |
| - | Tensile Strength ¹ (3.20 mm) | 71.0 | MPa | ASTM D638 |
| Flexural Modulus ³ (6.40 mm)3650MPaASTM D790 | | 7.0 | % | ASTM D638 |
| | Flexural Modulus ³ (6.40 mm) | 3650 | MPa | ASTM D790 |

| Flexural Strength ⁴ (6.40 mm) | 116 | MPa | ASTM D790 |
|--|----------------|--------------------|-------------|
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (3.20 mm) | 150 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (1.8 | | | |
| MPa, Unannealed, 6.40 mm) | 143 | °C | ASTM D648 |
| CLTE - Flow | 4.4E-5 | cm/cm/°C | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Dielectric Strength | 18 | kV/mm | ASTM D149 |
| Dielectric Constant | 2.88 | | ASTM D150 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (1.60 mm) | V-2 | | UL 94 |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 120 to 125 | °C | |
| Drying Time | 4.0 to 6.0 | hr | |
| Rear Temperature | 245 to 265 | °C | |
| Middle Temperature | 260 to 280 | °C | |
| Front Temperature | 275 to 295 | °C | |
| Processing (Melt) Temp | 270 to 300 | °C | |
| Mold Temperature | 60.0 to 110 | °C | |
| Injection Pressure | 60.0 to 140 | MPa | |
| Injection Rate | Moderate | | |
| Back Pressure | 0.100 to 0.500 | MPa | |
| Screw Speed | 40 to 60 | rpm | |
| Clamp Tonnage | 4.0 to 8.0 | kN/cm ² | |
| NOTE | | | |
| 1. | 5.0 mm/min | | |
| 2. | 5.0 mm/min | | |
| 3. | 2.8 mm/min | | |
| 4. | 2.8 mm/min | | |
| | | | |

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