

Radilon® S RCW2505W 3733 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

Polyamide 6 compound reinforced with 25% of a combination of special glass fibre and minerals. This injection moulding grade is also heat stabilized and lubricated.

Suitable for parts requiring rigidity, dimensional control, and low warp after repeated high temperature exposure.

General

| | | | |
|------------------------|---|------------------------------------|--------------|
| Filler / Reinforcement | • Glass Fiber/Mineral, 25% Filler by Weight | | |
| Additive | • Heat Stabilizer | • Lubricant | |
| Features | • Good Dimensional Stability • Good Rigidity | • Heat Stabilized • Low Warpage | • Lubricated |
| Uses | • Automotive Applications | | |
| Agency Ratings | • EU 2011/65/EC | | |
| RoHS Compliance | • RoHS Compliant | | |
| Processing Method | • Injection Molding | | |
| Resin ID (ISO 1043) | • PA6-MG25 | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-----------------------|----------------|
| Density | 1.34 | g/cm ³ | ISO 1183 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 706000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 11500 | psi | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 9.9 | % | ISO 527-2/1A/5 |
| Flexural Modulus ² | 667000 | psi | ISO 178 |
| Flexural Stress ² | 21900 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength (73°F) | 2.8 | ft·lb/in ² | ISO 179/1eA |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load 264 psi, Unannealed | 351 | °F | ISO 75-2/Af |
| Melting Temperature ³ | 428 | °F | ISO 11357-3 |

Processing Information

| Injection | Nominal Value | Unit |
|--------------------------------------|---------------|------|
| Drying Temperature - Desiccant Dryer | 176 | °F |
| Drying Time - Desiccant Dryer | 2.0 to 4.0 | hr |
| Dew Point - Desiccant Dryer | < -4 | °F |
| Suggested Max Moisture | 0.10 | % |
| Processing (Melt) Temp | 464 to 536 | °F |
| Mold Temperature | 176 to 212 | °F |
| Injection Rate | Moderate-Fast | |