

Radilon® S LERV150K 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 15% glass fibre reinforced, impact modified, heat stabilized. Natural colour.

Suitable for parts requiring improved impact strength along with enhanced stiffness.

General

| | |
|------------------------|--|
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight |
| Additive | • Heat Stabilizer • Impact Modifier |
| Features | • Good Impact Resistance • Heat Stabilized • Good Stiffness • Impact Modified |
| Agency Ratings | • EU 2011/65/EC |
| RoHS Compliance | • RoHS Compliant |
| Appearance | • Natural Color |
| Processing Method | • Injection Molding |
| Resin ID (ISO 1043) | • PA6-I-GF15 |

Properties¹

| Physical | Dry | Conditioned | Unit | Test Method |
|--------------------------------------|--------|-------------|-----------------------|-----------------|
| Density | 1.21 | -- | g/cm ³ | ISO 1183 |
| Water Absorption | | | | ISO 62 |
| Saturation, 73°F, 0.0787 in | 7.6 | -- | % | |
| Water Absorption | | | | ISO 62 |
| Equilibrium, 73°F, 0.0787 in, 50% RH | 2.3 | -- | % | |
| Viscosity Number | | | | ISO 307 |
| H2SO4 (Sulphuric Acid) | 118 | -- | cm ³ /g | |
| Mechanical | Dry | Conditioned | Unit | Test Method |
| Tensile Modulus | 783000 | 442000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 16400 | 9860 | psi | ISO 527-2/1A/5 |
| Tensile Strain (Yield) | 3.7 | 9.5 | % | ISO 527-2/1A/50 |
| Tensile Strain (Break) | 4.3 | 13 | % | ISO 527-2/1A/5 |
| Flexural Modulus ² | 696000 | -- | psi | ISO 178 |
| Flexural Stress ² | 25400 | -- | psi | ISO 178 |
| Impact | Dry | Conditioned | Unit | Test Method |
| Charpy Notched Impact Strength | | | | ISO 179/1eA |
| -22°F | 3.1 | -- | ft·lb/in ² | |
| 73°F | 6.2 | -- | ft·lb/in ² | |
| Charpy Unnotched Impact Strength | | | | ISO 179/1eU |
| -22°F | 29 | -- | ft·lb/in ² | |
| 73°F | 36 | -- | ft·lb/in ² | |
| Thermal | Dry | Conditioned | Unit | Test Method |
| Melting Temperature ³ | 424 | -- | °F | ISO 11357-3 |

Radilon® S LERV150K 100 NT

Radici Group High Performance Polymers - Polyamide 6

| Electrical | Dry | Conditioned | Unit | Test Method |
|-----------------------------|---------|-------------|--------|---------------|
| Surface Resistivity (500 V) | 1.0E+12 | -- | ohms | IEC 62631-3-2 |
| Volume Resistivity (500 V) | 1.0E+13 | -- | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | | | | IEC 60112 |
| Solution A | 600 | -- | V | |
| Flammability | Dry | Conditioned | Unit | Test Method |
| Burning Rate (0.118 in) | < 2.0 | -- | in/min | ISO 3795 |
| Flame Rating (0.06 in) | HB | -- | | UL 94 |

Processing Information

| Injection | Dry | 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 | 0.15 | % |
| Processing (Melt) Temp | 482 to 536 | °F |
| Mold Temperature | 140 to 212 | °F |
| Injection Rate | Moderate-Fast | |

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 10°C/min