

Technical Data Sheet

Perlex R3510 LIGHT GREY 6-2949



Polycarbonate

Product Description

Perlex R3510 LIGHT GREY 6-2949 is a Polycarbonate Glass Fiber, 10% filled material.

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|-----------------------------|--------------------------|
| Additive | Flame Retardant |
| Application | Machine/Mechanical Parts |
| Filler/Reinforcement | Glass Fiber, 10% |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (300 °C/1.2 kg) | 10 | g/10 min | ISO 1133 |
| Density | 1.25 | g/cm ³ | ISO 1183 |
| Mechanical | | | |
| Tensile Stress at Yield | 75 | MPa | ISO 527-2 |
| Tensile Strain at Break | 5 | % | ISO 527-2 |
| Flexural Modulus | 3900 | MPa | ISO 178 |
| Tensile Strain at Yield | 5 | % | ISO 527-2 |
| Tensile Stress at Break | 83 | MPa | ISO 527-2 |
| Tensile Modulus | 4050 | MPa | ISO 527-1 |
| Flexural Stress | 135 | MPa | ISO 178 |
| Impact | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C) | 6.0 | kJ/m ² | ISO 179 |
| (-30 °C) | 6.0 | kJ/m ² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (-30 °C) | 58 | kJ/m ² | ISO 179 |
| (23 °C) | 68 | kJ/m ² | ISO 179 |
| Notched Izod Impact (Area), (23 °C) | 10.0 | kJ/m ² | ASTM D256 |
| Thermal | | | |
| Vicat Softening Temperature | | | |
| (B (50N), 50 °C/h) | 145 | °C | ISO 306 |
| (A (10N), 50 °C/h) | 152 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 135 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 128 | °C | ISO 75-2/A |
| RTI Elec | | | |
| (1.6 mm) | 80.0 | °C | UL 746B |
| (3.2 mm) | 80.0 | °C | UL 746B |

| | | | |
|---------------------------------------|----------|--------|----------------|
| RTI Imp | | | |
| (1.6 mm) | 80.0 | °C | UL 746B |
| (3.2 mm) | 80.0 | °C | UL 746B |
| RTI Str | | | |
| (1.6 mm) | 80.0 | °C | UL 746B |
| (3.2 mm) | 80.0 | °C | UL 746B |
| Electrical | | | |
| Volume Resistivity | >1.0E+13 | ohm*m | IEC 62631-3-1 |
| Comparative Tracking Index (CTI) | 175 | V | IEC 60112 |
| Surface Resistivity | >1.0E+15 | ohm | IEC 60093 |
| Flammable | | | |
| Burning Rate | | | |
| (2.00 mm) | 0.0 | mm/min | FMVSS 302 |
| (2.00 mm) | 0.0 | mm/min | ISO 3795 |
| Glow Wire Ignition Temperature | | | |
| (3.0 mm) | 960 | °C | IEC 60695-2-13 |
| (2.0 mm) | 960 | °C | IEC 60695-2-13 |
| (1.0 mm) | 960 | °C | IEC 60695-2-13 |
| UL Information | | | |
| Flame Rating | | | |
| (1.6 mm) | V-0 | | UL 94 |
| (3.2 mm) | V-0 | | UL 94 |

| Injection Parameters | Nominal Value | Units |
|-----------------------------|----------------------|--------------|
| Drying Time | 3.0 to 4.0 | hr |
| Drying Temperature | 110 to 120 | °C |
| Processing (Melt) Temp | 270 to 310 | °C |
| Mold Temperature | 50 to 80 | °C |