

Perlex R5563 BLACK 2-0010

LyondellBasell Industries - Polycarbonate

General Information

Product Description

Perlex R5563 BLACK 2-0010 is a Polycarbonate material. Features include: UV Resistant.

General

| | | | |
|------------|--------------------|-----------------|-----------------|
| Additive | • Flame Retardant | • UV Stabilizer | |
| Features | • Flame Retardant | • UV Resistant | • UV Stabilized |
| Uses | • Electrical Parts | | |
| Appearance | • Opaque | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|----------------------------------------------------------|---------------|-----------------------|-------------|
| Density | 1.20 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 12 | g/10 min | ISO 1133 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 334000 | psi | ISO 527-1 |
| Tensile Stress (Yield) | 8700 | psi | ISO 527-2 |
| Tensile Stress (Break) | 6960 | psi | ISO 527-2 |
| Tensile Strain (Yield) | 5.0 | % | ISO 527-2 |
| Tensile Strain (Break) | > 50 | % | ISO 527-2 |
| Flexural Modulus | 348000 | psi | ISO 178 |
| Flexural Stress | 13800 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength | | | ISO 179 |
| -22°F | 5.2 | ft·lb/in ² | |
| 73°F | 22 | ft·lb/in ² | |
| Charpy Unnotched Impact Strength | | | ISO 179 |
| -22°F | No Break | | |
| 73°F | No Break | | |
| Notched Izod Impact (Area) (73°F) | 21.4 | ft·lb/in ² | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 275 | °F | ISO 75-2/B |
| Deflection Temperature Under Load 264 psi, Unannealed | 266 | °F | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 293 | °F | ISO 306/B50 |
| -- | 302 | °F | ISO 306/A50 |
| RTI Elec | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |
| RTI Imp | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |

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| Thermal | Nominal Value | Unit | Test Method |
|--------------------------------|----------------------|-------------|--------------------|
| RTI Str | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | > 1.0E+15 | ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+13 | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | 175 | V | IEC 60112 |
| Flammability | Nominal Value | Unit | Test Method |
| Burning Rate | | | |
| 0.0787 in | 0.0 | in/min | ISO 3795 |
| 0.0787 in | 0.0 | in/min | FMVSS 302 |
| Flame Rating | | | UL 94 |
| 0.06 in | V-0 | | |
| 0.12 in | V-0 | | |
| Glow Wire Flammability Index | | | IEC 60695-2-12 |
| 0.06 in | 1760 | °F | |
| 0.12 in | 1760 | °F | |
| Glow Wire Ignition Temperature | | | IEC 60695-2-13 |
| 0.06 in | 1560 | °F | |
| 0.12 in | 1560 | °F | |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|----------------------|-------------|
| Drying Temperature | 230 to 248 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Processing (Melt) Temp | 518 to 590 | °F |
| Mold Temperature | 122 to 176 | °F |