

## Technical Data Sheet

### *Perlex* R5563 GREY 6-3284



Polycarbonate

#### Product Description

*Perlex* R5563 GREY 6-3284 is a Polycarbonate material. Features include: UV Resistant.

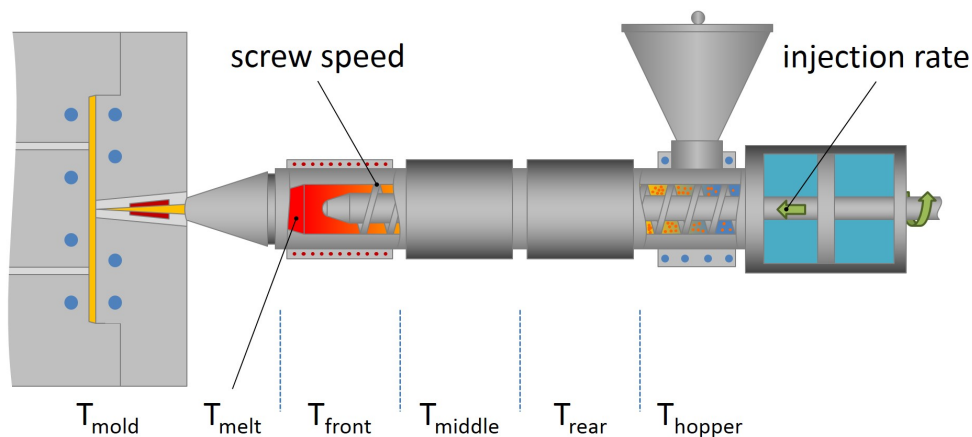
#### Regulatory Status

For regulatory compliance information, see R5563 GREY 6-3284 [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

|                     |                                                                        |
|---------------------|------------------------------------------------------------------------|
| <b>Status</b>       | Commercial: Active                                                     |
| <b>Availability</b> | Africa-Middle East; Asia-Pacific; Europe; Latin America; North America |
| <b>Attribute</b>    | UV Resistant                                                           |
| <b>Appearance</b>   | Opaque                                                                 |
| <b>Additive</b>     | Flame Retardant; UV Stabilizer                                         |
| <b>Application</b>  | Electrical Parts                                                       |

| Typical Properties                                      | Nominal Value | Units             | Test Method |
|---------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                         |               |                   |             |
| Melt Flow Rate, (300 °C/1.2 kg)                         | 12            | g/10 min          | ISO 1133    |
| Density                                                 | 1.2           | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical</b>                                       |               |                   |             |
| Tensile Stress at Yield                                 | 60            | MPa               | ISO 527-2   |
| Tensile Strain at Break                                 | >50           | %                 | ISO 527-2   |
| Flexural Modulus                                        | 2400          | MPa               | ISO 178     |
| Tensile Strain at Yield                                 | 5             | %                 | ISO 527-2   |
| Tensile Stress at Break                                 | 48            | MPa               | ISO 527-2   |
| Tensile Modulus                                         | 2300          | MPa               | ISO 527-1   |
| Flexural Stress                                         | 95            | MPa               | ISO 178     |
| <b>Impact</b>                                           |               |                   |             |
| Charpy Impact Strength - Notched                        |               |                   |             |
| (23 °C)                                                 | 47            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C)                                                | 11            | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Impact Strength - Unnotched                      |               |                   |             |
| (-30 °C)                                                | No Break      |                   | ISO 179     |
| (23 °C)                                                 | No Break      |                   | ISO 179     |
| Notched Izod Impact (Area), (23 °C)                     | 45.0          | kJ/m <sup>2</sup> | ASTM D256   |
| <b>Thermal</b>                                          |               |                   |             |
| Vicat Softening Temperature                             |               |                   |             |
| (B (50N), 50 °C/h)                                      | 145           | °C                | ISO 306     |
| (A (10N), 50 °C/h)                                      | 150           | °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) | 130           | °C                | ISO 75-2/A  |

|                                  |          |        |                |
|----------------------------------|----------|--------|----------------|
| RTI Elec                         |          |        |                |
| (1.5 mm)                         | 80.0     | °C     | UL 746B        |
| (3.0 mm)                         | 80.0     | °C     | UL 746B        |
| RTI Imp                          |          |        |                |
| (1.5 mm)                         | 80.0     | °C     | UL 746B        |
| (3.0 mm)                         | 80.0     | °C     | UL 746B        |
| RTI Str                          |          |        |                |
| (1.5 mm)                         | 80.0     | °C     | UL 746B        |
| (3.0 mm)                         | 80.0     | °C     | UL 746B        |
| <b>Electrical</b>                |          |        |                |
| Volume Resistivity               | >1.0E+13 | ohm*m  | IEC 62631-3-1  |
| Comparative Tracking Index (CTI) | 175      | V      | IEC 60112      |
| High Amp Arc Ignition            |          |        | UL 746A        |
| Surface Resistivity              | >1.0E+15 | ohm    | IEC 60093      |
| <b>Flammable</b>                 |          |        |                |
| Hot-wire Ignition (HWI)          |          |        | UL 746A        |
| Burning Rate                     |          |        |                |
| (2.00 mm)                        | 0.0      | mm/min | FMVSS 302      |
| (2.00 mm)                        | 0.0      | mm/min | ISO 3795       |
| Glow Wire Flammability Index     |          |        |                |
| (1.5 mm)                         | 960      | °C     | IEC 60695-2-12 |
| (3.0 mm)                         | 960      | °C     | IEC 60695-2-12 |
| Glow Wire Ignition Temperature   |          |        |                |
| (1.5 mm)                         | 850      | °C     | IEC 60695-2-13 |
| (3.0 mm)                         | 850      | °C     | IEC 60695-2-13 |
| <b>UL Information</b>            |          |        |                |
| Flame Rating                     |          |        |                |
| (1.5 mm)                         | V-0      |        | UL 94          |
| (3.0 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    |

**Notes**

These are typical property values not to be construed as specification limits.

**Processing Techniques**

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

**Company Information**

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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