

**Technical Data Sheet****Perlex R5550**

Polycarbonate  
LyondellBasell Industries  
Engineering Plastics

| General                                  |                                          |                             |                 |
|------------------------------------------|------------------------------------------|-----------------------------|-----------------|
| Material Status                          | • Commercial: Active                     |                             |                 |
| Availability                             | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Additive                                 | • Flame Retardant                        |                             |                 |
| Features                                 | • Flame Retardant                        |                             |                 |
| Uses                                     | • Housings                               |                             |                 |
| Appearance                               | • Clear/Transparent                      |                             |                 |
| Physical                                 | Nominal Value (English)                  | Nominal Value (SI)          | Test Method     |
| Density                                  | 1.20 g/cm <sup>3</sup>                   | 1.20 g/cm <sup>3</sup>      | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 12 g/10 min                              | 12 g/10 min                 | ISO 1133        |
| Mechanical                               | Nominal Value (English)                  | Nominal Value (SI)          | Test Method     |
| Tensile Modulus                          | 334000 psi                               | 2300 MPa                    | ISO 527-1       |
| Tensile Stress (Yield)                   | 8700 psi                                 | 60.0 MPa                    | ISO 527-2       |
| Tensile Strain (Break)                   | > 50 %                                   | > 50 %                      | ISO 527-2       |
| Flexural Modulus                         | 348000 psi                               | 2400 MPa                    | ISO 178         |
| Flexural Stress                          | 13800 psi                                | 95.0 MPa                    | ISO 178         |
| Impact                                   | Nominal Value (English)                  | Nominal Value (SI)          | Test Method     |
| Notched Izod Impact (Area) (73°F (23°C)) | 7.14 ft·lb/in <sup>2</sup>               | 15.0 kJ/m <sup>2</sup>      | ASTM D256       |
| Thermal                                  | Nominal Value (English)                  | Nominal Value (SI)          | Test Method     |
| Deflection Temperature Under Load        |                                          |                             |                 |
| 66 psi (0.45 MPa), Unannealed            | 275 °F                                   | 135 °C                      | ISO 75-2/B      |
| 264 psi (1.8 MPa), Unannealed            | 266 °F                                   | 130 °C                      | ISO 75-2/A      |
| Vicat Softening Temperature              | 293 °F                                   | 145 °C                      | ISO 306/B50     |
| Flammability                             | Nominal Value (English)                  | Nominal Value (SI)          | Test Method     |
| Burning Rate                             |                                          |                             |                 |
| 0.0787 in (2.00 mm)                      | < 3.9 in/min                             | < 100 mm/min                | ISO 3795        |
| 0.0787 in (2.00 mm)                      | < 3.9 in/min                             | < 100 mm/min                | FMVSS 302       |
| Flame Rating                             |                                          |                             | UL 94           |
| 0.06 in (1.6 mm)                         | V-2                                      | V-2                         |                 |
| 0.13 in (3.2 mm)                         | V-0                                      | V-0                         |                 |
| Glow Wire Ignition Temperature           |                                          |                             | IEC 60695-2-13  |
| 0.04 in (1.0 mm)                         | 1760 °F                                  | 960 °C                      |                 |
| 0.08 in (2.0 mm)                         | 1760 °F                                  | 960 °C                      |                 |
| 0.12 in (3.0 mm)                         | 1760 °F                                  | 960 °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.

**Product Storage and Handling**

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

**Company Information**

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

Page: 1 of 2  
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