

Technical Data Sheet  
**PERLEX® R203**  
Polycarbonate  
Engineering Plastics



| General                                  |                           |                     |                |
|------------------------------------------|---------------------------|---------------------|----------------|
| Additive                                 | • UV Stabilizer           |                     |                |
| Features                                 | • Good Flow               | • UV Resistant      |                |
| Uses                                     | • Automotive Applications | • Lighting Fixtures |                |
| Physical                                 | Nominal Value (English)   | Nominal Value (SI)  | Test Method    |
| Density                                  | 1.20 g/cm³                | 1.20 g/cm³          | ISO 1183       |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 26 g/10 min               | 26 g/10 min         | ISO 1133       |
| Molding Shrinkage                        | 0.50 to 0.70 %            | 0.50 to 0.70 %      |                |
| Mechanical                               | Nominal Value (English)   | Nominal Value (SI)  | Test Method    |
| Tensile Modulus                          | 341000 psi                | 2350 MPa            | ISO 527-2      |
| Tensile Stress (Yield)                   | 8700 psi                  | 60.0 MPa            | ISO 527-2      |
| Tensile Strain (Break)                   | 100 %                     | 100 %               | ISO 527-2      |
| Flexural Modulus                         | 334000 psi                | 2300 MPa            | ISO 178        |
| Flexural Stress                          | 13100 psi                 | 90.0 MPa            | ISO 178        |
| Impact                                   | Nominal Value (English)   | Nominal Value (SI)  | Test Method    |
| Notched Izod Impact (Area) (73°F (23°C)) | 19.0 ft·lb/in²            | 40.0 kJ/m²          | ASTM D256      |
| Thermal                                  | Nominal Value (English)   | Nominal Value (SI)  | Test Method    |
| Heat Deflection Temperature              |                           |                     |                |
| 66 psi (0.45 MPa), Unannealed            | 275 °F                    | 135 °C              | ISO 75-2/B     |
| 264 psi (1.8 MPa), Unannealed            | 257 °F                    | 125 °C              | ISO 75-2/A     |
| Vicat Softening Temperature              | 286 °F                    | 141 °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          |
| 0.031 in (0.8 mm)                        | HB                        | HB                  |                |
| 0.06 in (1.5 mm)                         | HB                        | HB                  |                |
| 0.12 in (3.0 mm)                         | HB                        | HB                  |                |
| Glow Wire Ignition Temperature           |                           |                     | IEC 60695-2-13 |
| 0.04 in (1.0 mm)                         | 1560 °F                   | 850 °C              |                |
| 0.08 in (2.0 mm)                         | 1560 °F                   | 850 °C              |                |
| 0.12 in (3.0 mm)                         | 1560 °F                   | 850 °C              |                |

**Notes**

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