

## Technical Data Sheet

### Perlex R203 BLACK 2.0010



Polycarbonate

#### Product Description

Perlex R203 BLACK 2.0010 is a Polycarbonate material. Features include: Good Flow, and UV Resistant.

|             |                                            |
|-------------|--------------------------------------------|
| Attribute   | Good Flow; UV Resistant                    |
| Additive    | UV Stabilizer                              |
| Application | Automotive Applications; Lighting Fixtures |

| Typical Properties                                      | Nominal Value | Units             | Test Method    |
|---------------------------------------------------------|---------------|-------------------|----------------|
| <b>Physical</b>                                         |               |                   |                |
| Melt Flow Rate, (300 °C/1.2 kg)                         | 26            | 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                                 | 100           | %                 | ISO 527-2      |
| Flexural Modulus                                        | 2300          | MPa               | ISO 178        |
| Tensile Modulus                                         | 2350          | MPa               | ISO 527-1      |
| Flexural Stress                                         | 90            | MPa               | ISO 178        |
| <b>Impact</b>                                           |               |                   |                |
| Notched Izod Impact (Area), (23 °C)                     | 40.0          | kJ/m <sup>2</sup> | ASTM D256      |
| <b>Thermal</b>                                          |               |                   |                |
| Vicat Softening Temperature, (B (50N), 50 °C/h)         | 141           | °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) | 125           | °C                | ISO 75-2/A     |
| <b>Flammable</b>                                        |               |                   |                |
| Burning Rate                                            |               |                   |                |
| (2.00 mm)                                               | <100          | mm/min            | ISO 3795       |
| (2.00 mm)                                               | <100          | mm/min            | FMVSS 302      |
| Glow Wire Ignition Temperature                          |               |                   |                |
| (3.0 mm)                                                | 850           | °C                | IEC 60695-2-13 |
| (2.0 mm)                                                | 850           | °C                | IEC 60695-2-13 |
| (1.0 mm)                                                | 850           | °C                | IEC 60695-2-13 |
| <b>UL Information</b>                                   |               |                   |                |
| Flame Rating                                            |               |                   |                |
| (1.5 mm)                                                | HB            |                   | UL 94          |
| (3.0 mm)                                                | HB            |                   | UL 94          |
| (0.8 mm)                                                | HB            |                   | UL 94          |