

**Ryton® BR111BL**

PPS-(GF+MX)

Syensqo

| Processing/Physical Characteristics | Value | Unit  | Test Standard |
|-------------------------------------|-------|-------|---------------|
| <b>ASTM Data</b>                    |       |       |               |
| Mold Shrinkage, MD                  | 0.002 | mm/mm | ASTM D 955    |
| Mold Shrinkage, TD                  | 0.004 | mm/mm | ASTM D 955    |

| Mechanical properties               | Value | Unit              | Test Standard |
|-------------------------------------|-------|-------------------|---------------|
| <b>ISO Data</b>                     |       |                   |               |
| Tensile Strength                    | 155   | MPa               | ISO 527       |
| Strain at break                     | 1     | %                 | ISO 527       |
| Flexural modulus, 23°C              | 19000 | MPa               | ISO 178       |
| Izod impact strength, +23°C         | 20    | kJ/m <sup>2</sup> | ISO 180/1U    |
| Izod notched impact strength, +23°C | 7     | kJ/m <sup>2</sup> | ISO 180/1A    |
| <b>ASTM Data</b>                    |       |                   |               |
| Tensile Strength                    | 145   | MPa               | ASTM D 638    |
| Elongation at Break                 | 1     | %                 | ASTM D 638    |
| Compressive Strength                | 295   | MPa               | ASTM D 695    |
| Flexural Modulus                    | 19300 | MPa               | ASTM D 790    |
| Flexural Strength                   | 228   | MPa               | ASTM D 790    |
| Rockwell Hardness                   | M 101 | -                 | ASTM D 785    |
| Izod Impact notched, 1/8 in         | 59    | J/m               | ASTM D 256    |
| Izod Impact unnotched, 1/4 in       | 270   | J/m               | ASTM D 256    |

| Thermal properties  | Value | Unit  | Test Standard   |
|---|-------|-------|-----------------|
| <b>ISO Data</b>   |       |       |                 |
| Burning behav. at 1.5 mm nom. thickn.<br>Thickness tested | V-0   | class | IEC 60695-11-10 |
| Burning behav. 5V at thickness h<br>Thickness tested      | 1.6   | mm    | -               |
| Burning behav. 5V at thickness h<br>Thickness tested      | 5VA   | class | IEC 60695-11-20 |
| Burning behav. 5V at thickness h<br>Thickness tested      | 1.6   | mm    | -               |
| <b>ASTM Data</b>  |       |       |                 |
| DTUL @ 264 psi  | 265   | °C    | ASTM D 648      |
| Limiting Oxygen Index                                     | 65    | %     | ASTM D 2863     |

| Electrical properties           | Value | Unit   | Test Standard |
|---------------------------------|-------|--------|---------------|
| <b>ASTM Data</b>                |       |        |               |
| Dielectric Strength, Short Time | 18    | kV/mm  | ASTM D 149    |
| Dissipation Factor, 1 MHz       | 0.003 | -      | ASTM D 150    |
| Dielectric Constant, 1 MHz      | 4.6   | -      | ASTM D 150    |
| Surface Resistivity             | >1E15 | Ohm    | ASTM D 257    |
| Volume Resistivity              | 1E15  | Ohm*cm | ASTM D 257    |
| Arc Resistance                  | 180   | s      | ASTM D 495    |

| Other properties       | Value | Unit              | Test Standard |
|------------------------|-------|-------------------|---------------|
| Water Absorption, 24hr | 0.02  | %                 | ASTM D 570    |
| Density                | 1940  | kg/m <sup>3</sup> | ASTM D 792    |

**Characteristics****Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Chemical Resistance**

General Chemical Resistance

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa