




**Product Data Sheet &  
General Processing Conditions**

**RTP 2099 X 134682  
Polycarbonate/PBT Alloy  
Permanently Static Dissipative  
ESD Protection  
Impact Modified  
UV Stabilized**



This compound has been formulated to meet the static dissipative requirements of the ATEX Directive.

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b>     | <b>ASTM TEST</b> |
|--|-----------------------|----------------------|------------------|
| Specific Gravity                             | 1.17                  | 1.17                 | D 792            |
| Melt Flow Rate<br>@ 230 °C, / 3.8 kg         | 5.00 - 8.00 g/10 min  | 5.00 - 8.00 g/10 min | D 1238           |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0060 - 0.0080 in/in | 0.60 - 0.80 %        | D 955            |

**MECHANICAL**

|  |                            |          |        |
|--|----------------------------|----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 14.0 ft-lbs/in             | 747 J/m  | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | No Break                   | No Break | D 4812 |
| Tensile Strength   | 6000 psi                   | 41 MPa   | D 638  |
| Tensile Elongation                                       | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus  | 0.24 x 10 <sup>6</sup> psi | 1655 MPa | D 638  |
| Flexural Strength  | 9500 psi                   | 66 MPa   | D 790  |
| Flexural Modulus   | 0.25 x 10 <sup>6</sup> psi | 1724 MPa | D 790  |

**ELECTRICAL**

|   |           |           |                    |
|---|-----------|-----------|--------------------|
| Surface Resistance*                                 | < 1E9 ohm | < 1E9 ohm | IEC 60079:0        |
| Static Decay<br>MIL-PRF-81705D, 5kV to 50 V, 12% RH | < 0.50 s  | < 0.50 s  | FTMS101C<br>4046.1 |

**THERMAL**

|  |              |             |       |
|--|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 183 °F       | 84 °C       | D 648 |
| @ 66 psi (455 kPa)                             | 205 °F       | 96 °C       | D 648 |
| Ignition Resistance*<br>Flammability           | HB @ 1/32 in | HB @ 0.8 mm | UL94  |

**PROPERTY NOTES**

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\*ATEX Directive mandates surface resistance limits of <1.0E+09 ohm at 50% RH or <1.0E+11 ohm at 30% RH.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

**GENERAL PROCESSING FOR INJECTION MOLDING**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa     |
| Melt Temperature   | 410 - 480 °F      | 210 - 249 °C     |
| Mold Temperature   | 150 - 230 °F      | 66 - 110 °C      |
| Drying             | 4 hrs @ 180 °F    | 4 hrs @ 82 °C    |
| Moisture Content   | < 0.02 %          | < 0.02 %         |