



**Product Data Sheet &  
General Processing Conditions**

**RTP 800 DEL  
Acetal (POM)  
Base Resin  
Homo-Polymer**

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

| PERMANENCE                                   | English               | SI Metric     | ASTM<br>TEST |
|----------------------------------------------|-----------------------|---------------|--------------|
| Primary Additive                             | 0 %                   | 0 %           |              |
| Specific Gravity                             | 1.41                  | 1.41          | D 792        |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0210 - 0.0290 in/in | 2.10 - 2.90 % | D 955        |

**MECHANICAL**

|                                   |                            |          |        |
|-----------------------------------|----------------------------|----------|--------|
| Impact Strength, Izod             |                            |          |        |
| notched 1/8 in (3.2 mm) section   | 1.5 ft-lbs/in              | 80 J/m   | D 256  |
| unnotched 1/8 in (3.2 mm) section | 32.0 ft-lbs/in             | 1708 J/m | D 4812 |
| Tensile Strength                  | 9100 psi                   | 63 MPa   | D 638  |
| Tensile Elongation                | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus                   | 0.35 x 10 <sup>6</sup> psi | 2413 MPa | D 638  |
| Flexural Strength                 | 13000 psi                  | 90 MPa   | D 790  |
| Flexural Modulus                  | 0.39 x 10 <sup>6</sup> psi | 2689 MPa | D 790  |

**ELECTRICAL**

|                     |               |               |              |
|---------------------|---------------|---------------|--------------|
| Volume Resistivity  | > 1E12 ohm.cm | > 1E12 ohm.cm | D 257        |
| Surface Resistivity | > 1E14 ohm/sq | > 1E14 ohm/sq | D 257        |
| Surface Resistance  | > 1E13 ohm    | > 1E13 ohm    | ESD STM11.11 |

**THERMAL**

|                                                           |                            |                             |       |
|-----------------------------------------------------------|----------------------------|-----------------------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa)            | 203 °F                     | 95 °C                       | D 648 |
| Ignition Resistance*                                      |                            |                             |       |
| Flammability**                                            | HB @ 1/16 in               | HB @ 1.5 mm                 | D 635 |
| Coefficient of Linear Thermal Expansion<br>Flow Direction | 6.5 x 10 <sup>-5</sup> /°F | 11.7 x 10 <sup>-5</sup> /°C | E 831 |

**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.

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

\*\* Values per RTP Company testing.

**GENERAL PROCESSING FOR INJECTION MOLDING**

|                    | English           | SI Metric      |
|--------------------|-------------------|----------------|
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa   |
| Melt Temperature   | 360 - 425 °F      | 182 - 218 °C   |
| Mold Temperature   | 175 - 225 °F      | 79 - 107 °C    |
| Drying             | 2 hrs @ 250 °F    | 2 hrs @ 121 °C |
| Moisture Content   | 0.15 %            | 0.15 %         |
| Dew Point          | -25 °F            | -32 °C         |

**PROCESSING NOTES**

Desiccant Type Dryer Required.