



**Product Data Sheet &  
General Processing Conditions**

**RTP 200 TC-C-29 FR**  
**Nylon 6/6 (PA)**  
**Thermally Conductive**  
**Electrically Conductive**  
**Flame Retardant**



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

| PERMANENCE                                   | English               | SI Metric     | ASTM TEST |
|----------------------------------------------|-----------------------|---------------|-----------|
| Specific Gravity                             | 1.69                  | 1.69          | D 792     |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0010 - 0.0030 in/in | 0.10 - 0.30 % | D 955     |

**MECHANICAL**

|                                                          |                            |           |        |
|----------------------------------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 0.5 ft-lbs/in              | 27 J/m    | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 1.8 ft-lbs/in              | 96 J/m    | D 4812 |
| Tensile Strength                                         | 8500 psi                   | 59 MPa    | D 638  |
| Tensile Elongation                                       | 1.0 %                      | 1.0 %     | D 638  |
| Tensile Modulus                                          | 1.80 x 10 <sup>6</sup> psi | 12411 MPa | D 638  |
| Flexural Strength                                        | 12500 psi                  | 86 MPa    | D 790  |
| Flexural Modulus                                         | 2.00 x 10 <sup>6</sup> psi | 13790 MPa | D 790  |

**ELECTRICAL**

|                     |              |              |       |
|---------------------|--------------|--------------|-------|
| Volume Resistivity  | < 1E2 ohm.cm | < 1E2 ohm.cm | D 257 |
| Surface Resistivity | < 1E4 ohm/sq | < 1E4 ohm/sq | D 257 |

**THERMAL**

|                                                |                                         |              |           |
|------------------------------------------------|-----------------------------------------|--------------|-----------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 460 °F                                  | 238 °C       | D 648     |
| Ignition Resistance*                           |                                         |              |           |
| Flammability                                   | V-0 @ 1/16 in                           | V-0 @ 1.5 mm | UL94      |
| Thermal Conductivity                           |                                         |              |           |
| Through-plane                                  | 11.80 (BTU.in)/(hr.ft <sup>2</sup> .°F) | 1.70 W/(m.K) | E 1530    |
| In-plane                                       | 48.60 (BTU.in)/(hr.ft <sup>2</sup> .°F) | 7.00 W/(m.K) | E 1461-92 |

**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.

**GENERAL PROCESSING FOR INJECTION MOLDING**

|                    | English           | SI Metric     |
|--------------------|-------------------|---------------|
| Injection Pressure | 10000 - 18000 psi | 69 - 124 MPa  |
| Melt Temperature   | 530 - 570 °F      | 277 - 299 °C  |
| Mold Temperature   | 150 - 225 °F      | 66 - 107 °C   |
| Drying             | 4 hrs @ 175 °F    | 4 hrs @ 79 °C |
| Moisture Content   | 0.20 %            | 0.20 %        |
| Dew Point          | 0 °F              | -18 °C        |

**PROCESSING NOTES**

Desiccant Type Dryer Required.