



**Product Data Sheet &  
General Processing Conditions**

**RTP 283 D TFE 15  
Nylon 6/12 (PA)  
Carbon Fiber  
PTFE Lubricated**

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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM<br/>TEST</b> |
|----------------------------------------------|-----------------------|------------------|----------------------|
| Primary Additive                             | 20 %                  | 20 %             |                      |
| Specific Gravity                             | 1.26                  | 1.26             | 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 | 1.8 ft-lbs/in              | 96 J/m      | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 13.5 ft-lbs/in             | 721 J/m     | D 4812 |
| Tensile Strength                                         | 25000 psi                  | 172 MPa     | D 638  |
| Tensile Elongation                                       | 2.0 - 3.0 %                | 2.0 - 3.0 % | D 638  |
| Tensile Modulus                                          | 2.15 x 10 <sup>6</sup> psi | 14824 MPa   | D 638  |
| Flexural Strength                                        | 38000 psi                  | 262 MPa     | D 790  |
| Flexural Modulus                                         | 1.85 x 10 <sup>6</sup> psi | 12756 MPa   | D 790  |

**ELECTRICAL**

|                     |                   |                   |       |
|---------------------|-------------------|-------------------|-------|
| Volume Resistivity  | 1E-1 - 1E1 ohm.cm | 1E-1 - 1E1 ohm.cm | D 257 |
| Surface Resistivity | 1E3 - 1E5 ohm/sq  | 1E3 - 1E5 ohm/sq  | D 257 |

**THERMAL**

|                                                |              |             |       |
|------------------------------------------------|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 420 °F       | 216 °C      | D 648 |
| Ignition Resistance*<br>Flammability**         | HB @ 1/16 in | HB @ 1.5 mm | D 635 |

**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**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| Injection Pressure | 10000 - 18000 psi | 69 - 124 MPa     |
| Melt Temperature   | 480 - 545 °F      | 249 - 285 °C     |
| Mold Temperature   | 140 - 200 °F      | 60 - 93 °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.