



**Product Data Sheet &  
General Processing Conditions**

**RTP 205 D Z  
Nylon 6/12 (PA)  
Glass Fiber  
FDA Compliant Ingredients**

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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM TEST</b> |
|--|-----------------------|------------------|------------------|
| Primary Additive                             | 30 %                  | 30 %             |                  |
| Specific Gravity                             | 1.30                  | 1.30             | D 792            |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0020 - 0.0040 in/in | 0.20 - 0.40 %    | D 955            |

**MECHANICAL**

|  |                            |             |        |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 2.2 ft-lbs/in              | 117 J/m     | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 19.0 ft-lbs/in             | 1014 J/m    | D 4812 |
| Tensile Strength   | 23000 psi                  | 159 MPa     | D 638  |
| Tensile Elongation                                       | 3.0 - 4.0 %                | 3.0 - 4.0 % | D 638  |
| Tensile Modulus  | 1.30 x 10 <sup>6</sup> psi | 8964 MPa    | D 638  |
| Flexural Strength  | 34500 psi                  | 238 MPa     | D 790  |
| Flexural Modulus   | 1.20 x 10 <sup>6</sup> psi | 8274 MPa    | D 790  |

**ELECTRICAL**

|                    |               |               |       |
|--------------------|---------------|---------------|-------|
| Volume Resistivity | > 1E14 ohm.cm | > 1E14 ohm.cm | 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.