



**Product Data Sheet &  
General Processing Conditions**

**RTP 200 H FR**  
**Impact-Modified Nylon 6/6 (PA)**  
**High Impact**  
**Unreinforced**  
**Flame Retardant**  
**UL94 V-0**  


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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM<br/>TEST</b> |
|----------------------------------------------|-----------------------|------------------|----------------------|
| Specific Gravity                             | 1.26                  | 1.26             | D 792                |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0180 - 0.0240 in/in | 1.80 - 2.40 %    | D 955                |
| Water Absorption, 24 hrs @ 23°C              | 0.800 %               | 0.800 %          | D 570                |

**MECHANICAL**

|                                                          |                            |          |        |
|----------------------------------------------------------|----------------------------|----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 5.0 ft-lbs/in              | 267 J/m  | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | No Break                   | No Break | D 4812 |
| Tensile Strength                                         | 6700 psi                   | 46 MPa   | D 638  |
| Tensile Elongation                                       | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus                                          | 0.32 x 10 <sup>6</sup> psi | 2206 MPa | D 638  |
| Flexural Strength                                        | 11000 psi                  | 76 MPa   | D 790  |
| Flexural Modulus                                         | 0.30 x 10 <sup>6</sup> psi | 2068 MPa | D 790  |
| Hardness<br>Rockwell, R                                  | 112                        | 112      | D 785  |

**ELECTRICAL**

|                                  |               |               |       |
|----------------------------------|---------------|---------------|-------|
| Dielectric Strength, S/T, in oil | 500 VPM       | 19.7 kV/mm    | D 149 |
| Dielectric Constant, 1 MHz, Dry  | 3.7           | 3.7           | D 150 |
| Dissipation Factor, 1 MHz, Dry   | 0.0160        | 0.0160        | D 150 |
| Volume Resistivity               | > 1E16 ohm.cm | > 1E16 ohm.cm | D 257 |

**THERMAL**

|                                                |               |              |       |
|------------------------------------------------|---------------|--------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 160 °F        | 71 °C        | D 648 |
| @ 66 psi (455 kPa)                             | 375 °F        | 191 °C       | D 648 |
| Ignition Resistance*<br>Flammability           | V-0 @ 1/16 in | V-0 @ 1.5 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.

\* 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 - 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           |