### 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

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

### MECHANICAL

<table>
<thead>
<tr>
<th>Property</th>
<th>English</th>
<th>SI Metric</th>
<th>ASTM TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Strength, Izod</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>notched 1/8 in (3.2 mm) section</td>
<td>6.0 ft-lbs/in</td>
<td>320 J/m</td>
<td>D 256</td>
</tr>
<tr>
<td>unnotched 1/8 in (3.2 mm) section</td>
<td>No Break</td>
<td>No Break</td>
<td>D 4812</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>6500 psi</td>
<td>45 MPa</td>
<td>D 638</td>
</tr>
<tr>
<td>Tensile Elongation</td>
<td>&gt; 10.0 %</td>
<td>&gt; 10.0 %</td>
<td>D 638</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>0.28 x 10^6 psi</td>
<td>1931 MPa</td>
<td>D 638</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>11000 psi</td>
<td>76 MPa</td>
<td>D 790</td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>0.30 x 10^6 psi</td>
<td>2068 MPa</td>
<td>D 790</td>
</tr>
<tr>
<td>Hardness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rockwell, R</td>
<td>112</td>
<td>112</td>
<td>D 785</td>
</tr>
</tbody>
</table>

### ELECTRICAL

<table>
<thead>
<tr>
<th>Property</th>
<th>English</th>
<th>SI Metric</th>
<th>ASTM TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Strength, S/T, in oil</td>
<td>500 VPM</td>
<td>19.7 kV/mm</td>
<td>D 149</td>
</tr>
<tr>
<td>Dielectric Constant, 1 MHz, Dry</td>
<td>3.7</td>
<td>3.7</td>
<td>D 150</td>
</tr>
<tr>
<td>Dissipation Factor, 1 MHz, Dry</td>
<td>0.0160</td>
<td>0.0160</td>
<td>D 150</td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>&gt;1E16 ohm.cm</td>
<td>&gt;1E16 ohm.cm</td>
<td>D 257</td>
</tr>
</tbody>
</table>

### THERMAL

<table>
<thead>
<tr>
<th>Property</th>
<th>English</th>
<th>SI Metric</th>
<th>ASTM TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deflection Temperature @ 264 psi (1820 kPa)</td>
<td>160 °F</td>
<td>71 °C</td>
<td>D 648</td>
</tr>
<tr>
<td>@ 66 psi (455 kPa)</td>
<td>375 °F</td>
<td>191 °C</td>
<td>D 648</td>
</tr>
<tr>
<td>Ignition Resistance*</td>
<td>V-0 @ 1/16 in</td>
<td>V-0 @ 1.5 mm</td>
<td>UL94</td>
</tr>
</tbody>
</table>

### 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

http://www.upmold.com
This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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**PROCESSING NOTES**

Desiccant Type Dryer Required.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection Pressure</td>
<td>10000 - 18000 psi  69 - 124 MPa</td>
</tr>
<tr>
<td>Melt Temperature</td>
<td>530 - 570 °F  277 - 299 °C</td>
</tr>
<tr>
<td>Mold Temperature</td>
<td>150 - 225 °F  66 - 107 °C</td>
</tr>
<tr>
<td>Drying</td>
<td>4 hrs @ 175 °F  4 hrs @ 79 °C</td>
</tr>
<tr>
<td>Moisture Content</td>
<td>0.20 %  0.20 %</td>
</tr>
<tr>
<td>Dew Point</td>
<td>0 °F  -18 °C</td>
</tr>
</tbody>
</table>

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