




**Product Data Sheet &
General Processing Conditions**

**RTP 205 A FR UV
Nylon 6 (PA)
Glass Fiber
Flame Retardant
UV Stabilized
UL94 V-0**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|----------------------------------------------------------|----------------------------|------------------|------------------|
| Primary Additive | 30 % | 30 % | |
| Specific Gravity | 1.65 | 1.65 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0015 - 0.0030 in/in | 0.15 - 0.30 % | D 955 |
| Water Absorption, 24 hrs @ 23°C | 1.200 % | 1.200 % | D 570 |
| MECHANICAL | | | |
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 2.0 ft-lbs/in | 107 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 15.0 ft-lbs/in | 801 J/m | D 4812 |
| Tensile Strength | 21000 psi | 145 MPa | D 638 |
| Tensile Elongation | 2.0 - 3.0 % | 2.0 - 3.0 % | D 638 |
| Tensile Modulus | 1.80 x 10 ⁶ psi | 12411 MPa | D 638 |
| Flexural Strength | 33000 psi | 228 MPa | D 790 |
| Flexural Modulus | 1.50 x 10 ⁶ psi | 10342 MPa | D 790 |
| Hardness Rockwell, R | 119 | 119 | D 785 |
| ELECTRICAL | | | |
| Volume Resistivity | > 1E14 ohm.cm | > 1E14 ohm.cm | D 257 |
| THERMAL | | | |
| Deflection Temperature @ 264 psi (1820 kPa) | 390 °F | 199 °C | D 648 |
| @ 66 psi (455 kPa) | 420 °F | 216 °C | D 648 |
| Ignition Resistance* 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

| | English | SI Metric |
|--------------------|-------------------|------------------|
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa |
| Melt Temperature | 470 - 535 °F | 243 - 279 °C |
| Mold Temperature | 130 - 200 °F | 54 - 93 °C |
| Drying | 2 hrs @ 180 °F | 2 hrs @ 82 °C |
| Moisture Content | 0.20 % | 0.20 % |
| Dew Point | 0 °F | -18 °C |