




**Product Data Sheet &
General Processing Conditions**

**RTP 299 X 137151 B
Nylon 6/6 (PA)
Thermally Conductive
Electrically Insulative
Flame Retardant**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|----------------------------------------------|-----------------------|------------------|------------------|
| Specific Gravity | 1.90 | 1.90 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0020 - 0.0040 in/in | 0.20 - 0.40 % | D 955 |

MECHANICAL

| | | | |
|----------------------------------------------------------|----------------------------|-----------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 0.5 ft-lbs/in | 27 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 2.0 ft-lbs/in | 107 J/m | D 4812 |
| Tensile Strength | 8000 psi | 55 MPa | D 638 |
| Tensile Elongation | < 1.0 % | < 1.0 % | D 638 |
| Tensile Modulus | 2.30 x 10 ⁶ psi | 15858 MPa | D 638 |
| Flexural Strength | 13000 psi | 90 MPa | D 790 |
| Flexural Modulus | 2.30 x 10 ⁶ psi | 15858 MPa | D 790 |

ELECTRICAL

| | | | |
|---------------------|---------------|---------------|-------|
| Surface Resistivity | > 1E12 ohm/sq | > 1E12 ohm/sq | D 257 |
|---------------------|---------------|---------------|-------|

THERMAL

| | | | |
|---------------------------------------|-----------------------------------------|--------------|-----------|
| Ignition Resistance* Flammability | V-0 @ 1/16 in | V-0 @ 1.5 mm | UL94 |
| Thermal Conductivity Through-plane | 8.33 (BTU.in)/(hr.ft ² .°F) | 1.20 W/(m.K) | E 1530 |
| In-plane | 34.72 (BTU.in)/(hr.ft ² .°F) | 5.00 W/(m.K) | E 1461-92 |

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 - 18000 psi | 69 - 124 MPa |
| Melt Temperature | 530 - 570 °F | 277 - 299 °C |
| Mold Temperature | 175 - 250 °F | 79 - 121 °C |
| Drying | 4 hrs @ 175 °F | 4 hrs @ 79 °C |
| Moisture Content | 0.20 % | 0.20 % |
| Dew Point | 0 °F | -18 °C |