



**Product Data Sheet &
General Processing Conditions**

**RTP 4005.3
Polyphthalamide (PPA)
Glass Fiber Reinforced
Heat Stabilized**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Primary Additive | 33 % | 33 % | |
| Specific Gravity | 1.46 | 1.46 | 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 | 1.8 ft-lbs/in | 96 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 16.0 ft-lbs/in | 854 J/m | D 4812 |
| Tensile Strength | 30000 psi | 207 MPa | D 638 |
| Tensile Elongation | 2.0 - 3.0 % | 2.0 - 3.0 % | D 638 |
| Tensile Modulus | 1.75 x 10 ⁶ psi | 12066 MPa | D 638 |
| Flexural Strength | 41000 psi | 283 MPa | D 790 |
| Flexural Modulus | 1.65 x 10 ⁶ psi | 11377 MPa | D 790 |

ELECTRICAL

| | | | |
|--------------------|--------------------|--------------------|-------|
| Volume Resistivity | 1E14 - 1E16 ohm.cm | 1E14 - 1E16 ohm.cm | D 257 |
|--------------------|--------------------|--------------------|-------|

THERMAL

| | | | |
|--|--------------|-------------|-------|
| Deflection Temperature @ 264 psi (1820 kPa) | 530 °F | 277 °C | D 648 |
| Ignition Resistance* 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

| | English | SI Metric |
|--------------------|--------------------|--------------------|
| Injection Pressure | 10000 - 18000 psi | 69 - 124 MPa |
| Melt Temperature | 575 - 625 °F | 302 - 329 °C |
| Mold Temperature | 275 - 325 °F | 135 - 163 °C |
| Drying | 4 - 6 hrs @ 225 °F | 4 - 6 hrs @ 107 °C |
| Moisture Content | 0.05 % | 0.05 % |
| Dew Point | -25 °F | -32 °C |

PROCESSING NOTES

Desiccant Type Dryer Required.