



**Product Data Sheet &
General Processing Conditions**

**RTP 4005 ABR
Polyphthalamide (PPA)
Abrasion Resistant
Glass Fiber
Preliminary Datasheet**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|-------------------|----------------|------------------|------------------|
| Primary Additive | 30 % | 30 % | |
| Specific Gravity | 1.37 | 1.37 | D 792 |

MECHANICAL

| | | | |
|-----------------------------------|----------------------------|-------------|--------|
| Impact Strength, Izod | | | |
| notched 1/8 in (3.2 mm) section | 1.3 ft-lbs/in | 69 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 12.0 ft-lbs/in | 641 J/m | D 4812 |
| Tensile Strength | 18250 psi | 126 MPa | D 638 |
| Tensile Elongation | 1.5 - 3.0 % | 1.5 - 3.0 % | D 638 |
| Tensile Modulus | 1.20 x 10 ⁶ psi | 8274 MPa | D 638 |
| Flexural Strength | 27500 psi | 190 MPa | D 790 |
| Flexural Modulus | 1.10 x 10 ⁶ psi | 7584 MPa | D 790 |

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.

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.

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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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