



**Product Data Sheet &
General Processing Conditions**

**RTP 881 TFE 5
Acetal (POM)
Carbon Fiber Reinforced
PTFE Lubricated**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|----------------|------------------|------------------|
| Primary Additive | 10 % | 10 % | |
| Specific Gravity | 1.45 | 1.45 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0040 in/in | 0.40 % | D 955 |

MECHANICAL

| | | | |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 0.8 ft-lbs/in | 43 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 4.0 ft-lbs/in | 214 J/m | D 4812 |
| Tensile Strength | 10500 psi | 72 MPa | D 638 |
| Tensile Elongation | 1.0 - 3.0 % | 1.0 - 3.0 % | D 638 |
| Tensile Modulus | 1.20 x 10 ⁶ psi | 8274 MPa | D 638 |
| Flexural Strength | 16000 psi | 110 MPa | D 790 |
| Flexural Modulus | 1.10 x 10 ⁶ psi | 7584 MPa | D 790 |

ELECTRICAL

| | | | |
|--------------------|--------------|--------------|-------|
| Volume Resistivity | < 1E6 ohm.cm | < 1E6 ohm.cm | D 257 |
|--------------------|--------------|--------------|-------|

THERMAL

| | | | |
|--|--------------|-------------|-------|
| Deflection Temperature @ 264 psi (1820 kPa) | 305 °F | 152 °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 - 15000 psi | 69 - 103 MPa |
| Melt Temperature | 360 - 425 °F | 182 - 218 °C |
| Mold Temperature | 175 - 225 °F | 79 - 107 °C |
| Drying | 2 hrs @ 250 °F | 2 hrs @ 121 °C |
| Moisture Content | 0.15 % | 0.15 % |
| Dew Point | -25 °F | -32 °C |

PROCESSING NOTES

Desiccant Type Dryer Required.