



**Product Data Sheet &
General Processing Conditions**

**RTP 4285 TFE 15
Thermoplastic Polyimide (TPI)
Carbon Fiber
PTFE Lubricated**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.51	1.51	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0001 - 0.0010 in/in	0.01 - 0.10 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.5 ft-lbs/in	614 J/m	D 4812
Tensile Strength	28500 psi	197 MPa	D 638
Tensile Elongation	1.0 - 2.0 %	1.0 - 2.0 %	D 638
Tensile Modulus	3.50 x 10 ⁶ psi	24132 MPa	D 638
Flexural Strength	44000 psi	303 MPa	D 790
Flexural Modulus	3.00 x 10 ⁶ psi	20685 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E5 ohm.cm	< 1E5 ohm.cm	D 257
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THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	> 600 °F	> 316 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

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	20000 - 28000 psi	138 - 193 MPa
Melt Temperature	750 - 780 °F	399 - 416 °C
Mold Temperature	350 - 450 °F	177 - 232 °C
Drying	6 hrs @ 400 °F	6 hrs @ 204 °C
Moisture Content	0.01 %	0.01 %
Dew Point	-40 °F	-40 °C

PROCESSING NOTES

Desiccant Type Dryer Required.