



**Product Data Sheet &
General Processing Conditions**

**RTP 4005 TFE 10 FR
Polyphthalamide (PPA)
Glass Fiber
PTFE Lubricated
Flame Retardant**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.77	1.77	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0015 - 0.0030 in/in	0.15 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.200 %	0.200 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	20000 psi	138 MPa	D 638
Tensile Elongation	1.5 %	1.5 %	D 638
Tensile Modulus	2.10 x 10 ⁶ psi	14480 MPa	D 638
Flexural Strength	27000 psi	186 MPa	D 790
Flexural Modulus	1.90 x 10 ⁶ psi	13100 MPa	D 790
Hardness Rockwell, R	125	125	D 785

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	510 °F	266 °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	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	575 - 625 °F	302 - 329 °C
Mold Temperature	275 - 325 °F	135 - 163 °C
Drying	6 hrs @ 175 °F	6 hrs @ 79 °C
Moisture Content	0.05 %	0.05 %
Dew Point	-25 °F	-32 °C

PROCESSING NOTES

Desiccant Type Dryer Required.