



**Product Data Sheet &
General Processing Conditions**

**RTP 205 G FR HS
Nylon 4/6 (PA)
Glass Fiber
Flame Retardant
Heat Stabilized
Dry As Molded**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.68	1.68	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0030 - 0.0050 in/in	0.30 - 0.50 %	D 955
Water Absorption, 24 hrs @ 23°C	1.600 %	1.600 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.2 ft-lbs/in	64 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	22000 psi	152 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.65 x 10 ⁶ psi	11377 MPa	D 638
Flexural Strength	33000 psi	228 MPa	D 790
Flexural Modulus	1.70 x 10 ⁶ psi	11722 MPa	D 790
Hardness			
Rockwell, R	120	120	D 785

ELECTRICAL

Volume Resistivity	> 1E14 ohm.cm	> 1E14 ohm.cm	D 257
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THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	550 °F	288 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/32 in	V-0 @ 0.8 mm	D 3801
Limiting Oxygen Index**	37.0 %	37.00 %	D 2863

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	560 - 620 °F	293 - 327 °C
Mold Temperature	175 - 300 °F	79 - 149 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.05 %	0.05 %
Dew Point	-40 °F	-40 °C