



**Product Data Sheet &
General Processing Conditions**

**RTP 205 A FR UV
Nylon 6 (PA)
Glass Fiber
Flame Retardant
UV Stabilized
UL94 V-0**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.65	1.65	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	1.200 %	1.200 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	15.0 ft-lbs/in	801 J/m	D 4812
Tensile Strength	21000 psi	145 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.80 x 10 ⁶ psi	12411 MPa	D 638
Flexural Strength	33000 psi	228 MPa	D 790
Flexural Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 790
Hardness			
Rockwell, R	119	119	D 785

ELECTRICAL

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

Deflection Temperature			
@ 264 psi (1820 kPa)	390 °F	199 °C	D 648
@ 66 psi (455 kPa)	420 °F	216 °C	D 648
Ignition Resistance*			
Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	470 - 535 °F	243 - 279 °C
Mold Temperature	130 - 200 °F	54 - 93 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C