Product Data Sheet &
General Processing Conditions

RTP 203 A FR
Nylon 6 (PA)
Glass Fiber
Flame Retardant

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.58	1.58	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	1.400 %	1.400 %	D 570
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	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	16000 psi	110 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.25 x 10^6 psi	8619 MPa	D 638
Flexural Strength	27000 psi	186 MPa	D 790
Flexural Modulus	1.10 x 10^6 psi	7584 MPa	D 790
Hardness			
Rockwell, R	118	118	D 785
ELECTRICAL			
Dielectric Strength, S/T, in oil	475 VPM	18.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	4.0	4.0	D 150
Dissipation Factor, 1 MHz, Dry	0.0150	0.0150	D 150
Volume Resistivity	> 1E14 ohm.cm	> 1E14 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	370 °F	188 °C	D 648
@ 66 psi (455 kPa)	400 °F	204 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
Flammability**	5VA @ 1/8 in	5VA @ 3.0 mm	D 5048

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	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