Product Data Sheet &
General Processing Conditions

RTP 205 D FR
Nylon 6/12 (PA)
Glass Fiber
Flame Retardant
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	0.150 %	0.150 %	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	13.0 ft-lbs/in	694 J/m	D 4812
Tensile Strength	19000 psi	131 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.75 x 10^6 psi	12066 MPa	D 638
Flexural Strength	29000 psi	200 MPa	D 790
Flexural Modulus	1.60 x 10^6 psi	11032 MPa	D 790
ELECTRICAL			
Dielectric Strength, S/T, in oil	475 VPM	18.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	4.2	4.2	D 150
Dissipation Factor, 1 MHz, Dry	0.0150	0.0150	D 150
Volume Resistivity	> 1E13 ohm.cm	> 1E13 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	410 °F	210 °C	D 648
@ 66 psi (455 kPa)	415 °F	213 °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 - 18000 psi	69 - 124 MPa
Melt Temperature	480 - 545 °F	249 - 285 °C
Mold Temperature	140 - 200 °F	60 - 93 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Desiccant Type Dryer Required.

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a “trial and error” basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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