Product Data Sheet &
General Processing Conditions

RTP 201 FR UV
Nylon 6/6 (PA)
Glass Fiber
Flame Retardant
UV Stabilized
UL94 V-0

The RTP series of flame retardant, glass fiber reinforced nylon materials are designed to provide the optimal balance of strength, electrical and ignition resistance properties while exhibiting excellent processing characteristics. RTP 201 FR UV is a flame retardant, glass reinforced nylon 6.6 material which includes UV stabilization. In addition to a UL outdoor certification of (f1), RTP 201 FR UV possesses the full range of UL94 ratings required for many EEE applications.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.48	1.48	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0040 - 0.0060 in/in	0.40 - 0.60 %	D 955
Water Absorption, 24 hrs @ 23°C	0.800 %	0.800 %	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	13000 psi	90 MPa	D 638
Tensile Elongation	3.0 - 4.0 %	3.0 - 4.0 %	D 638
Tensile Modulus	0.81 x 10^6 psi	5585 MPa	D 638
Flexural Strength	20000 psi	138 MPa	D 790
Flexural Modulus	0.70 x 10^6 psi	4826 MPa	D 790
Hardness			
Rockwell, R	115	115	D 785
ELECTRICAL			
Dielectric Strength, S/T, in oil	500 VPM	19.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	4.0	4.0	D 150
Dissipation Factor, 1 MHz, Dry	0.0170	0.0170	D 150
Volume Resistivity	> 1E15 ohm.cm	> 1E15 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	400 °F	204 °C	D 648
@ 66 psi (455 kPa)	420 °F	216 °C	D 648
Ignition Resistance*			
Flammability	V-0 @ 1/32 in	V-0 @ 0.8 mm	UL94
Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94
Limiting Oxygen Index	34.0 %	34.00 %	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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	530 - 570 °F	277 - 299 °C
Mold Temperature	150 - 225 °F	66 - 107 °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.