Product Data Sheet &
General Processing Conditions

RTP 301 FR
Polycarbonate (PC)
Glass Fiber
Flame Retardant
Non-PBBO/E
UL94 V-0

The RTP series of flame retardant, glass fiber reinforced polycarbonate materials offer dimensional stability with improved heat distortion and ignition resistance performance over the base resin. RTP 301 FR also provides good maintenance of impact strengths.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.26	1.26	D 792
Melt Flow Rate			
@ 300 °C, / 1.2 kg	5.00 - 15.00 g/10 min	5.00 - 15.00 g/10 min	D 1238
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	0.100 %	0.100 %	D 570
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	5.0 ft-lbs/in	267 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	8500 psi	59 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.55 x 10^6 psi	3792 MPa	D 638
Flexural Strength	15000 psi	103 MPa	D 790
Flexural Modulus	0.50 x 10^6 psi	3448 MPa	D 790
Hardness			
Rockwell, R	118	118	D 785
ELECTRICAL			
Dielectric Strength, S/T, in oil	500 VPM	19.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.1	3.1	D 150
Dissipation Factor, 1 MHz, Dry	0.0080	0.0080	D 150
Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	285 °F	141 °C	D 648
@ 66 psi (455 kPa)	295 °F	146 °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	550 - 600 °F	288 - 316 °C
Mold Temperature	180 - 250 °F	82 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.