



**Product Data Sheet &
General Processing Conditions**

**RTP 303 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 properties over the base resin.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.34	1.34	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0020 - 0.0040 in/in	0.20 - 0.40 %	D 955
Water Absorption, 24 hrs @ 23°C	0.090 %	0.090 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.5 ft-lbs/in	133 J/m	D 256
unnotched 1/8 in (3.2 mm) section	13.0 ft-lbs/in	694 J/m	D 4812
Tensile Strength	15000 psi	103 MPa	D 638
Tensile Elongation	3.0 - 4.0 %	3.0 - 4.0 %	D 638
Tensile Modulus	0.90 x 10 ⁶ psi	6206 MPa	D 638
Flexural Strength	24000 psi	165 MPa	D 790
Flexural Modulus	0.80 x 10 ⁶ psi	5516 MPa	D 790
Hardness			
Rockwell, R	118	118	D 785

ELECTRICAL

Dielectric Strength, S/T, in oil	480 VPM	18.9 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.2	3.2	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)	290 °F	143 °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
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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.