Product Data Sheet &
General Processing Conditions

RTP 305 FR L
Polycarbonate (PC)
Glass Fiber
Flame Retardant
Non-PBBO/E
Lubricated
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 305 FR L includes lubricants for enhanced processing.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.44	1.44	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.070 %	0.070 %	D 570
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	3.0 ft-lbs/in	160 J/m	D 256
unnotched 1/8 in (3.2 mm) section	15.0 ft-lbs/in	801 J/m	D 4812
Tensile Strength	18000 psi	124 MPa	D 638
Tensile Elongation	3.0 - 4.0 %	3.0 - 4.0 %	D 638
Tensile Modulus	1.30 x 10^6 psi	8964 MPa	D 638
Flexural Strength	26000 psi	179 MPa	D 790
Flexural Modulus	1.15 x 10^6 psi	7929 MPa	D 790
Hardness			
Rockwell, R	119	119	D 785
ELECTRICAL			
Dielectric Strength, S/T, in oil	460 VPM	18.1 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.4	3.4	D 150
Dissipation Factor, 1 MHz, Dry	0.0070	0.0070	D 150
Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	295 °F	146 °C	D 648
@ 66 psi (455 kPa)	300 °F	149 °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.