




**Product Data Sheet &  
General Processing Conditions**

**RTP 305 SE  
Polycarbonate (PC)  
Glass Fiber  
Self Extinguishing  
Halogen Free  
UL94 V-2**



The RTP 300 SE series represent a range of glass fiber reinforced, self-extinguishing polycarbonate materials which offer outstanding dimensional stability with improved rigidity, heat resistance and strengths over the base resin.

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	30 %	30 %	
Specific Gravity	1.42	1.42	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0010 - 0.0025 in/in	0.10 - 0.25 %	D 955
Water Absorption, 24 hrs @ 23°C	0.080 %	0.080 %	D 570

**MECHANICAL**

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	3.3 ft-lbs/in	176 J/m	D 256
unnotched 1/8 in (3.2 mm) section	18.0 ft-lbs/in	961 J/m	D 4812
Tensile Strength	19000 psi	131 MPa	D 638
Tensile Elongation	3.0 - 4.0 %	3.0 - 4.0 %	D 638
Tensile Modulus	1.20 x 10 <sup>6</sup> psi	8274 MPa	D 638
Flexural Strength	30000 psi	207 MPa	D 790
Flexural Modulus	1.15 x 10 <sup>6</sup> psi	7929 MPa	D 790
Hardness			
Rockwell, R	119	119	D 785

**ELECTRICAL**

Dielectric Strength, S/T, in oil	470 VPM	18.5 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.4	3.4	D 150
Dissipation Factor, 1 MHz, Dry	0.0080	0.0080	D 150
Arc Resistance	120 s	120 s	D 495
Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257

**THERMAL**

Deflection Temperature			
@ 264 psi (1820 kPa)	300 °F	149 °C	D 648
@ 66 psi (455 kPa)	300 °F	149 °C	D 648
Ignition Resistance*			
Flammability	V-2 @ 1/16 in	V-2 @ 1.5 mm	UL94
Flammability	V-1 @ 1/8 in	V-1 @ 3.0 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**

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Desiccant Type Dryer Required.