




**Product Data Sheet &
General Processing Conditions**

**RTP 307 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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.52	1.52	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0005 - 0.0020 in/in	0.05 - 0.20 %	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	4.0 ft-lbs/in	214 J/m	D 256
unnotched 1/8 in (3.2 mm) section	20.0 ft-lbs/in	1068 J/m	D 4812
Tensile Strength	21000 psi	145 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.60 x 10 ⁶ psi	11032 MPa	D 638
Flexural Strength	32000 psi	221 MPa	D 790
Flexural Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 790
Hardness Rockwell, R	119	119	D 785

ELECTRICAL

Dielectric Strength, S/T, in oil	455 VPM	17.9 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.6	3.6	D 150
Dissipation Factor, 1 MHz, Dry	0.0070	0.0070	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

Desiccant Type Dryer Required.