




**Product Data Sheet &  
General Processing Conditions**

**RTP 301 HF FR  
Polycarbonate (PC)  
High Flow  
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 HF FR is a special low viscosity grade.

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	10 %	10 %	
Specific Gravity	1.28	1.28	D 792
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	1.8 ft-lbs/in	96 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	8000 psi	55 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.45 x 10 <sup>6</sup> psi	3103 MPa	D 638
Flexural Strength	14500 psi	100 MPa	D 790
Flexural Modulus	0.45 x 10 <sup>6</sup> psi	3103 MPa	D 790

**ELECTRICAL**

Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257
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**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	280 °F	138 °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**

	<b>English</b>	<b>SI Metric</b>
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.

11 Jun 2008 LWA2

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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