



**Product Data Sheet &  
General Processing Conditions**

**RTP 305 TFE 15 SI 2 HB  
Polycarbonate (PC)  
Glass Fiber  
PTFE Lubricated  
Silicone Lubricated  
UL94 HB**



RTP 303 TFE 15 SI 2 HB and RTP 305 TFE 15 SI 2 HB are glass fiber reinforced polycarbonates which contain PTFE and silicone fluid. These materials offer excellent physical properties and dimensional stability as well as both excellent lubricity and a low coefficients of friction.

**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	1.53	1.53	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	2.5 ft-lbs/in	133 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	14000 psi	97 MPa	D 638
Tensile Elongation	1.5 - 2.5 %	1.5 - 2.5 %	D 638
Tensile Modulus	1.25 x 10 <sup>6</sup> psi	8619 MPa	D 638
Flexural Strength	23000 psi	159 MPa	D 790
Flexural Modulus	1.10 x 10 <sup>6</sup> psi	7584 MPa	D 790
Hardness Rockwell, R	118	118	D 785

**ELECTRICAL**

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)	300 °F	149 °C	D 648
Ignition Resistance* Flammability	HB @ 1/16 in	HB @ 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  
Dew Point

0.02 %  
-20 °F

0.02 %  
-29 °C

**PROCESSING NOTES**

---

Desiccant Type Dryer Required.