



**Product Data Sheet &
General Processing Conditions**

**RTP 303 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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.42	1.42	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0015 - 0.0030 in/in	0.15 - 0.30 %	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	3.0 ft-lbs/in	160 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	13000 psi	90 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	0.85 x 10 ⁶ psi	5861 MPa	D 638
Flexural Strength	21000 psi	145 MPa	D 790
Flexural Modulus	0.85 x 10 ⁶ psi	5861 MPa	D 790
Hardness Rockwell, R	118	118	D 785

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)	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

	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.