



**Product Data Sheet &
General Processing Conditions**

**RTP 300 TFE 20 SE
Polycarbonate (PC)
Unreinforced
PTFE Lubricated
Self Extinguishing
Bromine/Chlorine Free
UL94 V-0**



RTP 300 TFE 20 SE is an internally lubricated polycarbonate which exhibits low wear characteristics while maintaining the toughness and self-extinguishing behavior of the base resin.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.32	1.32	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0060 - 0.0080 in/in	0.60 - 0.80 %	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	4.0 ft-lbs/in	214 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	7000 psi	48 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.30 x 10 ⁶ psi	2068 MPa	D 638
Flexural Strength	10000 psi	69 MPa	D 790
Flexural Modulus	0.30 x 10 ⁶ psi	2068 MPa	D 790
Hardness			
Rockwell, R	116	116	D 785

ELECTRICAL

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

Deflection Temperature			
@ 264 psi (1820 kPa)	275 °F	135 °C	D 648
@ 66 psi (455 kPa)	280 °F	138 °C	D 648
Ignition Resistance*			
Flammability	HB @ 1/16 in	HB @ 1.5 mm	UL94
Flammability	V-0 @ 0.250 in	V-0 @ 6.3 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
Drying
Moisture Content
Dew Point

0 - 250 °F
4 hrs @ 250 °F
0.02 %
-20 °F

82 - 121 °C
4 hrs @ 121 °C
0.02 %
-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.