




**Product Data Sheet &
General Processing Conditions**

**RTP 300 TFE 5 SE A
Polycarbonate (PC)
Unreinforced
PTFE Lubricated
Self Extinguishing
Bromine/Chlorine Free
UL94 V-2**



The RTP 300 TFE SE series of compounds incorporate various percentages of PTFE into unreinforced polycarbonate. These materials exhibit excellent dimensional stability, physical properties and lubricity along with self-extinguishing behavior.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	5 %	5 %	
Specific Gravity	1.23	1.23	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0050 - 0.0080 in/in	0.50 - 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	3.0 ft-lbs/in	160 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	0.30 x 10 ⁶ psi	2068 MPa	D 638
Flexural Strength	13000 psi	90 MPa	D 790
Flexural Modulus	0.33 x 10 ⁶ psi	2275 MPa	D 790
Hardness Rockwell, R	117	117	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-2 @ 1/8 in	V-2 @ 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.