




Product Data Sheet & General Processing Conditions

RTP 300 TFE 10 SE
Polycarbonate (PC)
Unreinforced
PTFE Lubricated
Self Extinguishing
Bromine/Chlorine Free
UL94 V-1


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	10 %	10 %	
Specific Gravity	1.25	1.25	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	8000 psi	55 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.33 x 10 ⁶ psi	2275 MPa	D 638
Flexural Strength	12500 psi	86 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
--------------------	---------------	---------------	-------

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-1 @ 1/8 in	V-1 @ 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.

1 Dec 2004 SAC

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.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900