




**Product Data Sheet &
General Processing Conditions**

**RTP 300 TFE 15 SE
Polycarbonate (PC)
Unreinforced
PTFE Lubricated
Self Extinguishing
Bromine/Chlorine Free
UL94 V-2**



RTP 300 TFE 15 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 | 15 % | 15 % | |
| Specific Gravity | 1.29 | 1.29 | 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 | 7500 psi | 52 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 | 11000 psi | 76 MPa | D 790 |
| Flexural Modulus | 0.33 x 10 ⁶ psi | 2275 MPa | D 790 |
| Hardness Rockwell, R | 116 | 116 | 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 | V-2 @ 1/8 in | V-2 @ 3.0 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 | 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.