



**Product Data Sheet &  
General Processing Conditions**

**RTP 305 TFE 13 SI 2  
Polycarbonate (PC)  
Glass Fiber  
PTFE Lubricated  
Silicone Lubricated**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

| PERMANENCE                                   | English               | SI Metric     | ASTM TEST |
|----------------------------------------------|-----------------------|---------------|-----------|
| Primary Additive                             | 30 %                  | 30 %          |           |
| Specific Gravity                             | 1.52                  | 1.52          | D 792     |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0010 - 0.0030 in/in | 0.10 - 0.30 % | D 955     |

**MECHANICAL**

|                                                          |                            |             |        |
|----------------------------------------------------------|----------------------------|-------------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 2.5 ft-lbs/in              | 133 J/m     | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 11.5 ft-lbs/in             | 614 J/m     | D 4812 |
| Tensile Strength                                         | 14000 psi                  | 97 MPa      | D 638  |
| Tensile Elongation                                       | 1.5 - 3.5 %                | 1.5 - 3.5 % | D 638  |
| Tensile Modulus                                          | 1.25 x 10 <sup>6</sup> psi | 8619 MPa    | D 638  |
| Flexural Strength                                        | 22000 psi                  | 152 MPa     | D 790  |
| Flexural Modulus                                         | 1.15 x 10 <sup>6</sup> psi | 7929 MPa    | D 790  |

**ELECTRICAL**

|                    |                    |                    |       |
|--------------------|--------------------|--------------------|-------|
| Volume Resistivity | 1E14 - 1E16 ohm.cm | 1E14 - 1E16 ohm.cm | D 257 |
|--------------------|--------------------|--------------------|-------|

**THERMAL**

|                                                |              |             |       |
|------------------------------------------------|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 300 °F       | 149 °C      | D 648 |
| Ignition Resistance*                           |              |             |       |
| Flammability**                                 | HB @ 1/16 in | HB @ 1.5 mm | D 635 |

**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.

\*\* Values per RTP Company testing.

**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.