



**Product Data Sheet &  
General Processing Conditions**

**RTP 4605 HI FR  
Syndiotactic Polystyrene (SPS)  
Glass Fiber  
Impact Modified  
Flame Retardant**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	30 %	30 %	
Specific Gravity	1.41	1.41	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 in/in	0.20 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.2 ft-lbs/in	67 J/m	D 256
unnotched 1/8 in (3.2 mm) section	6.0 ft-lbs/in	320 J/m	D 4812
Tensile Strength	14750 psi	102 MPa	D 638
Tensile Elongation	1.5 %	1.5 %	D 638
Tensile Modulus	1.40 x 10 <sup>6</sup> psi	9653 MPa	D 638
Flexural Strength	22500 psi	155 MPa	D 790
Flexural Modulus	1.45 x 10 <sup>6</sup> psi	9998 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	400 °F	204 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

**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**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	560 - 620 °F	293 - 327 °C
Mold Temperature	160 - 300 °F	71 - 149 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C