

# **Product Data Sheet & General Processing Conditions**

## RTP 4607 FR Syndiotactic Polystyrene (SPS) Glass Fiber Flame Retardant

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

			ASTM
PERMANENCE	English	SI Metric	TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.53	1.53	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0015 in/in	0.15 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	7.0 ft-lbs/in	374 J/m	D 4812
Tensile Strength	18000 psi	124 MPa	D 638
Tensile Elongation	1.2 %	1.2 %	D 638
Tensile Modulus	1.75 x 10^6 psi	12066 MPa	D 638
Flexural Strength	28000 psi	193 MPa	D 790
Flexural Modulus	1.50 x 10^6 psi	10342 MPa	D 790
THERMAL			
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.

### **GENERAL PROCESSING FOR INJECTION MOLDING**

	English	SI Metric	
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	
PROCESSING NOTES			

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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.

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<sup>\*</sup> This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

<sup>\*\*</sup> Values per RTP Company testing.

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