



Product Data Sheet & General Processing Conditions

RTP 4605 Syndiotactic Polystyrene (SPS) Glass Fiber

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.25	1.25	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0030 in/in	0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.010 %	0.010 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.8 ft-lbs/in	96 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	17500 psi	121 MPa	D 638
Tensile Elongation	1.6 %	1.6 %	D 638
Tensile Modulus	1.40 x 10 ⁶ psi	9653 MPa	D 638
Flexural Strength	24500 psi	169 MPa	D 790
Flexural Modulus	1.40 x 10 ⁶ psi	9653 MPa	D 790

ELECTRICAL

Dielectric Constant, 1 MHz, Dry	2.9	2.9	D 150
Dissipation Factor, 1 MHz, Dry	0.0010	0.0010	D 150

THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	460 °F	238 °C	D 648
@ 66 psi (455 kPa)	500 °F	260 °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	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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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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RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900