

Product Data Sheet & General Processing Conditions

# RTP 4605 HI Syndiotactic Polystyrene (SPS) Glass Fiber Impact Modified

## **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	2.6 ft-lbs/in	139 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	16000 psi	110 MPa	D 638
Tensile Elongation	2.5 %	2.5 %	D 638
Tensile Modulus	1.20 x 10^6 psi	8274 MPa	D 638
Flexural Strength	24000 psi	165 MPa	D 790
Flexural Modulus	1.20 x 10^6 psi	8274 MPa	D 790

# **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			

## 8 May 2007 BLM

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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