

# Nylene® 9543 HS

## TECHNICAL DATASHEET

TDS Ref # 167 Reviewed: 10/21/2014

### DESCRIPTION

- Good chemical properties and reduced moisture absorption of nylon 6/12 resins while adding glass reinforcement to increase strength and stiffness
- Suitable in applications where typical nylon 6 or 6/6 may be unsuitable due to moisture absorption or specific chemical requirements

PROPERTIES	TEST METHOD	UNIT	VALUE
<b>PHYSICAL PROPERTIES</b>			
Mold Shrinkage	n/a	in/in	0.002
Specific Gravity	D792	n/a	1.43
<b>MECHANICAL PROPERTIES</b>			
Flexural Modulus	D790	psi (MPa)	1,320,000 (9,130)
Notched Izod @ 23°C	D256	ftlb/in (J/m)	2.1 (114)
Tensile Modulus	D638	psi (MPa)	1,530,000 (10,600)
Tensile Strength	D638	psi (MPa)	21,500 (149)
<b>THERMAL PROPERTIES</b>			
DTUL @ 1820 kPa	D648	°F (°C)	396 (202)
Melt Point	D3418	°F (°C)	435 (224)

### NOTES

- Testing conducted on dry-as-molded specimens at 73°F

### PROCESSING CONSIDERATIONS: SPECIALTY SPECIALTY 6/12

Processing Conditions: Specialty 6/12 Melt Temperature 150-250 °F (65.6-121°C), highly filled grades require >175 °F (80°C) to obtain the best overall surface appearance. Residence Time should not exceed 6 minutes, less with higher melt temps. Shot Size should be between 25-75% of barrel capacity. Fill Rate fast fill rates are suggested for best surface appearance. Re grind Level typically no more than 25% is recommended, with higher levels possible for unfilled grades depending on the end use requirements. Make certain re grind is properly dried to virgin moisture levels. Drying Temperature 150-180 °F (66-82°C) for 2-4 hours

### CHARACTERISTICS

Resin Type: Nylon 6/12  
 Product Characteristics:  
 Glass Reinforced, Copolymer, Heat Stabilized

### INJECTION MOLDING PROCESSING

Prime Grade

### FEATURES

- High stiffness
- Low moisture

### MARKETS USED

- Automotive Applications
- General Applications
- Electrical Applications

### APPLICATIONS

- Coil Bobbins
- Fuel Line Connector & Elbow
- Water & Sump Pump Housings
- Water & Sump Pump Impellers
- Water Softener Components

### DISCLAIMER

The data set forth herein has been carefully compiled by Nylene in our laboratories. Values shown are typical properties and not specifications. Since processing variables will affect properties, the reproducibility of our data in a customer's testing facility is not guaranteed. There is no warranty of any kind, either expressed or implied, applicable to the use of this information, and the user assumes all risk and liability in connection therewith.



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