

Nylene® 5150 HS (ISO)

TECHNICAL DATASHEET

TDS Ref # 843 Reviewed: 12/11/2014

DESCRIPTION

- Formulated to exhibit maximum stiffness for the most demanding applications
- Glass fiber reinforced, heat-stabilized nylon 6/6 injection molding resin
- Should be used in parts and tools specifically designed to accommodate such high glass fiber loadings, in order to maximize part performance

PROPERTIES	TEST METHOD	UNIT	VALUE
PHYSICAL PROPERTIES			
Density	ISO 1183	g/cm ³	1.54
Mold Shrinkage	D955	mm/mm	.01
MECHANICAL PROPERTIES			
Charpy Impact	ISO 179	kJ/m ²	145 at 23°C
Flexural Modulus	ISO 178	MPa	10020
Tensile Strength	ISO 527	MPa	195
THERMAL PROPERTIES			
DTUL @ 1800 kPa	ISO 75	°C	245
Melt Point	ISO 11357	°C (°F)	255

NOTES

- Testing conducted on dry-as-molded specimens at 73°F (22.8°C)

PROCESSING CONSIDERATIONS: PA 6/6 GLASS REINFORCED > 15%

°F (°C)	Rear Zone	500-560 (260-293)	Melt Temperature: Nylene PA6/6 melts at 490 °F (254°C), actual melt temperatures of 540-600 (282-316°C) are permissible, depending on residence time and shot size.
	Center Zone	530-570 (277-299)	
	Front Zone	540-590 (282-310)	
	Nozzel	535-585 (279-307)	
	Melt Temp.	550-600 (287-316)	
PRESSURE	Injection	5-15,000	Residence Time: should not exceed 6 minutes if possible, less with higher melt temperatures.
	Hold	4-12,000	Shot Size: should be between 25-75% of barrel capacity.
	Back	0-50	Fill Rate: fast fill rates are suggested for best surface appearance.
			Regrind Level: typically no more than 25% is recommended, with higher levels possible for unfilled grades depending on the end use requirements. Make certain regrind is properly dried to virgin moisture levels.
			Drying Temperature: 150-180 °F (65-182°C) (for 2-4 hours, Nylene PA6/6 should be dried to less than 0.20% moisture for optimum performance. Drying longer than 4 hours or at higher temperatures may cause oxidation of the polymer or remove essential volatiles.

CHARACTERISTICS

Resin Type: Nylon 6/6
 Product Characteristics:
 Glass Reinforced, Internally Lubricated,
 Heat Stabilized

INJECTION MOLDING PROCESSING

Prime Grade

FEATURES

- High Heat Resistance
- Good Chemical Resistance
- Very High Strength and Stiffness

MARKETS USED

- Automotive Applications
- General Applications
- Industrial Applications
- Tool & Appliance

APPLICATIONS

- Bracket
- Engine Mounts
- Housing
- Power Equipment Housings

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.



Headquarters and Facility:

55 Haul Road, Wayne, NJ 07470
 P: 973-694-4141 | F: 973-694-3549

North American Sales Office:

31700 Telegraph Rd. Suite 235, MI 48025
 P: 248-377-6769 | F: 248-377-3845

Nylene Custom Resins Facility:

1421 Hwy 136 W. Henderson, KY 42420
 P: 270-826-7641 | TF: 800-626-7050

Nylene Canada Facility

200 McNab Street, Arrnprior ON, K7S 3P2
 P: 613-623-3191 | TF: 800-267-7394

For a complete listing of our global offices, visit:

www.nylene.com/contactus

www.nylene.com | info@nylene.com

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