

## Ascend Performance Materials Vydyne® R540H Nylon 66, 40% Glass Reinforced, Conditioned

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66 , 40% Glass Fiber Filled

### Material Notes:

Vydyne® R540H is general-purpose, heat-stabilized, hydrolysis-resistant, 40% glass-fiber reinforced PA66 resin. Available in natural, it is specifically designed to maximize the retention of physical properties when exposed to anti-freeze solution at elevated temperatures. This product is also lubricated for improved flow and offers superior surface appearance. Glass-reinforced Vydyne resins provide higher heat distortion temperature, resistance to creep and better dimensional stability when compared with unreinforced PA66. These products have good chemical resistance to a broad range of chemicals including gasoline, hydraulic fluids and most solvents. Vydyne R540H is heat-stabilized to minimize oxidative degradation of the polymer when exposed to elevated temperatures in service. This product provides improved retention of physical properties under exposure to long term heat. Also, Vydyne R540H has excellent knit-line strength and fatigue resistance, which is essential for cycle testing with anti-freeze solutions. Typical Applications/End Uses; Vydyne R540H is successfully used in a wide range of injection-molding engineering applications. Typical parts include automotive clips, radiator and tanks, parts of the air-conditioning and fuel distribution systems; electrical connectors, housings, and bobbins; and industrial applications such as gears, bearing shells, covers and housings. Availability: Asia Pacific Europe North America Filler/Reinforcement: Glass Fiber, 40% Filler by Weight Additive: Heat Stabilizer Lubricant Features: Antifreeze Resistant Fatigue Resistant Gasoline Resistance Good Chemical Resistance Good Flow Heat Stabilized Hydrolysis Resistant Lubricated Solvent Resistant Uses: Automotive Under the Hood Appearance: Natural Color Forms: Pellets Processing Method: Injection Molding Information provided by Ascend Performance Materials.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Ascend-Performance-Materials-Vydyne-R540H-Nylon-66-40-Glass-Reinforced-Conditioned.php](http://www.lookpolymers.com/polymer_Ascend-Performance-Materials-Vydyne-R540H-Nylon-66-40-Glass-Reinforced-Conditioned.php)

Physical Properties	Metric	English	Comments
Density	1.46 g/cc	0.0527 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.60 % @Time 86400 sec	0.60 % @Time 24.0 hour	ISO 62
Moisture Absorption at Equilibrium	1.5 %	1.5 %	50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm @Diameter 2.00 mm	0.0040 in/in @Diameter 0.0787 in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.0090 cm/cm @Diameter 2.00 mm	0.0090 in/in @Diameter 0.0787 in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	165 MPa	23900 psi	ISO 527-2
Elongation at Break	4.0 %	4.0 %	ISO 527-2
Tensile Modulus	11.1 GPa	1610 ksi	ISO 527-2

<b>Mechanical Properties</b>	<b>250 MPa Metric</b>	<b>36300 psi English</b>	<b>ISO 178 Comments</b>
Flexural Modulus	9.30 GPa	1350 ksi	ISO 178
Izod Impact, Notched (ISO)	13.0 kJ/m <sup>2</sup> @Temperature -30.0 °C	6.19 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 180
	19.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	9.04 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 180
Charpy Impact Unnotched	8.70 J/cm <sup>2</sup> @Temperature -30.0 °C	41.4 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	9.20 J/cm <sup>2</sup> @Temperature 23.0 °C	43.8 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179
Charpy Impact, Notched	1.10 J/cm <sup>2</sup> @Temperature -30.0 °C	5.23 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	1.90 J/cm <sup>2</sup> @Temperature 23.0 °C	9.04 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179

## Contact Songhan Plastic Technology Co.,Ltd.

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