

Ascend Performance Materials Vydyne® R513H Nylon 66, 13% Glass Filled, Conditioned (2.5% Moisture)

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 10% Glass Fiber Filled

Material Notes:

Vydyne® R513H is general-purpose, 13% glass-reinforced, heat stabilized PA66 resin. Available in natural, it is an injection-molding grade resin that is lubricated for machine feed, flow, and mold release. Glass-reinforced Vydyne resins provide a higher heat distortion temperature, better resistance to creep, higher impact, and better dimensional stability when compared with unreinforced PA66. This product has good chemical resistance to a broad range of chemicals, including many aliphatic and aromatic hydrocarbons found in most solvent, gasoline, hydraulic fluids, greases and machine oils. Vydyne R513 has tensile strength and modulus properties just below aluminum and zinc can replace these metals in numerous applications due to an excellent balance of properties. Reduction in production costs, energy consumption and part weight are key advantages of Vydyne glass-reinforced PA66 resins over aluminum and/or zinc die-cast parts. Vydyne R513H is heat-stabilized and formulated to minimize the oxidative and thermal degradation of the PA66 polymer when exposed to elevated temperature for extended periods of time. Vydyne R513H provides improved retention of physical properties under exposure to long-term heat. The continuous operating use temperature is 275°F, with short-term peak temperature as high as 475°F. Typical Applications/End Uses: Vydyne R513H resin has been used for many under-the-hood automotive applications, motor housings for power tools and garden appliances. The resin has also been used in miscellaneous brackets, gears and clips, which require high rigidity and strength. Availability: Asia Pacific Europe North America Filler/Reinforcement: Glass Fiber, 13% Filler by Weight Additive: Heat Stabilizer Lubricant Features: Gasoline Resistance Good Chemical Resistance Good Flow Good Mold Release Grease Resistant Heat Stabilized High Rigidity High Strength Lubricated Oil Resistant Solvent Resistant Uses: Automotive Under the Hood Gears Housings Power/Other Tools Appearance: Natural Color Forms: Pellets Processing Method: Injection Molding

Order this product through the following link:

http://www.lookpolymers.com/polymer_Ascend-Performance-Materials-Vydyne-R513H-Nylon-66-13-Glass-Filled-Conditioned-25-Moisture.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.23 g/cc	1.23 g/cc	ISO 1183
Water Absorption	1.0 % @Time 86400 sec	1.0 % @Time 24.0 hour	ISO 62
Moisture Absorption at Equilibrium	2.2 %	2.2 %	50% RH; ISO 62
Linear Mold Shrinkage	0.0050 cm/cm @Thickness 2.00 mm	0.0050 in/in @Thickness 0.0787 in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.010 cm/cm @Thickness 2.00 mm	0.010 in/in @Thickness 0.0787 in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	75.0 MPa	10900 psi	ISO 527-2

Mechanical Properties	75.0 MPa Metric	10900 psi English	ISO 527-2 Comments
Elongation at Break	13 %	13 %	ISO 527-2
Tensile Modulus	3.90 GPa	566 ksi	ISO 527-2
Flexural Strength	106 MPa	15400 psi	ISO 178
Flexural Modulus	3.15 GPa	457 ksi	ISO 178
Izod Impact, Notched (ISO)	5.40 kJ/m ²	2.57 ft-lb/in ²	ISO 180
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	8.50 kJ/m ²	4.04 ft-lb/in ²	ISO 180
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	3.70 J/cm ²	17.6 ft-lb/in ²	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	4.20 J/cm ²	20.0 ft-lb/in ²	ISO 179
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.530 J/cm ²	2.52 ft-lb/in ²	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.750 J/cm ²	3.57 ft-lb/in ²	ISO 179
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China