

Ascend Performance Materials Vydyne® R513H Black Nylon 66, 13% Glass Reinforced, Conditioned

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

Material Notes:

Vydyne® R513H Black is general-purpose, 13% glass-fiber reinforced, heat-stabilized PA66 resin. Available in black, it is an injection-molding grade that is lubricated for machine feed, flow, and mold release. Glass-reinforced Vydyne resins provide a higher heat distortion temperature, better resistance to creep, high 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 solvents, gasoline, hydraulic fluids, greases and machine oils. Vydyne R513 Black has tensile strength and modulus properties just below aluminum and zinc and 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 R513 Black is heat-stabilized and formulated to minimize the oxidative and thermal degradation of the PA66 polymer when exposed to elevated temperatures for extended periods of time. Vydyne R513H Black provides improved retention of physical properties under exposure to long-term heat. The continuous operating use temperature is 275°F, with short-term peak temperatures as high as 475°F. Availability:Asia PacificEuropeNorth AmericaFiller/Reinforcement:Glass Fiber, 13% Filler by WeightAdditive:Heat StabilizerLubricant Features: Gasoline ResistanceGood Chemical ResistanceGood FlowGood Mold ReleaseGrease ResistantHeat StabilizedHigh RigidityHigh StrengthLubricatedOil ResistantSolvent ResistantUses: Automotive Under the Hood GearsHousings Power/Other ToolsAppearance: BlackForms: PelletsProcessing Method: Injection MoldingInformation provided by Ascend Performance Materials.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Ascend-Performance-Materials-Vydyne-R513H-Black-Nylon-66-13-Glass-Reinforced-Conditioned.php

Physical Properties	Metric	English	Comments
Density	1.23 g/cc	0.0444 lb/in³	ISO 1183
Water Absorption	1.0 %	1.0 %	ISO 62
	@Time 86400 sec	@Time 24.0 hour	
Moisture Absorption at Equilibrium	2.2 %	2.2 %	50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0050 cm/cm	0.0050 in/in	ISO 294-4
	@Diameter 2.00 mm	@Diameter 0.0787 in	
Linear Mold Shrinkage, Transverse	0.010 cm/cm	0.010 in/in	ISO 294-4
	@Diameter 2.00 mm	@Diameter 0.0787 in	

Mechanical Properties	Metric	English	Comments	
Tensile Strength at Break	75.0 MPa	10900 psi	ISO 527-2	
Elongation at Break	13 %	13 %	ISO 527-2	
Tensile Modulus	3.90 GPa	566 ksi	ISO 527-2	



Mechanical Properties	Metric	English psi	Comments
Flexural Modulus	3.15 GPa	457 ksi	ISO 178
Izod Impact, Notched (ISO)	5.40 kJ/m²	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