

## Ascend Performance Materials VYDYNE® R543 Nylon, 43% Glass Reinforced, Conditioned

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

### Material Notes:

Vydyne® R543 is general purpose, 43% glass-fiber reinforced PA66 resin. Available in natural, it is an injection-molding grade resin that is lubricated for machine fee, 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 solvents, gasoline, hydraulic fluids, greases and machine oils. Vydyne R534 resin has tensile strength and modulus properties just below aluminum and zinc an 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-cat parts.

Availability:Asia PacificEuropeNorth AmericaAdditive: Lubricant Features:Gasoline ResistanceGood Chemical ResistanceGood Creep

ResistanceGood Dimensional StabilityGood FlowGood Impact ResistanceGood Mold ReleaseGrease ResistantHigh RigidityHigh

StrengthHigh Tensile Strength LubricatedOil ResistantSolvent ResistantUses:GearsHousingsLawn and Garden EquipmentPower/Other

ToolsAppearance: Natural ColorForms: PelletsProcessing Method: Injection Molding

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Ascend-Performance-Materials-VYDYNE-R543-Nylon-43-Glass-Reinforced-Conditioned.php](http://www.lookpolymers.com/polymer_Ascend-Performance-Materials-VYDYNE-R543-Nylon-43-Glass-Reinforced-Conditioned.php)

Physical Properties	Metric	English	Comments
Density	1.50 g/cc	0.0542 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.60 %	0.60 %	24 hours; ISO 62
Moisture Absorption at Equilibrium	1.5 %	1.5 %	50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm @Thickness 2.00 mm	0.0040 in/in @Thickness 0.0787 in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.0090 cm/cm @Thickness 2.00 mm	0.0090 in/in @Thickness 0.0787 in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	170 MPa	24700 psi	ISO 527-2
Elongation at Break	4.0 %	4.0 %	ISO 527-2
Tensile Modulus	11.3 GPa	1640 ksi	ISO 527-2
Flexural Strength	250 MPa	36300 psi	ISO 178
Flexural Modulus	9.40 GPa	1360 ksi	ISO 178
	13.0 kJ/m <sup>2</sup>	6.19 ft-lb/in <sup>2</sup>	

Izod Impact Notched (ISO) Mechanical Properties	Metric @ Temperature -30.0 °C	English @ Temperature -22.0 °F	ISO 180 Comments
	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	9.00 J/cm <sup>2</sup> @Temperature -30.0 °C	42.8 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	9.50 J/cm <sup>2</sup> @Temperature 23.0 °C	45.2 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179
Charpy Impact, Notched	1.40 J/cm <sup>2</sup> @Temperature -30.0 °C	6.66 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179
	2.00 J/cm <sup>2</sup> @Temperature 23.0 °C	9.52 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179

## Contact Songhan Plastic Technology Co.,Ltd.

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