

## Ascend Performance Materials Vydyne® R228 Nylon 66, 40% Mineral Reinforced, Conditioned

Category: Polymer, Thermoplastic, Nylon, Nylon 66, Nylon 66, 40% Mineral Filled

## **Material Notes:**

Vydyne® R228 is a 40% mineral-reinforced PA66 resin formulated for improved impact strength. Available in black, it is an injectionmolding grade formulated to retain the inherent processing advantages of unreinforced PA66 while enhancing rigidity, strength and heat resistance. Vydyne R228 maintains the chemical resistance typical of PA66 to a wide variety of chemicals, gasoline, oils, greases and solvents. Vydyne R228 resin utilized a unique mineral-reinforced PA66 system developed by Ascend Performance Materials to satisfy the market need for a high-rigidity thermoplastic as an alternative to certain metals. This mineral system provides two key features: (1) isotropic behavior-property development in molded parts is usually impendent of flow direction. (2) a reduction in the tendency to develop sink marks in heavy cross sections such as molded-in bosses and ribs. While not sink-free, parts made from Vydyne R228 can often permit boss and rib design or wall cross section changes that would not be tolerable in other unreinforced thermoplastic materials. Thus Vydyne R228 resin offers more uniform molded part strength and performance, as well as wider latitude in part design. Vydyne R228 resin is a workhorse of Ascend Performance Materials' full line of mineral-reinforced PA66 resins, providing the best overall balance of properties. Vydyne R228 is heat stabilized and designed to provide increased ductility improvement results in tougher, more impact-resistant molded parts. The reduction in melt viscosity enhances overall ease of injection-molding, resulting in minor reduction in tensile strength, modulus and heat distortion temperature. Parts manufacture from Vydyne R228 have successfully withstood paint bake oven cycles without significant loss of either dimensional stability or part properties. Availability: Asia Pacific Europe North America Filler/Reinforcement: Mineral, 40% Filler by Weight Additive: Heat Stabilizer Features: Ductile Gasoline Resistance Good Chemical ResistanceGood Impact ResistanceGood StrengthGood ToughnessGrease ResistantHeat StabilizedHigh Heat ResistanceHigh RigidityOil ResistantSolvent ResistantUses:Automotive Exterior PartsAutomotive Under the Hood CamsGearsHousingsIndustrial ApplicationsPower/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-R228-Nylon-66-40-Mineral-Reinforced-Conditioned.php

Physical Properties	Metric	English	Comments
Density	1.48 g/cc	0.0535 lb/in³	ISO 1183
Water Absorption	1.1 %	1.1 %	ISO 62
	@Time 86400 sec	@Time 24.0 hour	
Moisture Absorption at Equilibrium	1.6 %	1.6 %	50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.011 cm/cm	0.011 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	



Metric	English	Comments
73.0 MPa	10600 psi	ISO 527-2
30 %	30 %	ISO 527-2
16 %	16 %	ISO 527-2
2.60 GPa	377 ksi	ISO 527-2
50.0 MPa	7250 psi	ISO 178
2.30 GPa	334 ksi	ISO 178
7.00 kJ/m²	3.33 ft-lb/in²	ISO 180
@Temperature -30.0 °C	@Temperature -22.0 °F	
16.0 kJ/m <sup>2</sup>	7.61 ft-lb/in <sup>2</sup>	ISO 180
@Temperature 23.0 °C	@Temperature 73.4 °F	
13.0 J/cm <sup>2</sup>	61.9 ft-lb/in <sup>2</sup>	ISO 179/1eU
@Temperature -30.0 °C	@Temperature -22.0 °F	
NB	NB	ISO 179/1eU
@Temperature 23.0 °C	@Temperature 73.4 °F	
0.800 J/cm <sup>2</sup>	3.81 ft-lb/in <sup>2</sup>	ISO 179/1eA
@Temperature -30.0 °C	@Temperature -22.0 °F	
1.70 J/cm <sup>2</sup>	8.09 ft-lb/in <sup>2</sup>	ISO 179/1eA
@Temperature 23.0 °C	@Temperature 73.4 °F	
	73.0 MPa  30 %  16 %  2.60 GPa  50.0 MPa  2.30 GPa  7.00 kJ/m²  @Temperature -30.0 °C  16.0 kJ/m²  @Temperature 23.0 °C  13.0 J/cm²  @Temperature -30.0 °C  NB  @Temperature 23.0 °C  0.800 J/cm²  @Temperature 23.0 °C	73.0 MPa 10600 psi  30 % 30 %  16 % 16 %  2.60 GPa 377 ksi  50.0 MPa 7250 psi  2.30 GPa 334 ksi  7.00 kJ/m² 3.33 ft-lb/in² @Temperature -30.0 °C @Temperature -22.0 °F  16.0 kJ/m² 7.61 ft-lb/in² @Temperature 23.0 °C @Temperature 73.4 °F  13.0 J/cm² 61.9 ft-lb/in² @Temperature -30.0 °C @Temperature -22.0 °F  NB NB  @Temperature 23.0 °C @Temperature 73.4 °F  0.800 J/cm² 3.81 ft-lb/in² @Temperature -30.0 °C @Temperature 73.4 °F  1.70 J/cm² 8.09 ft-lb/in²

## **Contact Songhan Plastic Technology Co.,Ltd.**

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