

Vydyne® R1000

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne R1000 is an unreinforced PA66 for injection molded applications.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Additive	• Heat Stabilizer • Mold Release
Features	• Heat Stabilized
Agency Ratings	• ISO 1043 PA66
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	8.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.0	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	435000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	12300	psi	ISO 527-2
Tensile Strain (Break, 73°F)	20	%	ISO 527-2
Flexural Modulus (73°F)	406000	psi	ISO 178
Flexural Stress (73°F)	15200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	48	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	1.9	ft·lb/in ²	
73°F	2.4	ft·lb/in ²	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	167 to 185	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	500 to 518	°F
Middle Temperature	518 to 536	°F
Front Temperature	518 to 554	°F
Processing (Melt) Temp	518 to 554	°F
Mold Temperature	140 to 194	°F

