

Vydyne® AST03

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne AST03 is an impact modified PA66 resin for injection molded applications.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Additive	• Impact Modifier • Mold Release
Features	• Impact Modified
Agency Ratings	• ISO 1043 PA66 I
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA66-I

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.08	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	6.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.6	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	363000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	9430	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.6	%	ISO 527-2
Tensile Strain (Break, 73°F)	60	%	ISO 527-2
Flexural Modulus (73°F)	392000	psi	ISO 178
Flexural Stress (73°F)	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	48	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-40°F	17	ft·lb/in ²	
73°F	26	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (73 to 131°F, 0.0787 in)	5.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	6.9E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 in	149	°F	
0.06 in	149	°F	
0.12 in	149	°F	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (0.0394 in)	1.0E+16	ohms·cm	IEC 60093



Comparative Tracking Index (0.118 in)	600 V	IEC 60112
Flammability	Nominal Value	Unit
Flame Rating		UL 94
0.030 in	HB	
0.06 in	HB	
0.12 in	HB	

Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	167 to 185	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	482 to 500	°F
Middle Temperature	509 to 527	°F
Front Temperature	509 to 527	°F
Processing (Melt) Temp	509 to 527	°F
Mold Temperature	140 to 176	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

