

Vydyne® AST44

polyamide 66



Vydyne AST44 is an impact modified PA66 for injection molded applications.

General

Regional Availability	• North America	• Europe
Additive	• Release agent	
Agency Rating	• ISO, 1043 PA66 I	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	dry	cond.	Unit	Test Standard
Density	1.07	-	g/cm ³	ISO 1183
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	1.5	*	%	
Water Absorption, Saturation, 23°C	5.5		%	ISO 62

Mechanical	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	1900	-	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	50	-	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4.6	-	%	ISO 527-2
Tensile Strain (Break, 23°C)	>50	-	%	ISO 527-2
Flexural Modulus (23°C)	1900	-	MPa	ISO 178
Flexural Strength (23°C)	72	-	MPa	ISO 178

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	80	-	kJ/m ²	
-30°C	65	-	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	100	-	kJ/m ²	
-30°C	100	-	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	80	-	kJ/m ²	
-40°C	55	-	kJ/m ²	

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Thermal	dry	cond.	Unit	Test Standard
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	100	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	120	*	E-6/K	
RTI Elec				UL 746
0.750 mm	65		°C	
1.50 mm	65		°C	
3.00 mm	65		°C	
RTI Imp				UL 746
0.750 mm	65		°C	
1.50mm	65		°C	
3.00 mm	65		°C	
RTI Str				UL 746
0.750 mm	65		°C	
1.50 mm	65		°C	
3.00 mm	65		°C	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E14	-	Ohm*m	IEC 60093
Comparative Tracking Index (3.00 mm)	550		V	IEC 60112

Flammability	Value	Test Standard
Flammability		UL 94
0.750 mm	HB	
1.50 mm	HB	
3.00 mm	HB	

Injection	Value	Unit
Drying Temperature	75 - 85	°C
Drying Time	4	h
Suggested Max Moisture	0.2	%
Rear Temperature	250 - 260	°C
Middle Temperature	265 - 275	°C
Front Temperature	265 - 275	°C
Processing (Melt) Temperature	265 - 275	°C
Mold Temperature	60 - 80	°C

