Vydyne® B28N

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B28N is a nucleated and unreinforced PA6 for injection molded applications.

General		
Material Status	• Commercial: Active	
Availability	• Europe	• North America
Agency Ratings	• ISO 1043 PA6	
Forms	• Pellets	
Processing Method	• Injection Molding	
Resin ID	• PA6	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm³	ISO 1183
Water Absorption (Saturation, 73°F)	10	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.6	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	392000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	10200	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	3.5	%	ISO 527-2
Tensile Strain (Break, 73°F)	15	%	ISO 527-2
Flexural Modulus (73°F)	348000	psi	ISO 178
Flexural Stress (73°F)	12300	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.9	ft·lb/in²	
73°F	11	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	48	ft·lb/in²	
73°F	130	ft·lb/in²	
Notched Izod Impact Strength			ISO 180/1A
-40°F	1.4	ft·lb/in²	
73°F	2.4	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow (73 to 131°F, 0.0787 in)	4.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	4.4E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Imp			UL 746B
0.030 in	149	°F	
0.12 in	149	°F	
RTI Str			UL 746B
0.030 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	Test Method
Oxygen Index	24	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	446 to 464	°F
Middle Temperature	464 to 482	°F
Front Temperature	482 to 500	°F
Processing (Melt) Temp	482 to 500	°F
Mold Temperature	140 to 176	°F

Notes

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