

Vydyne® 65B

polyamide 66



Vydyne 65B is a medium-high viscosity resin used for extrusion-compounding. It is desirable to include this neat resin in a formulation in which the melt strength of the final product is critical for the application. Vydyne 65B exhibits good initial color and it has a moisture level below 0.1%. Resistance of Vydyne 65B to heat, oil and wear is typical of PA66 neat resins.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Features	• Chemical Resistant • Good Color Stability • High Strength • Solvent Resistant	• Gasoline Resistant • Good Toughness • Medium-High Viscosity	• General Purpose • High Rigidity • Oil Resistant
Agency Rating	• ASTM, D6779 PA0113 • FDA, 21 CFR 177.1500 • EU, 2023/2006	• EC, 1935/2004 • FED, L-P-410A • MIL, M-20693B	• EU, 10/2011 • ASTM, D4066 PA0113
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Other Extrusion		

Physical

	dry	cond.	Unit	Test Standard
Density	1.14	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.9	*	%	
Flow : 23°C, 2.00 mm	2.0	*	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	2.5	*	%	
Water Absorption, Saturation, 23°C	8.5		%	ISO 62
Relative Viscosity, Sulphuric Acid	223 - 242		-	ISO 307
Relative Viscosity, Formic Acid	117 - 145		-	ASTM D 789
Moisture Content	0.1		%	ASTM D 6869
Yellowness Index	4		YI	ASTM D 1925

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3100	1500	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	83	55	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	50	65	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	5.5	20	%	ISO 527-2
Tensile Strain (Break, 23°C)	25	200	%	ISO 527-2
Flexural Modulus (23°C)	2800	700	MPa	ISO 178

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Flexural Strength (23°C)	80	20	MPa	ISO 178
Poisson's Ratio (23°C)	0.4		-	ISO 527-2

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	6	40	kJ/m²	
-30°C	6	7	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m²	
-30°C	N	N	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	6	40	kJ/m²	
-30°C	6	7	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	65	-	°C	
0.45 MPa, Unannealed	195	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	100	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	100	*	E-6/K	

Extrusion	Value	Unit
Cylinder Zone 1 Temp	250 - 295	°C
Cylinder Zone 2 Temp	250 - 295	°C
Cylinder Zone 3 Temp	250 - 295	°C
Cylinder Zone 4 Temp	250 - 295	°C
Cylinder Zone 5 Temp	250 - 295	°C
Melt temperature	270 - 295	°C
Die temperature	270 - 295	°C

