

Vydyne® B BK X146 EM1 LT K1

polyamide 6



Vydyne B BK X146 EM1 LT K1 is a general-purpose, impact-modified PA6 resin. Available in black, it is inorganic heat-stabilized for improved resistance to high temperatures. It is lubricated for machine feed and easy mold release and shows an improved impact resistance also at low temperatures.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Abrasion Resistance • Good Impact Strength • Heat Aging Resistant • Lubricated	• Chemical Resistant • Good Mold Release • High Elongation • Oil Resistant	• Gasoline Resistant • Good Toughness • Low Temperature Impact Resistance • Solvent Resistant
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.12	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.8	*	%	
Flow : 23°C, 2.00 mm	1.4	*	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	2.6	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2000	1200	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	60	35	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	5.5	7	%	ISO 527-2
Tensile Strain (Break, 23°C)	45	55	%	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Notched Izod Impact Strength				ISO 180/1A
+23°C	12	-	kJ/m ²	
-30°C	9	-	kJ/m ²	

Thermal

	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	60	-	°C	
0.45 MPa, Unannealed	150	-	°C	

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Melting Temperature	222	*	°C	ISO 11357-3
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Electrical	Value	Unit	Test Standard
Comparative Tracking Index (3.00 mm)	450	V	IEC 60112

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

Injection	Value	Unit
Drying Temperature	80 - 90	°C
Drying Time	≥ 3	h
Rear Temperature	230 - 270	°C
Middle Temperature	230 - 270	°C
Front Temperature	230 - 270	°C
Nozzle temperature	230 - 270	°C
Processing (Melt) Temperature	230 - 270	°C
Mold Temperature	80 - 90	°C

