Vydyne® B BK X146 EM3 LT K1

Ascend Performance Materials Operations LLC - *Polyamide 6*

General Information

Product Description

Vydyne B BK X146 EM3 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 a superior impact resistance also at low temperatures.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Heat Stabilizer	• Impact Modifier	• Lubricant
Features	• Abrasion Resistant • Chemical Resistant • Gasoline Resistant • Good Mold Release	• Heat Aging Resistant • Heat Stabilized • High Elongation • Impact Modified	• Low Temperature Impact Resistance • Lubricated • Oil Resistant • Solvent Resistant
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA6-I		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.08	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	2.1	--	%	
Flow : 73°F, 0.0787 in	1.7	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	2.4	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	290000	174000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	7980	5080	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	6.5	11	%	ISO 527-2
Tensile Strain (Break, 73°F)	80	100	%	ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Notched Izod Impact Strength				ISO 180/1A
-22°F	12	--	ft·lb/in²	
73°F	19	--	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	284	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	131	--	°F	ISO 75-2/A
Melting Temperature	432	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Comparative Tracking Index (0.118 in)	450	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.030 in	HB	--		
0.06 in	HB	--		

Processing Information

Injection	Dry	Unit
Drying Temperature	176 to 194	°F
Drying Time	> 3.0	hr

Rear Temperature	446 to 518 °F
Middle Temperature	446 to 518 °F
Front Temperature	446 to 518 °F
Nozzle Temperature	446 to 518 °F
Processing (Melt) Temp	446 to 518 °F
Mold Temperature	176 to 194 °F

Notes

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