

Vydyne® 41HFE BL0887

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description

Vydyne 41HFE BL0887 is a high impact modified, metal and x-ray detectable, heat stabilized PA66. This resin imparts good toughness and impact resistance while offering metal and x-ray detectability in critical applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer	• Lubricant	• Mold Release
Features	• Heat Stabilized	• High Impact Resistance	• Lubricated
Appearance	• Blue		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-I-MED(x)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.1	--	%	
Flow : 73°F, 0.0787 in	0.80	--	%	
Water Absorption (24 hr, 73°F)	1.1	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	247000	116000	psi	ISO 527-1
Tensile Stress (Break, 73°F)	5510	4640	psi	ISO 527-2
Tensile Strain (Break, 73°F)	33	> 50	%	ISO 527-2
Flexural Modulus (73°F)	261000	116000	psi	ISO 178
Flexural Stress (73°F)	6530	2610	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	6.2	5.2	ft·lb/in ²	
-22°F	6.2	5.7	ft·lb/in ²	
73°F	12	22	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	No Break	No Break		
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-40°F	6.2	7.1	ft·lb/in ²	
-22°F	6.2	7.1	ft·lb/in ²	
73°F	10	25	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	239	306	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	135	127	°F	ISO 75-2/A
Melting Temperature	500	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	640	580	V/mil	IEC 60243-1



Processing Information		
Injection		Dry Unit
Drying Temperature		176 °F
Drying Time		4.0 hr
Rear Temperature		536 to 590 °F
Middle Temperature		536 to 590 °F
Front Temperature		536 to 590 °F
Nozzle Temperature		536 to 590 °F
Processing (Melt) Temp		545 to 581 °F
Mold Temperature		149 to 203 °F

