

Vydyne® 47HFE BL0892

Ascend Performance Materials Operations LLC - Polyamide 66

General Information

Product Description

Vydyne 47HFE BL0892 is a medium impact modified, metal and x-ray detectable, heat stabilized PA66. This resin imparts good toughness and impact resistance while offering detectability in critical applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer	• Impact Modifier	• Mold Release
Features	• Good Impact Resistance	• Heat Stabilized	• Impact Modified
Appearance	• Blue		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-I		

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	1.3	--	%	
Flow : 73°F, 0.0787 in	1.7	--	%	
Water Absorption (24 hr, 73°F)	1.1	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	373000	232000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	7250	5370	psi	ISO 527-2
Tensile Stress (Break, 73°F)	6960	5220	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.7	51	%	ISO 527-2
Tensile Strain (Break, 73°F)	19	55	%	ISO 527-2
Flexural Modulus (73°F)	360000	189000	psi	ISO 178
Flexural Stress (73°F)	9860	4500	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	3.6	3.3	ft·lb/in ²	
-22°F	4.1	4.4	ft·lb/in ²	
73°F	5.3	6.9	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	55	53	ft·lb/in ²	
-22°F	54	58	ft·lb/in ²	
73°F	56	130	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	4.0	4.3	ft·lb/in ²	
-22°F	4.4	4.5	ft·lb/in ²	
73°F	4.8	6.0	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature	502	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	640	--	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
Notes		
¹ Typical properties: these are not to be construed as specifications.		

