

DuPont™ Zytel®

nylon resin

PRELIMINARY DATA

Zytel® CFE8005HS BK010

Zytel® CFE8005HS BK010 is a Super Tough, heat stabilized, black polyamide 66 resin offering outstanding melt strength for extrusion blow molding applications.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Resin Identification	ISO 1043		PA66-HI	
Part Marking Code	ISO 11469		>PA66-HI<	
Mechanical				
Yield Stress	ISO 527	MPa (kpsi)	50 (7.3)	44.2 (6.4)
Nominal Strain at Break	ISO 527	%	32	>50
Yield Strain	ISO 527	%	15	>50
Tensile Modulus	ISO 527	MPa (kpsi)	2000 (290)	1121 (163)
Flexural Modulus	ISO 178	MPa (kpsi)	2000 (290)	917 (133)
Thermal				
Deflection Temperature 0.45MPa	ISO 75f	°C (°F)	120 (250)	
1.80MPa			60 (140)	
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	260 (500)	
CLTE, Normal -30 - 30°C (-22 - 86°F)	ISO 11359-1/-2	E-4/C (E-4/F)	1.1 (0.6)	
-40 - 23°C (-40 - 73°F)			1.1 (0.6)	
23 - 55°C (73 - 130°F)			1.4 (0.8)	
55 - 60°C (130 - 140°F)			1.3 (0.7)	

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
Test temperatures are 23°C unless otherwise stated.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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Zytel® CFE8005HS BK010

Property	Test Method	Units	Value	
			DAM	50%RH
Thermal				
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)		
-30 - 30°C (-22 - 86°F)			1.0 (0.6)	
-40 - 23°C (-40 - 73°F)			1.0 (0.6)	
23 - 55°C (73 - 130°F)			1.2 (0.7)	
55 - 160°C (130 - 320°F)			1.2 (0.7)	
Electrical				
CTI	IEC 60112	V		575
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1080 (1.08)	
Hardness, Rockwell	ISO 2039/2			
Scale M		44		
Scale R			111	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			1.6	
Parallel, 2.0mm			1.6	
Mold Shrinkage		%		
0.050in	2.7			
0.100in	2.9			
0.150in	3.3			
Processing				
Melt Temperature Range		°C (°F)	270-300 (520-570)	
Melt Temperature Optimum		°C (°F)	285 (545)	
Mold Temperature Range		°C (°F)	50-90 (120-190)	
Mold Temperature Optimum		°C (°F)	70 (160)	
Drying Time, Dehumidified Dryer		h	2-4	
Drying Temperature		°C (°F)	80 (175)	
Processing Moisture Content		%	<0.05	

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