

DuPont™ Zytel®

nylon resin

Zytel® 8018HS BKB085

Zytel® 8018HS BKB085 is a 14% glass reinforced, toughened, heat stabilized black polyamide 66 resin.

Property	Test Method	Units	Value
			DAM
Identification			
Resin Identification	ISO 1043		PA66-IGF14
Part Marking Code	ISO 11469		>PA66-IGF14<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	85 (12.3)
Strain at Break	ISO 527	%	9
Tensile Modulus	ISO 527	MPa (kpsi)	4200 (610)
Flexural Modulus	ISO 178	MPa (kpsi)	3600 (520)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-40°C (-40°F)			4
23°C (73°F)			12
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			246 (475)
1.80MPa			195 (383)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			263 (505)
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.96 (0.53)
23 - 55°C (73 - 130°F)			1.18 (0.66)
55 - 160°C (130 - 320°F)			1.23 (0.68)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.52 (0.29)
23 - 55°C (73 - 130°F)			0.50 (0.28)
55 - 160°C (130 - 320°F)			0.46 (0.26)
Electrical			
CTI	UL 746A	V	
3.0mm			580

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.

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Property	Test Method	Units	Value
			DAM
Flammability			
Flammability Classification	IEC 60695-11-10		
0.75mm			HB
1.5mm			HB
3.0mm			HB
Flammability Classification	UL94		
0.75mm			HB
1.5mm			HB
3.0mm			HB
High Amperage Arc Ignition Resistance	UL 746A	arcs	
3.0mm			>200
Hot Wire Ignition	UL 746A	s	
1.5mm			105
3.0mm			18
Temperature Index			
RTI, Electrical	UL 746B	°C	
0.75mm			120
1.5mm			120
3.0mm			120
RTI, Impact	UL 746B	°C	
0.75mm			65
1.5mm			95
3.0mm			105
RTI, Strength	UL 746B	°C	
0.75mm			85
1.5mm			105
3.0mm			105
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1190 (1.19)
Hardness, Rockwell	ISO 2039/2		
Scale M			70
Scale R			110

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Property	Test Method	Units	Value
			DAM
Processing			
Melt Temperature Range		°C (°F)	285-305 (545-580)
Melt Temperature Optimum		°C (°F)	295 (565)
Mold Temperature Range		°C (°F)	50-100 (120-210)
Mold Temperature Optimum		°C (°F)	80 (175)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.20

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