DuPont™ Minlon®

mineral reinforced nylon resin

Minlon® 10B40HS1 BK061

Minlon® 10B40HS1 BK061 is a 40% mineral reinforced, heat stabilized, black polyamide 66 resin for injection molding.

Property	Test Method	Units	Value DAM
Identification			
Resin Identification	ISO 1043		PA66-MD40
Part Marking Code	ISO 11469		>PA66-MD40<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	95 (13.8)
Strain at Break	ISO 527	%	2.5
Tensile Modulus	ISO 527	MPa (kpsi)	10000 (1450)
Flexural Modulus	ISO 178	MPa (kpsi)	9500 (1380)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	
-40°C (-40°F)			2
23°C (73°F)			3
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
1.80MPa			205 (401)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			263 (505)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.33 (0.18)
23 - 55°C (73 - 130°F)			0.36 (0.20)
55 - 160°C (130 - 320°F)			0.39 (0.22)
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.53 (0.29)
23 - 55°C (73 - 130°F)			0.66 (0.36)
55 - 160°C (130 - 320°F)			1.1 (0.61)

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		
0.71mm			HB
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1510 (1.51)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.9
Parallel, 2.0mm			0.4
Mold Shrinkage		%	
Flow, 1.6mm (0.062in)			0.4
Flow, 3.2mm (0.125in)			0.4
Flow, 6.4mm (0.25in)			0.6
Transverse, 1.6mm (0.062in)			0.9
Transverse, 3.2mm (0.125in)			0.9
Transverse, 6.4mm (0.25in)			1.1
Processing			
Melt Temperature Range		°C (°F)	285-305 (545-580)
Melt Temperature Optimum		°C (°F)	295 (560)
Mold Temperature Range		°C (°F)	70-120 (160-250)
Mold Temperature Optimum		°C (°F)	100 (210)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.20

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