DuPont[™] Zytel[®]

nylon resin

Zytel® 80G43HS1L BK104

Zytel[®] 80G43HS1L BK104 is a 43% glass fiber reinforced, heat stabilized, black polyamide 66 resin with superior impact resistance.

Property	Test Method	Units	Value DAM
Resin Identification	ISO 1043		PA66-IGF43
Part Marking Code	ISO 11469		>PA66-IGF43<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	169 (24.5)
Strain at Break	ISO 527	%	3.3
Tensile Modulus	ISO 527	MPa (kpsi)	11700 (1700)
Flexural Modulus	ISO 178	MPa (kpsi)	10300 (1490)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-40°C (-40°F)			15
23°C (73°F)			23
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	90
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			261 (502)
1.80MPa			250 (482)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			262 (504)
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1430 (1.43)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.6
Parallel, 2.0mm			0.2

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 DuPont Oval Logo, DuPontTM, The miracles of scienceTM and Zytel® are trademarks or registered trademarks of DuPont Company. Copyright© 2005.

050325/050329

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent coursel for a freedom to practice opinion on the intended applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.

Zytel® 80G43HS1L BK104

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

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 DuPont Oval Logo, DuPontTM, The miracles of scienceTM and Zytel® are trademarks or registered trademarks of DuPont Company. Copyright© 2

050325/050329

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.