

DuPont™ Zytel®

nylon resin

PRELIMINARY DATA

Zytel® 75LG60HSL BK031

Zytel® 75LG60HSL is a 60% long glass reinforced, heat stabilized, lubricated polyamide 66 resin for structural applications.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Resin Identification	ISO 1043		PA66-GF60	
Part Marking Code	ISO 11469		>PA66-GF60<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	255 (37.0)	200 (29)
Strain at Break	ISO 527	%	1.4	1.5
Tensile Modulus	ISO 527	MPa (kpsi)	22000 (3190)	18000 (2610)
Flexural Modulus	ISO 178	MPa (kpsi)	19400 (2810)	16300 (2360)
Flexural Strength	ISO 178	MPa (kpsi)	430 (62.4)	340 (49.3)
Notched Izod Impact Strength	ISO 180/1A	kJ/m ²	50	
Unnotched Izod Impact Strength	ISO 180/1U	kJ/m ²	100	
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²		
-30°C (-22°F)			60	62
23°C (73°F)			60	62
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²		
-30°C (-22°F)			100	95
23°C (73°F)			110	110

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.

For optimal properties with long glass resins, it is necessary to process the resin with conditions that minimize fiber breakage.

Recommended molding equipment include a mild working screw, with a low compression ratio and deep metering section.

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

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

050602/050818

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.

Zytel® 75LG60HSL BK031

Property	Test Method	Units	Value	
			DAM	50%RH
Thermal				
Deflection Temperature 1.80MPa	ISO 75f	°C (°F)	260 (500)	
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	260 (500)	
CLTE, Normal -40 - 23°C (-40 - 73°F) 23 - 55°C (73 - 130°F) 55 - 160°C (131 - 320°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.45 (0.25) 0.58 (0.32) 0.92 (0.51)	
CLTE, Parallel -40 - 23°C (-40 - 73°F) 23 - 55°C (73 - 130°F) 55 - 160°C (131 - 320°F)	ISO 11359-1/-2	E-4/C (E-4/F)	0.15 (0.08) 0.14 (0.08) 0.08 (0.04)	
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1720 (1.72)	
Molding Shrinkage Normal, 2.0mm Parallel, 2.0mm	ISO 294-4	%	0.6 0.2	
Processing				
Melt Temperature Range		°C (°F)	290-310 (550-590)	
Melt Temperature Optimum		°C (°F)	305 (580)	
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	
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.

For optimal properties with long glass resins, it is necessary to process the resin with conditions that minimize fiber breakage.

Recommended molding equipment include a mild working screw, with a low compression ratio and deep metering section.

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

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

050602/050818

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.