



# Zytel<sup>®</sup> HTN

high performance polyamide resin

## Zytel<sup>®</sup> HTN51G45HSL BK083

Glass Reinforced High Performance Polyamide Resin

Zytel<sup>®</sup> HTN51G45HSL BK083 is a 45% glass reinforced, heat stabilized, lubricated high performance polyamide resin.

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Mechanical</b>				
Tensile Strength	ASTM D 638	MPa (kpsi)	235 (34)	
Elongation at Break	ASTM D 638	%	2.2	
Flexural Modulus	ASTM D 790	MPa (kpsi)		
23C (73F)			13790 (2000)	
120C (248F)			11690 (1695)	
Izod Impact	ASTM D 256	J/m (ft lb/in)	107 (2)	
<b>Thermal</b>				
Heat Deflection Temperature	ASTM D 648	°C (°F)		
1.8MPa (264psi)			260 (500)	
Glass Transition Temperature	ASTM D 3418	°C (°F)	125 (257)	90 (194)
Melting Point	ASTM D 3418	°C (°F)	300 (572)	
<b>Flammability</b>				
Rating @ Thickness	UL94		HB	
Thickness Tested	UL94	mm (in)	0.85	
<b>Other</b>				
Specific Gravity	ASTM D 792		1.58	
Mold Shrinkage		%		
Flow, 3.2mm (0.126in)			0.18	
Transverse, 3.2mm (0.126in)			0.7	

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.  
Mechanical properties measured at 23°C (73°F) unless otherwise stated.

During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

Zytel<sup>®</sup> is a DuPont registered trademark.

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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 or additives 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. 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-51459 or H-50102.

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# Product Information

## Zytel® HTN51G45HSL BK083

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Processing</b>				
Melt Temperature Range		°C (°F)	320-330 (610-625)	
Mold Temperature Range		°C (°F)	130-160 (265-320)	
Mold Temperature Optimum		°C (°F)	150 (300)	
Drying Time, Dehumidified Dryer		h	6-8	
Drying Temperature		°C (°F)	100 (210)	
Air Dew Point		°C (°F)	<-20 (<-4)	
Processing Moisture Content		%	<0.1	

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