



PRELIMINARY DATA

Zytel® RS HTN59G55LWSF BK083

Zytel® RS HTN59G55LWSF BK083 is a 55% glass reinforced high performance polyamide resin containing 32% renewably sourced ingredients by weight (71% based on polymer only). It provides low warpage and good dimensional stability in structural applications.

Property	Test Method	Units	Value
			DAM
<b>Identification</b>			
Part Marking Code	ISO 11469		>PA-GF55<
Part Marking Code	SAE J1344		>PA-GF55<
<b>Mechanical</b>			
Stress at Break	ISO 527	MPa (kpsi)	235 (34)
Strain at Break	ISO 527	%	2.5
Tensile Modulus	ISO 527	MPa (kpsi)	17000 (2460)
Flexural Modulus	ISO 178	MPa (kpsi)	14400 (2080)
Flexural Strength	ISO 178	MPa (kpsi)	340 (49.3)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	24
<b>Thermal</b>			
Deflection Temperature 1.80MPa	ISO 75-1/-2	°C (°F)	190 (374)

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.

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.

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

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 \* DuPont™ Zytel® RS contains a minimum of 20% renewably sourced ingredients by weight.

090213/090217

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## Zytel® RS HTN59G55LWSF BK083

Property	Test Method	Units	Value	
			DAM	
<b>Electrical</b>				
Dielectric Constant	ASTM D 2520 B			
1 GHz				4.1
3 GHz				4.1
10 GHz	ASTM D 2520 B	E-4		
Dissipation Factor				4.2
1 GHz				125
3 GHz				113
10 GHz			119	
<b>Other</b>				
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1570 (1.57)	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			0.25	
Parallel, 2.0mm			0.05	
<b>Processing</b>				
Melt Temperature Range		°C (°F)	240-260 (465-500)	
Melt Temperature Optimum		°C (°F)	250 (482)	
Mold Temperature Range		°C (°F)	80-100 (176-212)	
Mold Temperature Optimum		°C (°F)	90 (194)	
Drying Time, Dehumidified Dryer		h	6-8	
Drying Temperature		°C (°F)	100 (212)	
Processing Moisture Content		%	<0.10	

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