



# Zytel®

nylon resin

## Zytel® ST801HS BK010

### Super Tough Nylon 66 Resin

Zytel® ST801HS NC010 is a heat stabilized Super Tough black nylon 66 resin. It offers outstanding impact resistance and high productivity.

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Mechanical</b>				
Yield Stress	ISO 527-1/-2	MPa (kpsi)	51 (7.4)	NoYLD
Yield Strain	ISO 527-1/-2	%	6	
Nominal Strain at Break	ISO 527-1/-2	%	38	>50
Tensile Modulus	ISO 527-1/-2	MPa (kpsi)	2003 (290.5)	811 (117.6)
Notched Charpy Impact	ISO 179/1eA	kJ/m2		
-30C (-22F)			13	
23C (73F)			72	21
Unnotched Charpy Impact	ISO 179/1eU	kJ/m2		
-30C (-22F)			NB	
23C (73F)			NB	
<b>Thermal</b>				
Deflection Temperature	ISO 75-1/-2	°C (°F)		
0.45MPa			177 (351)	
1.80MPa			61 (142)	
CLTE, Parallel	ASTM E 831	E-4/C (E-4/F)		
23 - 55C (73 - 130F)			1.1 (0.61)	
CLTE, Normal	ASTM E 831	E-4/C (E-4/F)		
23 - 55C (73 - 130F)			1.2 (0.67)	
Melting Temperature	ISO 3146C	°C (°F)	262 (504)	
<b>Flammability</b>				
Rating @ 1.6mm Nominal	UL94		HB	
Rating @ Thickness	UL94		HB	
Thickness Tested	UL94	mm	0.75	
Limited Oxygen Index	ISO 4589	%	22	
<b>Other</b>				
Density	ISO 1183	kg/m3 (g/cm3)	1090 (1.09)	

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.

Zytel® 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® ST801HS BK010

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Processing</b>				
Melt Temperature Range		°C (°F)	288-293 (550-560)	
Melt Temperature Optimum		°C (°F)	290 (555)	
Mold Temperature Range		°C (°F)	38-93 (100-200)	
Mold Temperature Optimum		°C (°F)	70 (158)	
Drying Time		h	2-4	
Drying Temperature		°C (°F)	80 ( )	
Processing Moisture Content		%	<0.20	

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