

# DuPont™ Zytel®

nylon resin

PRELIMINARY DATA

## Zytel® FR73G20GWF GY372

Zytel® FR73G20GWF GY372 is a 20% glass fiber reinforced, flame retardant polyamide 6 resin for injection molding. It is halogen and red phosphorous free.

Property	Test Method	Units	Value	
			DAM	50%RH
<b>Identification</b>				
Resin Identification	ISO 1043		PA6-GF20FR(30)	
Part Marking Code	ISO 11469		>PA6-GF20FR(30)<	
<b>Mechanical</b>				
Stress at Break	ISO 527	MPa (kpsi)	90 (13.1)	48 (7.0)
Strain at Break	ISO 527	%	3.5	28
Tensile Modulus	ISO 527	MPa (kpsi)	6000 (870)	3000 (435)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>		
-30°C (-22°F)			3	
23°C (73°F)			4	6.5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	30	110
<b>Thermal</b>				
Deflection Temperature	ISO 75f	°C (°F)		
0.45MPa			200 (392)	
1.80MPa			150 (302)	
Melting Temperature	ISO 11357-1/-3	°C (°F)		
10°C/min			221 (430)	

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

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Property	Test Method	Units	Value	
			DAM	50%RH
<b>Electrical</b>				
Relative Permittivity 1E6 Hz	IEC 60250		3.8	
Volume Resistivity	IEC 60093	ohm m	1E13	
Electric Strength 1.0mm	IEC 60243-1	kV/mm (V/mil)	35 (890)	
CTI	IEC 60112	V	550	
<b>Flammability</b>				
Flammability Classification 0.75mm	IEC 60695-11-10		V-2	
1.5mm			V-2	
3.0mm			V-2	
Flammability Classification 0.75mm	UL94		V-2	
1.5mm			V-2	
3.0mm			V-2	
Glow Wire Flammability Index 0.75mm	IEC 60695-2-12	°C	960	
1.5mm			960	
Glow Wire Ignition Temperature 0.75mm	IEC 60695-2-13	°C	750	
1.5mm			750	
<b>Temperature Index</b>				
RTI, Electrical 0.75mm	UL 746B	°C	65	
RTI, Impact 0.75mm	UL 746B	°C	65	
RTI, Strength 0.75mm	UL 746B	°C	65	
<b>Other</b>				
Density	ISO 1183	kg/m <sup>3</sup> (g/cm <sup>3</sup> )	1330 (1.33)	

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Property	Test Method	Units	Value	
			DAM	50%RH
<b>Processing</b>				
Melt Temperature Range		°C (°F)	260-280 (500-535)	
Melt Temperature Optimum		°C (°F)	270 (520)	
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 (175)	
Processing Moisture Content		%	<0.20	

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