DuPont™ Zytel®

nylon resin

Zytel® FE5382 BK276

Zytel® FE5382 BK276 is a 33% glass fiber reinforced, heat stabilized, black polyamide 612 resin developed for electrical bobbins and encapsulation applications.

Property	Test Method	Units	Value DAM
Identification			
Resin Identification	ISO 1043		PA612-GF33
Part Marking Code	ISO 11469		>PA612-GF33<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	170 (24.7)
Strain at Break	ISO 527	%	2.5
Tensile Modulus	ISO 527	MPa (kpsi)	9800 (1420)
Flexural Modulus	ISO 178	MPa (kpsi)	8400 (1220)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	
-40°C (-40°F)			10
23°C (73°F)			12
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
1.80MPa			200 (392)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			218 (424)
Flammability			
Flammability Classification	IEC 60695-11-10		
0.75mm			HB
Flammability Classification	UL94		
0.75mm			HB

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.

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Property	Test Method	Units	Value DAM
Temperature Index			
RTI, Electrical	UL 746B	°C	
0.75mm			65
RTI, Impact	UL 746B	°C	
0.75mm			65
RTI, Strength	UL 746B	°C	
0.75mm			65
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1320 (1.32)
Mold Shrinkage		%	
Flow, 3.2mm (0.126in)			0.3
Transverse, 3.2mm (0.126in)			1.0
Processing			
Melt Temperature Range		°C (°F)	280-300 (535-570)
Melt Temperature Optimum		°C (°F)	290 (555)
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		%	<0.15

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