

DuPont™ Zytel®

nylon resin

PRELIMINARY DATA

Zytel® CDV805 BK409

Zytel® CDV805 BK409 is a glass-reinforced, toughened, heat stabilized polyamide resin modified with carbon fiber for improved performance in structural applications.

Property	Test Method	Units	Value	
			DAM	50%RH
Identification				
Resin Identification	ISO 1043		PA-I(GF+CF)	
Part Marking Code	ISO 11469		>PA-I(GF+CF)<	
Mechanical				
Stress at Break	ISO 527	MPa (kpsi)	140 (20.3)	93 (13.5)
Strain at Break	ISO 527	%	3.2	7.2
Tensile Modulus	ISO 527	MPa (kpsi)	9600 (1390)	5900 (855)
Flexural Modulus	ISO 178	MPa (kpsi)	8200 (1190)	5500 (800)
Flexural Strength	ISO 178	MPa (kpsi)	228 (33)	128 (18.5)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²		
-40°C (-40°F)			7.5	
23°C (73°F)			16	
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²		
-40°C (-40°F)			65	
23°C (73°F)			72	
Thermal				
Deflection Temperature	ISO 75-1/-2	°C (°F)		
1.80MPa			225 (437)	
Melting Temperature	ISO 11357-1/-3	°C (°F)		
10°C/min			250 (482)	

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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Zytel® CDV805 BK409

Property	Test Method	Units	Value	
			DAM	50%RH
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1290 (1.29)	
Molding Shrinkage	ISO 294-4	%		
Normal, 2.0mm			0.6	
Parallel, 2.0mm			0.2	
Processing				
Melt Temperature Range		°C (°F)	280-305 (535-580)	
Melt Temperature Optimum		°C (°F)	290 (555)	
Mold Temperature Range		°C (°F)	40-95 (105-205)	
Mold Temperature Optimum		°C (°F)	70 (160)	
Drying Time, Dehumidified Dryer		h	2-4	
Drying Temperature		°C (°F)	80 (180)	
Processing Moisture Content		%	<0.20	

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