

DuPont™ Zytel®

nylon resin

Zytel® FR7025V0F NC010

Zytel® FR7025V0F NC010 is a flame retardant polyamide 66 resin for injection molding. It does not contain elemental phosphorous, halogens or heavy metals.

Property	Test Method	Units	Value
			DAM
Identification			
Resin Identification	ISO 1043		PA66-FR(30)
Part Marking Code	ISO 11469		>PA66-FR(30)<
Mechanical			
Tensile Strength	ASTM D 638	MPa (kpsi)	89.6 (13)
Elongation at Break	ASTM D 638	%	14
Flexural Modulus	ASTM D 790	MPa (kpsi)	3450 (500)
Izod Impact	ASTM D 256	J/m (ft lb/in)	43 (0.8)
Thermal			
Heat Deflection Temperature 0.45MPa (66psi)	ASTM D 648	°C (°F)	230 (446)
1.8MPa (264psi)			70 (158)
Melting Point	ASTM D 3418	°C (°F)	264 (507)
Electrical			
CTI 3.0mm	UL 746A	PLC	0

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.

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Property	Test Method	Units	Value
			DAM
Flammability			
Flammability Classification	IEC 60695-11-10		
0.75mm			V-0
1.5mm			V-0
3.0mm			V-0
Flammability Classification	UL94		
0.75mm			V-0
1.5mm			V-0
3.0mm			V-0
Glow Wire Flammability Index	IEC 60695-2-12	°C	
1.5mm			960
3.0mm			960
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	
1.5mm			775
3.0mm			775
High Current Arc Ignition Resistance	UL 746A	PLC	
0.75mm			0
1.5mm			0
3.0mm			0
High Voltage Arc Tracking Rate	UL 746A	PLC	
0.75mm			0
1.5mm			0
3.0mm			0
Hot Wire Ignition	UL 746A	PLC	
0.75mm			3
1.5mm			3
3.0mm			1

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Property	Test Method	Units	Value	
			DAM	
Temperature Index				
RTI, Electrical	UL 746B	°C		
0.75mm			130	
1.5mm			130	
3.0mm			130	
RTI, Impact	UL 746B	°C		
0.75mm			75	
1.5mm			75	
3.0mm			75	
RTI, Strength	UL 746B	°C		
0.75mm			85	
1.5mm			85	
3.0mm			85	
Other				
Specific Gravity	ASTM D 792		1.15	
Mold Shrinkage			%	
Flow, 1.6mm (0.062in)				0.8
Flow, 3.2mm (0.125in)				1.1
Transverse, 1.6mm (0.062in)				0.8
Transverse, 3.2mm (0.125in)			1.1	
Processing				
Melt Temperature Range		°C (°F)	270-290 (520-555)	
Melt Temperature Optimum		°C (°F)	280 (535)	
Mold Temperature Range		°C (°F)	50-90 (120-190)	
Mold Temperature Optimum		°C (°F)	70 (160)	
Drying Time, Dehumidified Dryer		h	2-4	
Drying Temperature		°C (°F)	80 (175)	
Processing Moisture Content		%	<0.20	

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