

Zytel® FR7026V0F NC010

NYLON RESIN

DuPont Performance Polymers

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Unreinforced, Flame Retardant, Polyamide 66

General

Material Status	• Commercial: Active
Literature ¹	• Processing - Injection Molding (English) • Typical Processing for DuPont Engineering Polymers (English)
UL Yellow Card ²	• E41938-234499 • E41938-101927848
Search for UL Yellow Card	• DuPont Performance Polymers • Zytel®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Flame Retardant • Mold Release
Features	• Flame Retardant
RoHS Compliance	• Contact Manufacturer
Forms	• Pellets
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PA66-FR(30)<
Resin ID (ISO 1043)	• PA66-FR(30)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.16	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.90	--	%	
Water Absorption				ISO 62
Saturation, 73°F (23°C), 0.0787 in (2.00 mm)	8.0	--	%	
Equilibrium, 73°F (23°C), 0.0787 in (2.00 mm), 50% RH	2.4	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	544000 (3750)	--	psi (MPa)	ISO 527-2
Tensile Stress (Break)	11600 (80.0)	--	psi (MPa)	ISO 527-2
Tensile Strain (Break)	10	--	%	ISO 527-2

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.4 (3.0)	0.95 (2.0)	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	1.8 (3.7)	3.3 (7.0)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F (23°C)	38 (80)	52 (110)	ft·lb/in ² (kJ/m ²)	
Notched Izod Impact Strength (73°F (23°C))	2.1 (4.4)	--	ft·lb/in ² (kJ/m ²)	ISO 180/1A



Zytel® FR7026V0F NC010

NYLON RESIN

DuPont Performance Polymers

PROSPECTOR®

www.ulprospector.com

Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness (H 358/30)	--	16000 (110)	psi (MPa)	ISO 2039-1
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	446 (230)	--	°F (°C)	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	176 (80.0)	--	°F (°C)	ISO 75-2/A
Melting Temperature ⁴	500 (260)	--	°F (°C)	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	> 1.0E+15	ohms	IEC 60093
Electric Strength	790 (31)	--	V/mil (kV/mm)	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				
0.0591 in (1.50 mm)	V-0	--		UL 94 IEC 60695-11-10, -20
0.0323 in (0.820 mm)	V-0	--		IEC 60695-11-10, -20
Glow Wire Flammability Index				IEC 60695-2-12
0.0157 in (0.400 mm)	1760 (960)	--	°F (°C)	
0.0295 in (0.750 mm)	1760 (960)	--	°F (°C)	
0.0591 in (1.50 mm)	1760 (960)	--	°F (°C)	
0.118 in (3.00 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.0157 in (0.400 mm)	1760 (960)	--	°F (°C)	
0.0295 in (0.750 mm)	1760 (960)	--	°F (°C)	
0.0591 in (1.50 mm)	1760 (960)	--	°F (°C)	
0.118 in (3.00 mm)	1760 (960)	--	°F (°C)	
Oxygen Index	39	--	%	ISO 4589-2
Burning Rate ⁵ (39.4 mil (1.00 mm))	DNI	--		ISO 3795
Fill Analysis	Dry	Conditioned	Unit	
Melt Density	1.03	--	g/cm ³	
Specific Heat Capacity of Melt	0.619 (2590)	--	Btu/lb/°F (J/kg/°C)	
Thermal Conductivity of Melt	1.2 (0.17)	--	Btu·in/hr/ft ² /°F (W/m/K)	
Additional Information	Dry	Conditioned	Unit	Test Method
Odor	5.00	--		VDA 270
Injection	Dry (English)	Dry (SI)		
Drying Temperature	176 °F	80.0 °C		



Injection	Dry (English)	Dry (SI)
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.20 %	0.20 %
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Melt Temperature, Optimum	536 °F	280 °C
Mold Temperature	122 to 194 °F	50.0 to 90.0 °C
Mold Temperature, Optimum	158 °F	70 °C
Holding Pressure	7250 to 14500 psi	50.0 to 100 MPa
Drying Recommended	yes	yes
Ejection Temperature	410 °F	210 °C
Hold Pressure Time	3.00 s/mm	3.00 s/mm
Screw Tangential Speed	472 in/min	200 mm/sec

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 10°C/min

⁵ FMVSS 302



Where to Buy

Supplier

DuPont Performance Polymers

Wilmington, DE USA

Telephone: 302-999-4592**Web:** <http://plastics.dupont.com/>

Distributor

Biesterfeld Plastic GmbH*Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.***Telephone:** +49-40-32008-0**Web:** <http://www.biesterfeld-plastic.com/>**Availability:** Algeria, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey**CCC Plastics****Telephone:** 800-465-6917**Web:** <http://www.cccplastics.com/>**Availability:** Canada**Distrupol Ltd***Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.***Telephone:** 08452003040**Web:** <http://www.distrupol.com/>**Availability:** Denmark, Finland, Ireland, Norway, Sweden, United Kingdom**PolyOne Distribution***PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.***Telephone:** 800-894-4266**Web:** <http://polyonedistribution.com/>**Availability:** Global