

Technical Data

Product Description

Unreinforced, Flame Retardant, Non-Halogenated, Elemental phosphorous free, Polyamide 66, Non-Chlorine & Non-Bromine Material.

General

Material Status	• Commercial: Active		
UL Yellow Card ¹	• E41938-234498		
Search for UL Yellow Card	• DuPont Mobility & Materials • Zytel®		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		• Mold Release
Features	• Flame Retardant	• Halogen Free	• Low (to None) Phosphorus Content
RoHS Compliance	• Contact Manufacturer		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	• Tensile Modulus vs. Temperature (ISO 11403-1)
Part Marking Code (ISO 11469)	• >PA66-FR(30)<		
Resin ID (ISO 1043)	• PA66-FR(30)		
ISO Designation	• ISO 16396-PA66,FR(30),M1F1G1NR,S14-040		

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
Equilibrium, 23°C, 2.00 mm, 50% RH	2.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3700	2000	MPa	ISO 527-1
Tensile Stress				ISO 527-2
Yield	--	55.0	MPa	
Break	80.0	--	MPa	
Tensile Strain				ISO 527-2
Yield	--	20	%	
Break	10	--	%	
Nominal Tensile Strain at Break	--	30	%	ISO 527-2
Flexural Modulus	3660	--	MPa	ISO 178
Poisson's Ratio	0.36	0.40		
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°C	3.0	--	kJ/m ²	
-30°C	3.0	--	kJ/m ²	
23°C	3.7	--	kJ/m ²	
Charpy Unnotched Impact Strength (23°C)	140	--	kJ/m ²	ISO 179/1eU



Zytel® FR7025V0F NC010

NYLON RESIN

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	235	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	84.0	--	°C	ISO 75-2/A
Glass Transition Temperature ³	80.0	20.0	°C	ISO 11357-2
Ball Pressure Test (220°C)	Pass	--		IEC 60695-10-2
Melting Temperature ³	260	--	°C	ISO 11357-3
CLTE				
Flow : 23 to 55°C	6.5E-5	--	cm/cm/°C	ASTM E831
Flow : -40 to 23°C	6.0E-5	--	cm/cm/°C	ISO 11359-2
Flow : 55 to 160°C	7.0E-5	--	cm/cm/°C	ISO 11359-2
Transverse : -40 to 23°C	7.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength	31	30	kV/mm	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.75 mm	V-0	--		IEC 60695-11-10, -20
1.5 mm	V-0	--		
Oxygen Index	39	--	%	ISO 4589-2
FMVSS Flammability ⁴	DNI	--		FMVSS 302
Fill Analysis	Dry	Conditioned	Unit	
Ejection Temperature	210	--	°C	
Injection	Dry Unit			
Drying Temperature	80 °C			
Drying Time - Desiccant Dryer	2.0 to 4.0 hr			
Suggested Max Moisture	< 0.20 %			
Processing (Melt) Temp	270 to 290 °C			
Melt Temperature, Optimum	280 °C			
Mold Temperature	50 to 90 °C			
Mold Temperature, Optimum	70 °C			
Holding Pressure	50.0 to 100 MPa			
Drying Recommended	yes			
Hold Pressure Time	3.00 s/mm			
Maximum Screw Tangential Speed	12 m/min			

Notes

¹ 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.

² Typical properties: these are not to be construed as specifications.

³ 10°C/min

⁴ Derived from Similar Grade



Where to Buy

Supplier

DuPont Mobility & Materials

Wilmington, Wilmington USA

Telephone: 302-999-4592

Web: <http://plastics.dupont.com/>

Distributor

Avient Distribution

Avient Distribution is a global distribution company. Contact Avient Distribution for availability of individual products by country.

Telephone: +1-440-930-3004 (USA); +86-21-6028-4805 (China)

Web: <https://now.avient.com/>

Availability: Global

CCC Plastics

Telephone: 800-461-1638

Web: <https://www.ccc-group.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

