

Frianyl® B3 GF30 V0 BK 9005

Polyamide 6

Celanese Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Polyamide 6 compound, 30% glass fiber reinforced, heat resistant, based on flame retardants halogen and red phosphorous free. UL listed V0@0.4mm all color.

Designed for Electrical applications requiring self-extinguishing properties combined with good mechanical performances, this grade meets the most stringent safety requirements for insulating materials.

General

Material Status	• Commercial: Active		
UL Yellow Card ¹	• E86034-104407033 • E86034-306735 • E331274-103610484		
Search for UL Yellow Card	• Celanese Corporation • Frianyl®		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Additive	• Flame Retardant		
Features	• Flame Retardant	• Flame Retardant	• Good Heat Resistance
Uses	• Automotive Applications		
Forms	• Granules		
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	• Specific Volume vs Temperature (ISO 11403-2)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.50 to 0.80	--	%	
Flow	0.20 to 0.40	--	%	
Water Absorption				ISO 62
Saturation, 23°C	4.0	--	%	
Equilibrium, 23°C, 50% RH	1.5	--	%	
Viscosity Number (H2SO4 (Sulphuric Acid))	145	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	10500	7000	MPa	ISO 527-1/1A
Tensile Stress (Break)	140	95.0	MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	5.5	%	ISO 527-2/1A/5
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	7.0	--	kJ/m ²	
23°C	10	13	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	42	--	kJ/m ²	
23°C	55	55	kJ/m ²	
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness ³	205	--	MPa	ISO 2039-1
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	220	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	210	--	°C	ISO 75-2/A
Continuous Use Temperature	120	--	°C	DIN/IEC 60216-1
Melting Temperature ⁴	225	--	°C	ISO 11357-3



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Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity	1.0E+15	--	ohms-cm	IEC 60093
Comparative Tracking Index (CTI)	PLC 0	--		UL 746A
Comparative Tracking Index ⁵	600	--	V	IEC 60112
Comparative Tracking Index	Group I	--		IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.40 mm	V-0	--		
3.2 mm	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.8 mm	960	--	°C	
3.2 mm	960	--	°C	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.8 mm	775	--	°C	
3.2 mm	800	--	°C	
FMVSS Flammability ⁶	SE	--		FMVSS 302

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 30s

⁴ 20°C/min

⁵ 50 drops

⁶ ISO 3795



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Where to Buy

Supplier

Celanese Corporation

Florence, Florence USA

Telephone: 800-833-4882

Web: <http://www.celanese.com/engineered-materials>

Distributor

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

Web: <http://www.resinex.com/>

Availability: Europe

SNETOR Distribution

SNETOR Distribution is a Pan European distribution company. Contact SNETOR for availability of individual products by country.

Telephone: +33-1-4904-8888

Web: <http://www.snetor.com/>

Availability: Bulgaria, Croatia, Czech Republic, France, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia

