



# FRIANYL® A3 GF30 V0 BK 9005/MM

**FRIANYL®** 

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

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Resin Identification Part Marking Code Continuous Service Temperature	(PA66+PA6)-GF30 FR(40) >(PA66+PA6)-GF30 FR(40)< 130 °C		ISO 1043 ISO 11469 IEC 60216-1	
Rheological properties	dry/cond.			
Viscosity number Moulding shrinkage range, parallel Moulding shrinkage range, normal	145/* 0.3 - 0.6 0.6 - 0.9	cm³/g % %	ISO 307, 1628 ISO 294-4, 2577 ISO 294-4, 2577	
Typical mechanical properties	dry/cond.			
Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Charpy notched impact strength, 23°C Ball indentation hardness, H 961/30 Poisson's ratio [C]: Calculated	11000/- 150/- 2.5/- 8.5/- 220/- 0.34/- <sup>[C]</sup>	MPa MPa % kJ/m² MPa	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 179/1eA ISO 2039-1	
Thermal properties	dry/cond.			
Melting temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 0.45 MPa	260/* 220/* 230/*	°C °C	ISO 11357-1/-3 ISO 75-1/-2 ISO 75-1/-2	
Flammability	dry/cond.			
Burning Behav. at 1.5mm nom. thickn. Burning Behav. at thickness h Thickness tested UL recognition Glow Wire Flammability Index, 0.75mm Glow Wire Flammability Index, 3.0mm Glow Wire Ignition Temperature, 0.75mm Glow Wire Ignition Temperature, 3.0mm FMVSS Class	V-0/* V-0/* 0.4/* yes/* 960/- 960/- 775/- 800/- SE	class class mm °C °C °C °C	IEC 60695-11-10 IEC 60695-11-10 IEC 60695-11-10 UL 94 IEC 60695-2-12 IEC 60695-2-12 IEC 60695-2-13 IEC 60695-2-13 ISO 3795 (FMVSS 302)	
Electrical properties	dry/cond.			
Comparative tracking index	600/-		IEC 60112	
Physical/Other properties Humidity absorption, 2mm Water absorption, 2mm Density	dry/cond. 1.2/* 4.2/* 1420/-	% % kg/m³	Sim. to ISO 62 Sim. to ISO 62 ISO 1183	

Printed: 2025-05-29 Page: 1 of 2

Revised: 2025-02-14 Source: Celanese Materials Database





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#### Injection

Drying Recommended	yes	
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Drying Temperature	80	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.1	%
Melt Temperature Optimum	285	°C
Min. melt temperature	270	°C
Max. melt temperature	300	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	80	°C
Min. mould temperature	60	°C
Max. mould temperature	100	°C

#### Characteristics

Processing Injection Moulding

Delivery form Granules

Additives Flame retardant, Non-halogenated/Red phosphorous free flame retardant

Special characteristics Flame retardant, Heat stabilised or stable to heat

Printed: 2025-05-29 Page: 2 of 2

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