

FRIANYL[®] A3 E GF25 V0 BK 9011/YG FRIANYL®

Designed for Electrical applications requiring self-extinguishing properties combined with good mechanical performances, low blooming and corrosion, good surface quality, this grade meets the most stringent safety requirements for insulating materials. Suitable for EV high voltage applications. Suitable for marking with laser.

Product information

Resin Identification Part Marking Code	(PA66+PA6)-GF25 FR(40) >(PA66+PA6)-GF25 FR(40)<		ISO 1043 ISO 11469
Rheological properties	dry/cond.		
Viscosity number Moulding shrinkage range, parallel Moulding shrinkage range, normal	155/* 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 impact strength, 23°C Charpy impact strength, -30°C Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Poisson's ratio [C]: Calculated	9000/- 120/- 3/- 55/- 50/- 8/- 5/- 0.34/- ^[C]	MPa MPa % kJ/m ² kJ/m ² kJ/m ²	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 179/1eA
Thermal properties	dry/cond.		
Melting temperature, 10°C/min Ball pressure test	260/* 175/-	°C °C	ISO 11357-1/-3 IEC 60695-10-2
Flammability	dry/cond.		
Burning Behav. at 1.5mm nom. thickn. Burning Behav. at thickness h Thickness tested Glow Wire Flammability Index, 0.4mm Glow Wire Flammability Index, 0.75mm Glow Wire Flammability Index, 2.0mm Glow Wire Flammability Index, 3.0mm	V-0/* V-0/* 0.4/* 960/- 960/- 960/-	class class mm °C °C °C	IEC 60695-11-10 IEC 60695-11-10 IEC 60695-11-10 IEC 60695-2-12 IEC 60695-2-12 IEC 60695-2-12 IEC 60695-2-12
Electrical properties	dry/cond.		
Volume resistivity Surface resistivity Electric strength Comparative tracking index, 100 drops	1.2E13/- */5.1E13 45/- 500	Ohm.m Ohm kV/mm	IEC 62631-3-1 IEC 62631-3-2 IEC 60243-1 IEC 60112





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Physical/Other properties	dry/cond.			
Humidity absorption, 2mm	1.4/*	%	Sim. to ISO 62	
Water absorption, 2mm	4.8/*	%	Sim. to ISO 62	
Density	1370/-	kg/m³	ISO 1183	
Injection				
Drying Recommended	yes			
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			
Max. melt temperature	300			
Screw tangential speed	≤0.2			
Mold Temperature Optimum		-		
Min. mould temperature		°C		
Max. mould temperature	100	°C		
Characteristics				
Processing	Injection Moulding			
Delivery form	Granules			
Additives	Flame retardant, Non-halogenated/Red phosphorous free flame retardant			

Flame retardant, Heat stabilised or stable to heat, Laser Markable

Special characteristics

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