

# FRIANYL<sup>®</sup> A3 RV0 GY 7012/H

### FRIANYL®

Designed for Electrical applications requiring self-extinguishing properties combined with easy processability and good surface quality, this grade meets the most stringent safety requirements for insulating materials.

#### **Product information**

Resin Identification Part Marking Code Continuous Service Temperature	PA66 FR(30) >PA66 FR(30)< 130	°C	ISO 1043 ISO 11469 IEC 60216-1
Rheological properties	dry/cond.		
Viscosity number	140/*	cm³/g	ISO 307, 1628
Moulding shrinkage, parallel	1.2/-	%	ISO 294-4, 2577
Moulding shrinkage range, parallel	1 - 1.4	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.2/-	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1 - 1.4	%	ISO 294-4, 2577
Typical mechanical properties	dry/cond.		
Tensile modulus	3500/-	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	81/-	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	13/-	%	ISO 527-1/-2
Charpy impact strength, 23°C	N/-	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	3/-	kJ/m²	ISO 179/1eA
Poisson's ratio	0.37/- <sup>[C]</sup>		
[C]: Calculated			
Thermal properties	dry/cond.		
Melting temperature, 10°C/min	260/*	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	85/*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	185/*	°C	ISO 75-1/-2
Flammability	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	V-0/*	class	IEC 60695-11-10
Thickness tested	1.6/*	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0/*	class	IEC 60695-11-10
Thickness tested	0.4/*	mm	IEC 60695-11-10
UL recognition	yes/*		UL 94
Glow Wire Flammability Index, 0.75mm	960/-	°C	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	960/-	°C	IEC 60695-2-12
Glow Wire Ignition Temperature, 0.75mm	775/-	°C	IEC 60695-2-13
Glow Wire Ignition Temperature, 3.0mm	775/-	°C	IEC 60695-2-13
Electrical properties	dry/cond.		
Volume resistivity	1E13/-	Ohm.m	IEC 62631-3-1
Comparative tracking index	600/-		IEC 60112





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Physical/Other properties	dry/cond.		
Humidity absorption, 2mm Water absorption, 2mm Density	1.8/* 6.5/* 1170/-	% % kg/m <sup>3</sup>	Sim. to ISO 62 Sim. to ISO 62 ISO 1183
Injection			
Drying Recommended Drying Temperature Drying Time, Dehumidified Dryer Processing Moisture Content Melt Temperature Optimum Min. melt temperature Max. melt temperature Screw tangential speed Mold Temperature Optimum Min. mould temperature Max. mould temperature	275 265 285 ≤0.2 70 60	h % °C °C °C	
Characteristics			
Processing Additives	Injection Moulding Flame retardant, Non-halogenated	d/Red phosphorous free flame ret	ardant

Flame retardant

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Special characteristics

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