



FRIANYL® A3 RV0 BK 9005/SZ

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

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Resin Identification	PA66 FR(30)		ISO 1043
Part Marking Code	>PA66 FR(30)<		ISO 11469
Continuous Service Temperature	130	°C	IEC 60216-1
Rheological properties	dry/cond.		
Viscosity number	135/*	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	3400/2000	MPa	ISO 527-1/-2
	70/45	MPa	ISO 527-1/-2 ISO 527-1/-2
Tensile stress at yield, 50mm/min	70/45 2.5/8		
Tensile strain at break, 50mm/min		% MD-	ISO 527-1/-2
Flexural modulus	3500/-	MPa	ISO 178
Flexural strength	110/-	MPa	ISO 178
Charpy impact strength, 23°C	35/>60	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	3/5	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -40°C	3/-	kJ/m²	ISO 179/1eA
Poisson's ratio	0.37/0.4 ^[C]		
[C]: Calculated			
Thermal properties	dry/cond.		
Melting temperature, 10°C/min	265/*	°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.		
	V-0/*	class	IEC 60695-11-10
Burning Behav. at 1.5mm nom. thickn. Thickness tested	V-0/ 1.5/*		IEC 60695-11-10
		mm	
UL recognition	yes / * V-0 / *	ologo	UL 94 IEC 60695-11-10
Burning Behav. at thickness h Thickness tested	V-U/* 0.4/*	class	IEC 60695-11-10
		mm	UL 94
UL recognition	yes/* 960/-	°C	IEC 60695-2-12
Glow Wire Flammability Index, 0.75mm	960/-	°C	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	900/-	U	IEC 00095-2-12

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





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Electrical properties

Comparative tracking index, 100 drops 600 IEC 60112

dry/cond.

Physical/Other properties

Injection

Drying Recommended	yes	
Drying Temperature	80	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.1	%
Melt Temperature Optimum	275	°C
Min. melt temperature	265	°C
Max. melt temperature	285	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	70	°C
Min. mould temperature	60	°C
Max. mould temperature	90	°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

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