FRIANYL® A3 RV0 BK 9005/F

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	(PA66+PA6) FR(30)	ISO 1043
Part Marking Code	>(PA66+PA6) FR(30)<	ISO 11469
Continuous Service Temperature	266 °F	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	3880 / *	in^3/lb	ISO 307, 1628

Typical mechanical properties

	dry/cond.		
Tensile modulus	515000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	10000 / -	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	3 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	21.4 / -	$ftlb/in^2$	ISO 179/1eU
Charpy notched impact strength, 23°C	1.43 / -	$ftlb/in^2$	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	500 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	185 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	365 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.0157 / *	in	IEC 60695-11-10
Glow Wire Flammability Index, 0.75mm	1760 / -	°F	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	1760 / -	°F	IEC 60695-2-12

Electrical properties

	dry/cond.	
Comparative tracking index	600 / -	IEC 60112

Physical/Other properties

	dry/cond.		
Density	0.0422 / -	lb/in^3	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.1	%
Melt Temperature Optimum	527	°F
Min. melt temperature	509	°F
Max. melt temperature	545	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	158	°F

Revised: 2026-03-23 Source: Celanese Materials Database

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Min. mold temperature	140	°F
Max. mold temperature	194	°F

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
VW Group	VW 50133	*Best Fitting Grade To PA66-1-A, Not Officially Approved

Characteristics

Processing	Injection Molding
Additives	Flame retardant, Non-halogenated/Red phosphorus free flame retardant
Special characteristics	Flame retardant, Heat stabilized or stable to heat

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