FRIANYL® A3 RV0 BK 9005/JJ

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 / *	in³/lb	ISO 307, 1628
Molding shrinkage range, parallel	1.2 - 1.7	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.9 - 1.4	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	479000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	11000 / -	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	7.4 / -	%	ISO 527-1/-2
Charpy notched impact strength, 23 °C	1.57 / -	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30 °C	1.19 / -	ftlb/in²	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
Thickness tested	0.0630 / *	in	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

Electrical properties

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

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.2 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.5 / *	%	Sim. to ISO 62
Density	0.0419 / -	lb/in³	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

Revised: 2026-04-16 Source: Celanese Materials Database

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Max. melt temperature	545	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	158	°F
Min. mold temperature	140	°F
Max. mold temperature	194	°F

Characteristics

Processing	Injection Molding
Additives	Flame retardant, Non-halogenated/Red phosphorus free flame retardant
Special characteristics	Flame retardant

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