FRIANYL® A3 RV0 VT 4005/P

FRIANYL®

Car industry, Household appliances, Electrical devices.

Product information

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

Rheological properties

	dry/cond.		
Viscosity number	3740 / *	in³/lb	ISO 307, 1628
Molding shrinkage range, parallel	1 - 1.5	%	ISO 294-4, 2577
Molding shrinkage range, normal	1 - 1.6	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	508000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	12000 / -	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	5 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	>50 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.43 / -	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	0.0098 / *	in	IEC 60695-11-10
UL recognition	yes / *		UL 94
Glow Wire Flammability Index, 0.75mm	1760 / -	°F	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	1760 / -	°F	IEC 60695-2-12
Glow Wire Ignition Temperature, 0.75mm	1430 / -	°F	IEC 60695-2-13
Glow Wire Ignition Temperature, 3.0mm	1430 / -	°F	IEC 60695-2-13

Electrical properties

	dry/cond.		
Volume resistivity	1E13 / -	Ohm.m	IEC 62631-3-1
Comparative tracking index	600 / -		IEC 60112

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.5 / *	%	Sim. to ISO 62
Density	0.0426 / -	lb/in³	ISO 1183

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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
Min. mold temperature	140	°F
Max. mold temperature	194	°F
Ejection temperature	428	°F

Characteristics

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

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