FRIANYL® A3 GF25 V0XI

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Designed for Electrical applications requiring self-extinguishing properties combined with excellent ignition resistance, this grade meets the most stringent safety requirements for insulating materials.

Product information

Resin Identification	PA66-GF25FR(17)	ISO 1043
Part Marking Code	>PA66-GF25FR(17)<	ISO 11469

Rheological properties

	dry/cond.		
Melt volume-flow rate	40 / *	cm^3/10min	ISO 1133
Temperature	518 / *	°F	
Load	11 / *	lb	
Molding shrinkage range, parallel	0.2 - 0.5	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.5 - 0.8	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.42E6 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	21000 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.3 / -	%	ISO 527-1/-2
Flexural modulus	1.2E6 / -	psi	ISO 178
Flexural strength	27600 / -	psi	ISO 178
Charpy impact strength, 23°C	>50 / -	$ftlb/in^2$	ISO 179/1eU
Charpy notched impact strength, 23°C	3.81 / -	$ftlb/in^2$	ISO 179/1eA
Izod notched impact strength, 23°C	4.28 / -	$ftlb/in^2$	ISO 180/1A
Izod impact strength, 23°C	21.4 / -	$ftlb/in^2$	ISO 180/1U

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	446 / *	°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	0.0138 / *	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	1520 / -	°F	IEC 60695-2-13
Glow Wire Ignition Temperature, 3.0mm	1610 / -	°F	IEC 60695-2-13
FMVSS Class	SE		ISO 3795 (FMVSS 302)

Electrical properties

	dry/cond.	
Comparative tracking index	350 / -	IEC 60112

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Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1 / *	%	Sim. to ISO 62
Water absorption, 2mm	3.7 / *	%	Sim. to ISO 62
Density	0.0578 / -	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	536	°F
Min. melt temperature	509	°F
Max. melt temperature	554	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	176	°F
Min. mold temperature	158	°F
Max. mold temperature	194	°F

Characteristics

Processing	Injection Molding
Additives	Flame retardant
Special characteristics	Flame retardant, Heat stabilized or stable to heat, Laser Markable

Revised: 2026-03-06 Source: Celanese Materials Database

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