FRIANYL® A3 GF25 V0XI BK 7021/A

FRIANYL®

Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA66-GF25 FR(17)		ISO 1043
Part Marking Code	>PA66-GF25 FR(17)<		ISO 11469
Continuous Service Temperature	239	°F	IEC 60216-1

Rheological properties

	dry/cond.		
Molding shrinkage, parallel	0.4 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / -	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.41E6 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	21800 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.4 / -	%	ISO 527-1/-2
Flexural modulus	1.44E6 / -	psi	ISO 178
Flexural strength	35500 / -	psi	ISO 178
Flexural strain at failure	2.75 / -	%	ISO 178
Charpy impact strength, 23°C	26.6 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.14 / -	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	4.23 / -	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	21.4 / -	ftlb/in²	ISO 180/1U

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	473 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	482 / *	°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
UL recognition	yes / *		UL 94

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1 / *	%	Sim. to ISO 62
Water absorption, 2mm	3.9 / *	%	Sim. to ISO 62
Density	0.057 / -	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

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

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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

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