Celanese
The chemistry inside innovation™

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	115 °C	IEC 60216-1

Rheological properties

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

Typical mechanical properties

	dry/cond.		
Tensile modulus	9700 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	150 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.4 / -	%	ISO 527-1/-2
Flexural modulus	9900 / -	MPa	ISO 178
Flexural strength	240 / -	MPa	ISO 178
Flexural strain at failure	2.75 / -	%	ISO 178
Charpy impact strength, 23°C	56 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	8.7 / -	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	8.9 / -	kJ/m²	ISO 180/1A
Izod impact strength, 23°C	45 / -	kJ/m²	ISO 180/1U
Poisson's ratio	0.34 / -[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	245 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	250 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	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	1580 / -	kg/m³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	80	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.1	%

Celanese
The chemistry inside innovation™

FRIANYL® A3 GF25 V0XI BK 7021/A

FRIANYL®

Melt Temperature Optimum	280	°C
Min. melt temperature	265	°C
Max. melt temperature	290	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	80	°C
Min. mould temperature	70	°C
Max. mould temperature	90	°C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Additives	Flame retardant
Special characteristics	Flame retardant, Heat stabilised or stable to heat

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