FRIANYL® A3 W V2 BK 9005/U

FRIANYL®

Suitable for any field of application, this grade offers good mechanical performance, high productivity, easy processability for an aesthetically brilliant result.

Product information

Resin Identification	PA66	ISO 1043
Part Marking Code	>PA66<	ISO 11469

Rheological properties

Molding shrinkage range, parallel	1.5 - 1.9	%	ISO 294-4, 2577
Molding shrinkage range, normal	1.5 - 1.9	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	450000 / 152000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	12000 / 7000	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	10 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	19 / >80	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	1.9 / 6.18	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°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	392 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.0295 / *	in	IEC 60695-11-10
UL recognition	yes / *		UL 94

Electrical properties

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

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.4 / *	%	Sim. to ISO 62
Water absorption, 2mm	8.5 / *	%	Sim. to ISO 62
Density	0.0408 / -	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	518	°F
Max. melt temperature	554	°F
Max. screw tangential speed	≤0.2	m/s

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

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Mold Temperature Optimum	176 °F
Min. mold temperature	140 °F
Max. mold temperature	194 °F

Characteristics

Processing	Injection Molding
Additives	Nucleated, Non-halogenated/Red phosphorus free flame retardant
Special characteristics	Flame retardant, Heat stabilized or stable to heat

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