CELANYL® A3 H GF15 TP05S BK 9005/Z

CELANYL®

Lubricated grade with improved wear resistance, PTFE free.

Product information

Resin Identification	PA66-GF15		ISO 1043
Part Marking Code	>PA66-GF15<		ISO 11469
Continuous Service Temperature	248	°F	IEC 60216-1

Rheological properties

Molding shrinkage range, parallel	0.5 - 0.9	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.9 - 1.1	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	798000 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	15200 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5 / -	%	ISO 527-1/-2
Flexural modulus	725000 / -	psi	ISO 178
Flexural strength	21800 / -	psi	ISO 178
Charpy impact strength, 23°C	14.3 / -	ftlb/in²	ISO 179/1eU
Izod notched impact strength, 23°C	2.85 / -	ftlb/in²	ISO 180/1A

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	500 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	437 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	464 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.1181 / *	in	IEC 60695-11-10

Electrical properties

	dry/cond.		
Volume resistivity	1E13 / -	Ohm.m	IEC 62631-3-1
Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric strength	533 / -	kV/in	IEC 60243-1
Comparative tracking index	500 / -		IEC 60112

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.6 / *	%	Sim. to ISO 62
Water absorption, 2mm	6 / *	%	Sim. to ISO 62
Density	0.0433 / -	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	≤0.15	%
Melt Temperature Optimum	563	°F
Min. melt temperature	545	°F
Max. melt temperature	581	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F

Characteristics

Processing	Injection Molding
Special characteristics	Heat stabilized or stable to heat, Low wear / Low friction

Revised: 2024-08-16 Source: Celanese Materials Database

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