CELANYL® A3 GB50 BK 9005/A

CELANYL®

Designed for any technical application requiring high dimensional stability, low warpage, and good surface quality. Improved processability.

Product information

Resin Identification	(PA66+PA6)-GB50	ISO 1043
Part Marking Code	>(PA66+PA6)-GB50<	ISO 11469
Continuous Service Temperature	194 °F	IEC 60216-1

Rheological properties

Molding shrinkage range, parallel	0.7 - 1.1 %	ISO 294-4, 2577
Molding shrinkage range, normal	0.7 - 1.1 %	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	856000 / -	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	9430 / -	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5 / -	%	ISO 527-1/-2
Charpy impact strength, 23 °C	14.3 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23 °C	1.43 / -	ftlb/in²	ISO 179/1eA
Ball indentation hardness, H 961/30	31900 / -	psi	ISO 2039-1

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	500 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	392 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	428 / *	°F	ISO 75-1/-2

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.3 / *	%	Sim. to ISO 62
Water absorption, 2mm	4.2 / *	%	Sim. to ISO 62
Density	0.056 / -	lb/in³	ISO 1183

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

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

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Characteristics

Processing	Injection Molding
Special characteristics	Heat stabilized or stable to heat, High Gloss, High Flow, Low Warpage

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