CELANYL® B3 HH J10 GF40 BK 9005/TG

CELANYL®

Suitable for any technical application, provide high rigidity and toughness. Improved surface quality.

Product information

Resin Identification	PA6-I-GF40		ISO 1043
Part Marking Code	>PA6-I-GF40<		ISO 11469
Continuous Service Temperature	248	°F	IEC 60216-1

Rheological properties

Molding shrinkage range, parallel	0.2 - 0.5	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.5 - 0.8	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.57E6 / 870000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	23900 / 16000	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	3.5 / 8	%	ISO 527-1/-2
Charpy impact strength, 23°C	>80 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	9.51 / 14.3	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	9.99 / -	ftlb/in²	ISO 180/1A

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	437 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	383 / *	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	410 / *	°F	ISO 75-1/-2

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.3 / *	%	Sim. to ISO 62
Water absorption, 2mm	4.6 / *	%	Sim. to ISO 62
Density	0.0509 / -	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	500	°F
Min. melt temperature	464	°F
Max. melt temperature	554	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	176	°F
Min. mold temperature	122	°F
Max. mold temperature	248	°F

Characteristics

Processing	Injection Molding
Special characteristics	High impact or impact modified, Heat stabilized or stable to heat

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

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