CELANYL® A3 HH J10 GF13 BK 9005/E

CELANYL®

Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA66-I-GF13		ISO 1043
Part Marking Code	>PA66-I-GF13<		ISO 11469
Continuous Service Temperature	266	°F	IEC 60216-1

Rheological properties

	dry/cond.		
Molding shrinkage, parallel	0.6 / -	%	ISO 294-4, 2577
Molding shrinkage range, parallel	0.4 - 0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / -	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.7 - 1	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	696000 / 464000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	14500 / 9430	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	4.5 / 10	%	ISO 527-1/-2
Flexural modulus	580000 / -	psi	ISO 178
Flexural strength	22500 / -	psi	ISO 178
Charpy impact strength, 23°C	30.9 / >60	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.76 / 7.14	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	4.28 / -	ftlb/in²	ISO 180/1A
Izod impact strength, 23°C	>50 / -	ftlb/in²	ISO 180/1U

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	460 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.0315 / *	in	IEC 60695-11-10
Glow Wire Flammability Index, 0.75mm	1200 / -	°F	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	1200 / -	°F	IEC 60695-2-12

Electrical properties

	dry/cond.		
Comparative tracking index	500 / -		IEC 60112

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.7 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.2 / *	%	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
Ejection temperature	408	°F

Characteristics

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

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

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