CELANYL® A3 HH J6 BK 9005/3

CELANYL®

Designed for Automotive industry, suitable for any technical applications requiring improved impact and long term heat ageing resistance.

Product information

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

Rheological properties

Molding shrinkage range, parallel	1.4 - 1.8	%	ISO 294-4, 2577
Molding shrinkage range, normal	1.4 - 1.8	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	413000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	11000 / -	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	5 / -	%	ISO 527-1/-2
Tensile stress at break, 50mm/min	8700 / -	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	20 / -	%	ISO 527-1/-2
Flexural modulus	377000 / -	psi	ISO 178
Charpy impact strength, 23°C	>80 / -	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	4.99 / -	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	3.57 / -	ftlb/in²	ISO 180/1A

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	158 / *	°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

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	2.2 / *	%	Sim. to ISO 62
Water absorption, 2mm	7.9 / *	%	Sim. to ISO 62
Density	0.0401 / -	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	554	°F
Min. melt temperature	536	°F
Max. melt temperature	572	°F
Max. screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	176	°F

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

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Min. mold temperature	122	°F
Max. mold temperature	212	°F

Characteristics

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

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