CELANYL® A4 E GF25 BK 9005

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Designed as 'all in one solution' specifically for the thermal break insulation profiles extrusion.

Product information

Resin Identification	(PA66+PA6)-GF25		ISO 1043
Part Marking Code	>(PA66+PA6)-GF25<		ISO 11469
Continuous Service Temperature	212	°F	IEC 60216-1

Rheological properties

	dry/cond.		
Melt volume-flow rate	14.5 / *	cm^3/10min	ISO 1133
Temperature	527 / *	°F	
Load	11 / *	lb	
Molding shrinkage range, parallel	0.3 - 0.6	%	ISO 294-4, 2577
Molding shrinkage range, normal	0.6 - 0.9	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	1.12E6 / 783000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	20300 / 13800	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	4 / 6.5	%	ISO 527-1/-2
Flexural modulus	1.12E6 / -	psi	ISO 178
Flexural strength	29000 / -	psi	ISO 178
Charpy impact strength, 23°C	30.9 / 38.1	$ftlb/in^2$	ISO 179/1eU
Charpy notched impact strength, 23°C	5.47 / 7.14	$ftlb/in^2$	ISO 179/1eA
Izod notched impact strength, 23°C	5.71 / -	$ftlb/in^2$	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	473 / *	°F	ISO 75-1/-2

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.6 / *	%	Sim. to ISO 62
Water absorption, 2mm	6 / *	%	Sim. to ISO 62
Density	0.0473 / -	lb/in^3	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

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Extrusion

Drying Temperature	176 - 212	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.05	%
Melt Temperature Optimum	554	°F
Melt Temperature Range	536 - 572	°F

Characteristics

Processing	Injection Molding, Extrusion

Revised: 2025-12-22 Source: Celanese Materials Database

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