CELANYL® A3 H BK 9005

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Injection molding grade, easy flowing, suitable for any technical application requiring long term temperature resistance.

Product information

Resin Identification	(PA66+PA6)		ISO 1043
Part Marking Code	>(PA66+PA6)<		ISO 11469
Continuous Service Temperature	284	°F	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	4010 / *	in³/lb	ISO 307, 1628
Molding shrinkage range, parallel	1.5 - 1.9	%	ISO 294-4, 2577
Molding shrinkage range, normal	1.5 - 1.9	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	435000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	12000 / 7300[C]	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	20 / -[C]	%	ISO 527-1/-2
Charpy impact strength, 23°C	23.8 / >50	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	2.28 / 7.14[C]	ftlb/in²	ISO 179/1eA
Ball indentation hardness, H 961/30	21800 / -	psi	ISO 2039-1

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	176 / *	°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	2.4 / *	%	Sim. to ISO 62
Water absorption, 2mm	8.4 / *	%	Sim. to ISO 62
Density	0.0408 / -	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	≤0.4	m/s
Mold Temperature Optimum	158	°F
Min. mold temperature	122	°F
Max. mold temperature	194	°F

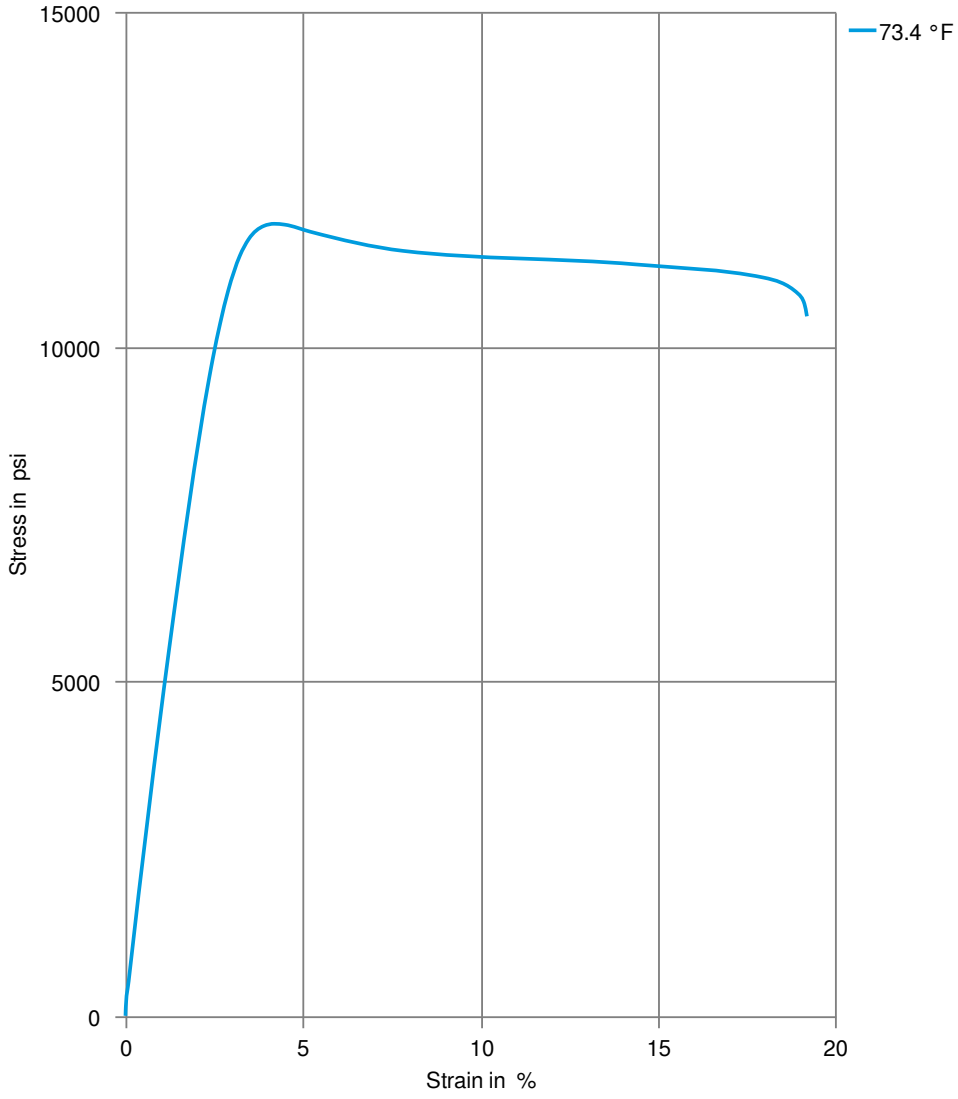
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Characteristics

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

Stress-strain (dry)

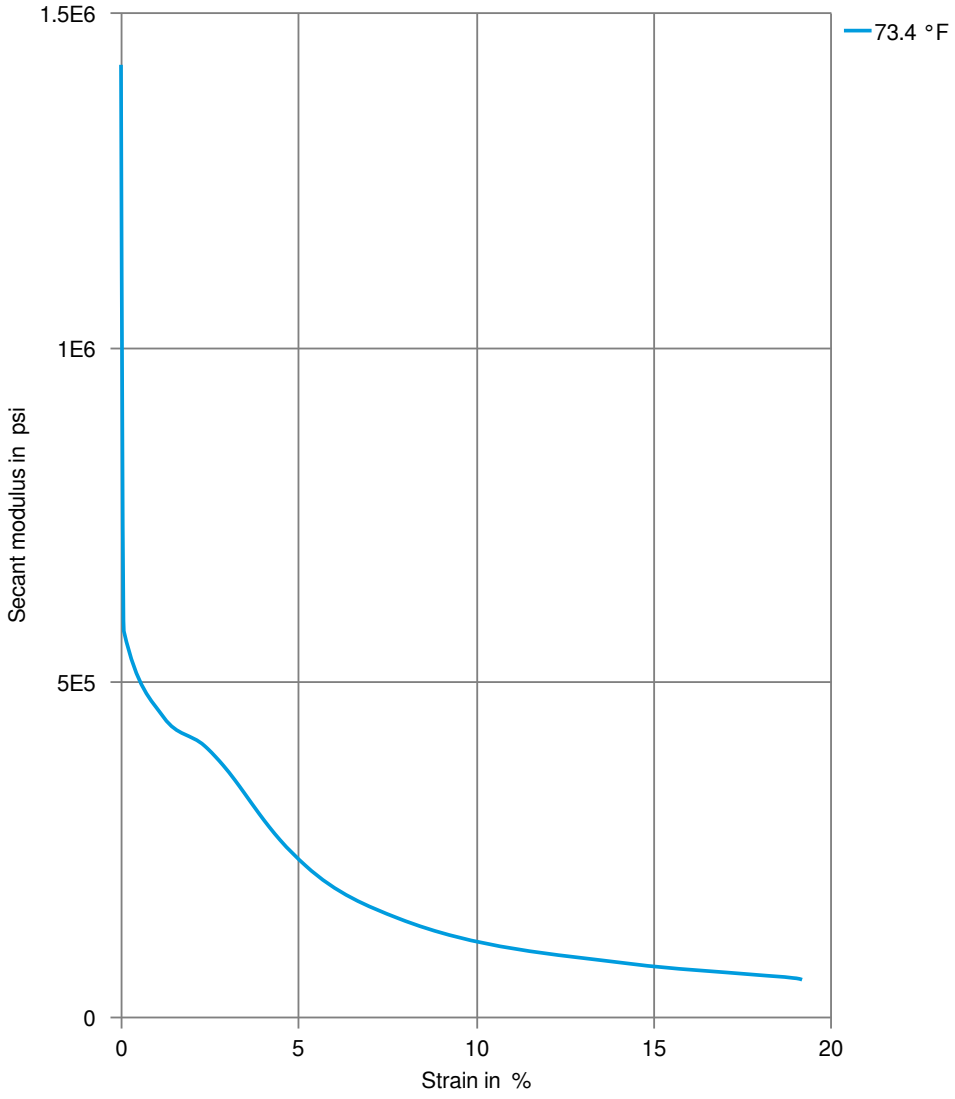


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Secant modulus-strain (dry)



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