CELANYL® A3 H J20 BK 9005/2

CELANYL®

Toughened grade for outstanding impact resistance over a wide temperature range. Long term heat ageing resistance.

Product information

Resin Identification	PA66-I		ISO 1043
Part Marking Code	>PA66-I<		ISO 11469

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	276000 / 109000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	7000 / -	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	5.5 / -	%	ISO 527-1/-2
Tensile stress at break, 50mm/min	6380 / 5950	psi	ISO 527-1/-2
Tensile strain at break, 50mm/min	35 / 200	%	ISO 527-1/-2
Flexural modulus	276000 / 97200	psi	ISO 178
Flexural strength	9860 / 3770	psi	ISO 178
Charpy impact strength, 23°C	85.6 / N	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	38.1 / 57.1	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	509 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	140 / *	°F	ISO 75-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	6.5 / *	%	Sim. to ISO 62
Density	0.0386 / -	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
Min. mold temperature	122	°F
Max. mold temperature	212	°F

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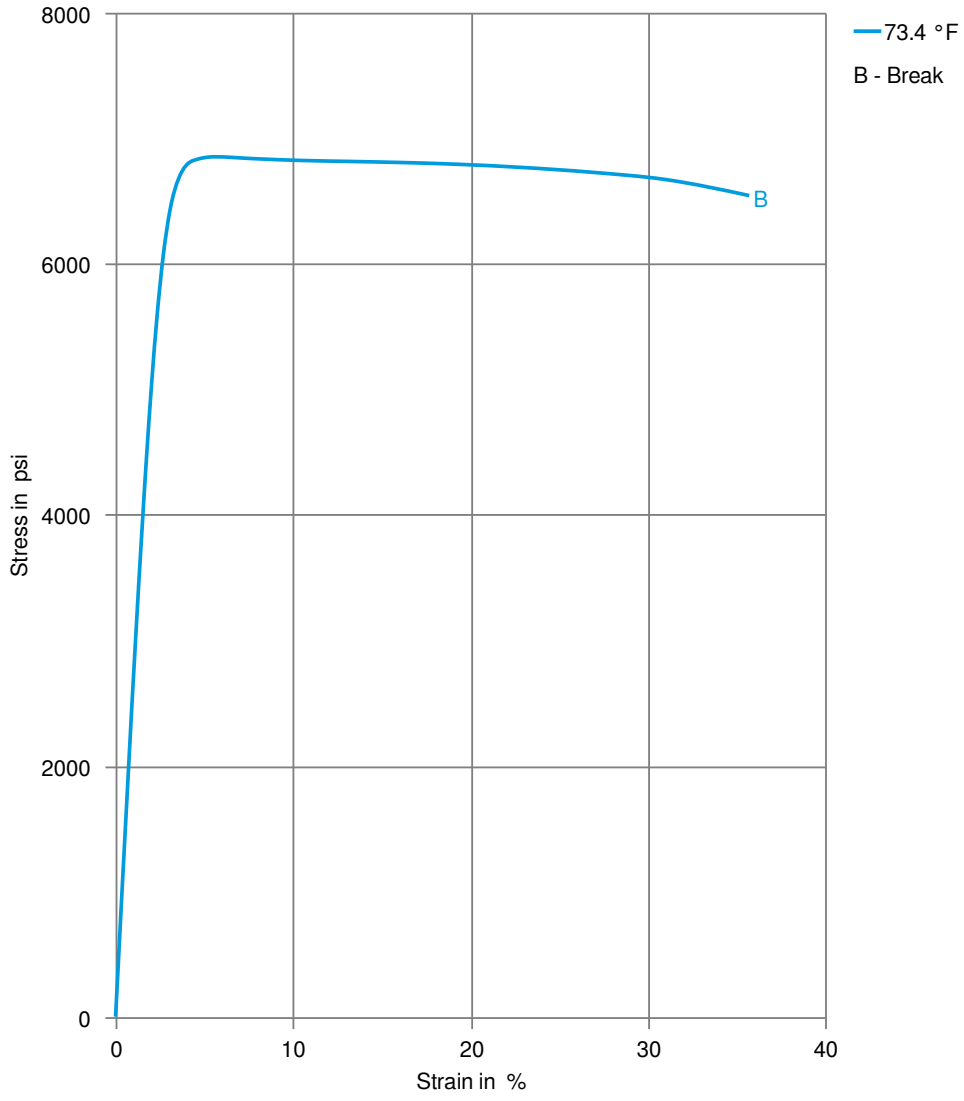
Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
VW Group	VW 50127	*Best Fitting Grade To PA66-3, Not Officially Approved

Characteristics

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

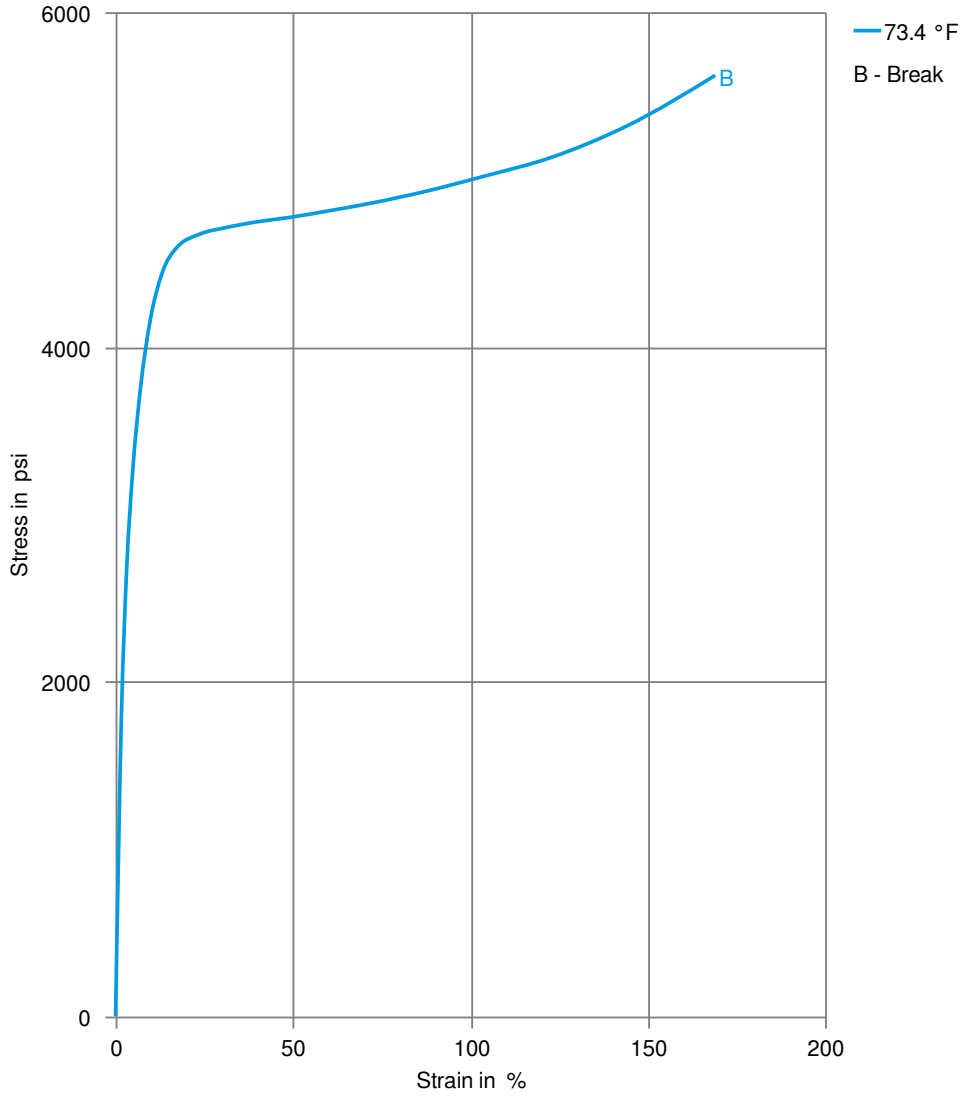
Stress-strain (dry)



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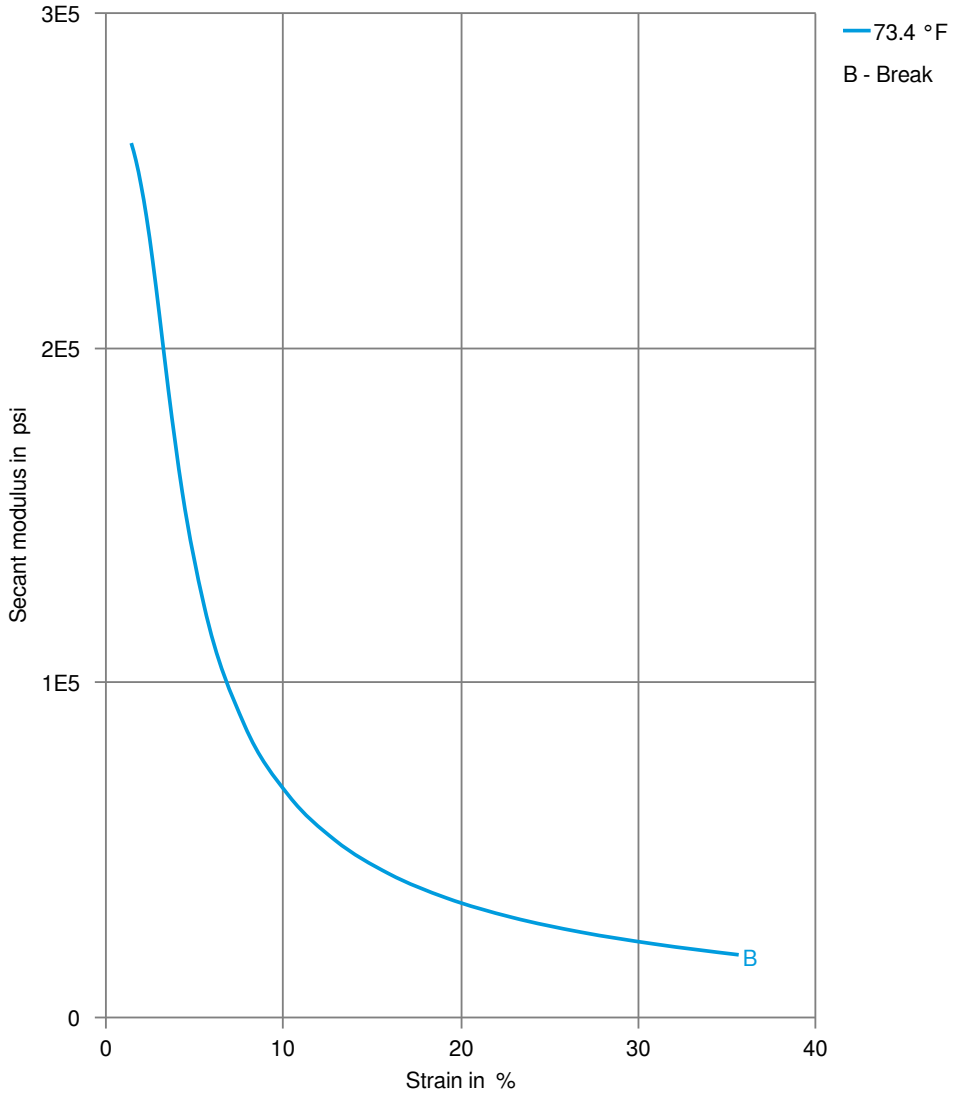
Stress-strain (cond.)



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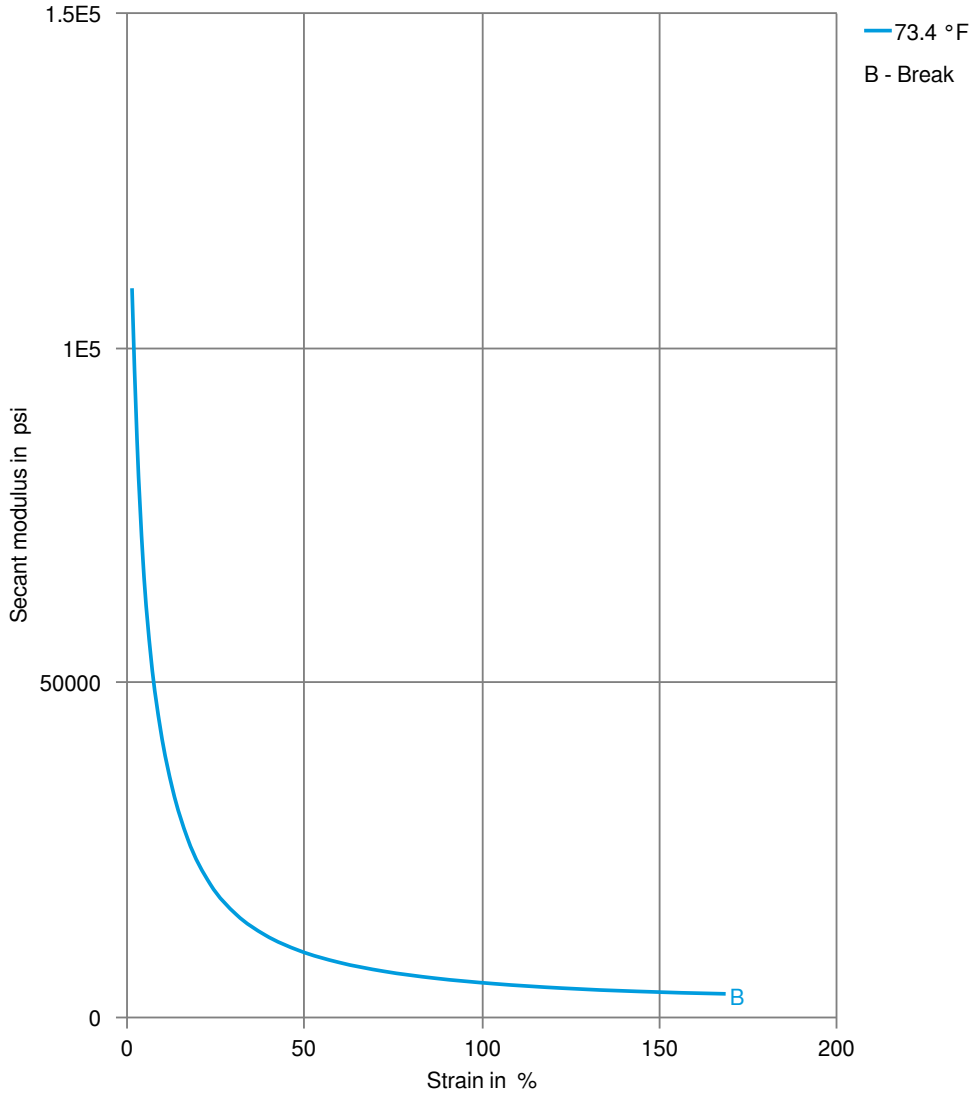
Secant modulus-strain (dry)



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Secant modulus-strain (cond.)



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