Desmopan 445

400 grade series, ester / Shore hardness D 45 - 70

injection molding grade; grease and oil-resistant; good heat resistance; low compression set; Application; Automotive engineering; Injection molded engineering parts

ISO Shortname

	Property	Test Condition	Unit	Standard	typical Value drying	annealed	- according to specifications
Mechanical properties (23 °C/50 % r. h.)							
C	shore hardness, method A		-	ISO 868		93	
C	shore hardness, method D		-	ISO 868		44	
	Ultimate tensile strength	200 mm/min	MPa	DIN 53504		56,4	
	Strain at break	200 mm/min	%	DIN 53504		491	
	Stress at 10 % strain	200 mm/min	MPa	DIN 53504		5,5	
	Stress at 50 % strain	200 mm/min	MPa	DIN 53504		11,6	
	Stress at 100 % strain	200 mm/min	MPa	DIN 53504		14,3	
	Stress at 300 % strain	200 mm/min	MPa	DIN 53504		31,5	
C	Compression set	24 h; 70 °C	%	ISO 815		35	
C	Abrasion resistance		mm³	ISO 4649		25	
	Impact resilience		%	ISO 4662		35	
	Tear propagation resistance	500 mm/min	kN/m	ISO 34-1		95	
Thermal properties							
	Torsional storage modulus	-20 °C	MPa	ISO 6721-2		280	
	Torsional storage modulus	23 °C	MPa	ISO 6721-2		25	
	Torsional storage modulus	70 °C	MPa	ISO 6721-2		16	
	Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		790	
	Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		103	
	Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		58	
Other properties (23 °C)							
C	Density		kg/m³	ISO 1183-1			1220
Molding conditions							
	Injection molding-Melt temperature		°C	-	210 - 235		
	Injection molding-Mold temperature		°C	-			20 - 40
	Maximum drying temperature		°C	-			110

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Impact properties: N = non-break, P = partial break, C = complete break

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Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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