



Desmopan 445

400 grade series, ester / Shore hardness D 45 - 49

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	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	
C Ultimate tensile strength	200 mm/min	MPa	acc. ISO 527-1,-3		38	
C Elongation at break	200 mm/min	%	acc. ISO 527-1,-3		500	
C Stress at 100 % strain	200 mm/min	MPa	acc. ISO 527-1,-3		8	
C Stress at 300 % strain	200 mm/min	MPa	acc. ISO 527-1,-3		20	
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		1220	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.