



Desmopan 453

400 grade series, ester / Shore hardness D 50 - 54

grease and oil-resistant; low compression set; good wear resistance; injection molding grade; Cylindrical pellets; opaque; Injection molded engineering parts

ISO Shortname

Property	Test Condition	Unit	Standard	Value	
				drying	annealed
Mechanical properties (23 °C/50 % r.h.)					
C shore hardness, method A		-	ISO 868		97
C shore hardness, method D		-	ISO 868		52
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		475
C Stress at 100 % strain	200 mm/min	MPa	acc. ISO 527-1,-3		17
C Stress at 300 % strain	200 mm/min	MPa	acc. ISO 527-1,-3		29
C Compression set	24 h; 70 °C	%	ISO 815		1527
C Compression set	72 h; 23 °C	%	ISO 815		15
C Abrasion resistance		mm ³	ISO 4649		32
Impact resilience		%	ISO 4662		30
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1		180
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183		1230
Molding conditions					
Injection molding-Melt temperature		°C	-	220 - 240	
Injection molding-Mold temperature		°C	-		20 - 40



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Disclaimer

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Test values

Unless specified to the contrary, the values given have been established on standardised test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.

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