

Desmopan 790

700 grade series, carbonates / Shore hardness A 90 - 94

Extrusion- and injection molding grade; high mechanical strength; Application; Toothed belts; Profiles; 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		92	
C shore hardness, method D		-	ISO 868		40	
Ultimate tensile strength	200 mm/min	MPa	DIN 53504		48	
Strain at break	200 mm/min	%	DIN 53504		434	
Stress at 10 % strain	200 mm/min	MPa	DIN 53504		3,4	
Stress at 50 % strain	200 mm/min	MPa	DIN 53504		8,5	
Stress at 100 % strain	200 mm/min	MPa	DIN 53504		11,7	
Stress at 300 % strain	200 mm/min	MPa	DIN 53504		32,2	
C Compression set	24 h; 70 °C	%	ISO 815		50	
C Compression set	72 h; 23 °C	%	ISO 815		25	
C Abrasion resistance		mm ³	ISO 4649		30	
Impact resilience		%	ISO 4662		32	
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1		85	

Thermal properties

Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		630	
Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		100	
Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		53	

Other properties (23 °C)

C Density		kg/m ³	ISO 1183-1			1210
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Molding conditions

Injection molding-Melt temperature		°C	-	210 - 230		
Injection molding-Mold temperature		°C	-			20 - 40
Extrusion-Melt temperature		°C	-	200 - 220		
Maximum drying temperature		°C	-			80

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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Test values

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

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.

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