

Desmopan DP 3970D

Glass fiber (Normal fiber) reinforced grades / Shore hardness injection molding grade; 20 % Glass fiber reinforced; good heat resistance; low coefficient of linear thermal expansion; Application; Automotive engineering; Injection molded engineering parts
D 70 - 74

ISO Shortname

Property	Test Condition	Unit	Standard	Value		
				drying	annealed	-
Mechanical properties (23 °C/50 % r. h.)						
C shore hardness, method A		-	ISO 868		99	
C shore hardness, method D		-	ISO 868		70	
C Ultimate tensile strength	200 mm/min	MPa	b.o. ISO 527-1,-3		64	
C Strain at break	200 mm/min	%	b.o. ISO 527-1,-3		25	
Flexural modulus	2 mm/min	MPa	ISO 178		1700	
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU		150	
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU		82	
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA		57	
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA		14,3	
Thermal properties						
Vicat softening temperature	10 N; 120 °C/h	°C	ISO 306		120	
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2		130	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2		150	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2		0,2	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2		1,4	
Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		2870	
Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		1519	
Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		877	
Other properties (23 °C)						
C Density		kg/m ³	ISO 1183-1			1376
Molding conditions						
Injection molding-Melt temperature		°C	-	220 - 245		
Injection molding-Mold temperature		°C	-			40 - 80
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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Disclaimer

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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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