

Desmopan DP 1080A

100 grade series, ester / Shore hardness A 80 - 84

injection molding grade; free from plasticizers; hard - soft systems; Technical 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		80	
Ultimate tensile strength	200 mm/min	MPa	DIN 53504		31,5	
Strain at break	200 mm/min	%	DIN 53504		723	
Stress at 10 % strain	200 mm/min	MPa	DIN 53504		1,3	
Stress at 50 % strain	200 mm/min	MPa	DIN 53504		3,3	
Stress at 100 % strain	200 mm/min	MPa	DIN 53504		4,1	
Stress at 300 % strain	200 mm/min	MPa	DIN 53504		7,6	
C Compression set	24 h; 70 °C	%	ISO 815		39	
C Compression set	72 h; 23 °C	%	ISO 815		22	
C Abrasion resistance		mm ³	ISO 4649		35	
Impact resilience		%	ISO 4662		44	
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1		56	
Thermal properties						
Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		171	
Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		34	
Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		24	
Other properties (23 °C)						
C Density		kg/m ³	ISO 1183-1			1206
Molding conditions						
Injection molding-Melt temperature		°C	-	185 - 200		
Injection molding-Mold temperature		°C	-			20
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



Desmopan DP 1080A

Disclaimer

Disclaimer for Developmental products

* This is a developmental product. Further information, including amended or supplementary data on hazards associated with its use, may be compiled in the future. For this reason, no assurances are given as to type conformity, processability, long-term performance characteristics or other production or application parameters. Therefore, the purchaser/user uses the product entirely at his own risk without having been given any warranty or guarantee and agrees that the supplier shall not be liable for any damage, of whatever nature, arising out of such use.

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.

Disclaimer

All of the information, documents and illustrations published on this website are the exclusive property of BAYER. Permission for their use is given on the proviso that the copyright note appears on all copies, that only personal and not commercial use is made of the information, that the information is not altered in any way and that all illustrations on the website are used only in conjunction with the associated texts. BAYER assumes no liability or warranties with respect to the information, documents and illustrations on the website. BAYER is not responsible for any damage of whatever nature that might arise from the use or existence of the website and the information, documents and illustrations it contains. The user bears full responsibility for all risks to him that might arise from the use of this website. BAYER reserves the right to amend or supplement the documents and information provided on the website at any time and without prior notice. The user of this website is fully responsible for the content and correctness of details he or she sends to BAYER, as well as for non-violation of any third-party rights that may be involved in such details.

Publisher: Global Innovations - Polycarbonates

Bayer MaterialScience AG,

D-51368 Leverkusen,

www.bayermaterialscience.com