

Desmopan DP 3055D

300 grade series, ester / Shore hardness D 55 - 59

injection molding grade; with high mechanical strength for articles subject to wear; excellent abrasion resistance; good wear resistance; very short cycle times; Application; Injection molded engineering parts; Rollers

ISO Shortname

Property	Test Condition	Unit	Standard	Value		
				drying	annealed	-
Mechanical properties (23 °C/50 % r. h.)						
C shore hardness, method A		-	ISO 868			96
C shore hardness, method D		-	ISO 868			56
Ultimate tensile strength	200 mm/min	MPa	DIN 53504			53,5
Strain at break	200 mm/min	%	DIN 53504			408
Stress at 10 % strain	200 mm/min	MPa	DIN 53504			14
Stress at 50 % strain	200 mm/min	MPa	DIN 53504			19,9
Stress at 100 % strain	200 mm/min	MPa	DIN 53504			22,2
Stress at 300 % strain	200 mm/min	MPa	DIN 53504			39,5
C Compression set	24 h; 70 °C	%	ISO 815			43
C Compression set	72 h; 23 °C	%	ISO 815			21
C Abrasion resistance		mm ³	ISO 4649			26
Impact resilience		%	ISO 4662			35
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1			136

Thermal properties

Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4			1200
Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4			256
Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4			117

Other properties (23 °C)

C Density		kg/m ³	ISO 1183-1			1220
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Molding conditions

Injection molding-Melt temperature		°C	-	220 - 240		
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.

Impact properties: N = non-break, P = partial break, C = complete break



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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.

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