

# Desmopan DP 3491A

300 grade series, ester / Shore hardness A 90 - 94

Extrusion- and injection molding grade; suitable for extrusion blow molding; high mechanical strength; high melt stability; Application; blow molding; Profiles; Injection molded engineering parts

## ISO Shortname

Property	Test Condition	Unit	Standard	typical Value	
				drying	annealed -
according to specifications					
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
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		54,1
Strain at break	200 mm/min	%	DIN 53504		498
Stress at 10 % strain	200 mm/min	MPa	DIN 53504		3,9
Stress at 50 % strain	200 mm/min	MPa	DIN 53504		7,4
Stress at 100 % strain	200 mm/min	MPa	DIN 53504		8,9
Stress at 300 % strain	200 mm/min	MPa	DIN 53504		25,8
C Compression set	24 h; 70 °C	%	ISO 815		50
C Compression set	72 h; 23 °C	%	ISO 815		20
C Abrasion resistance		mm <sup>3</sup>	ISO 4649 method A		25
Impact resilience		%	ISO 4662		36
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1		100

## Thermal properties

Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		515
Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		94
Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		59

## Other properties (23 °C)

C Density		kg/m <sup>3</sup>	ISO 1183-1		1200
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## Molding conditions

Injection molding-Melt temperature		°C	-	190 - 210	
Injection molding-Mold temperature		°C	-		20 - 40
Extrusion-Melt temperature		°C	-	180 - 210	
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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## Disclaimer

### Desmopan 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, you use the product entirely at his your own risk without having been given any warranty or guarantee and agree that Bayer MaterialScience shall not be liable for any damages, of whatever nature, arising out of such use. Commercialization and continued supply of this material are not assured. Its supply may be discontinued at any time.

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### Desmopan Typical value

The shown values are typical values only. Unless explicitly agreed in written form, they do not constitute a binding material specification or warranted values. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the property values given have been established on standardized test specimens at room temperature.

### Desmopan 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.

### Desmopan No Medical-, Food Contact- and Cosmetic Applications

This product is not designated as "Medical Grade"[i] and therefore shall not be considered a candidate for the manufacture of a medical device or of intermediate products for medical devices, which are intended under normal use to be brought into direct contact with the patient's body (e.g., skin, body fluids or tissues, including indirect contact to blood)\*. This product is also not designated for Food Contact[ii], including drinking water, or Cosmetic Applications. If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices, for Food Contact products or Cosmetic Applications, Covestro Aktiengesellschaft (COV-PUR-CO-TPU EMEA/LA) must be contacted in advance to provide its agreement to sell such product for such purpose. Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or Cosmetic Applications must be made solely by the purchaser of the product without relying upon any representations by Covestro Aktiengesellschaft (COV-PUR-CO-TPU EMEA/LA). [i] Please see the "Guidance on Use of Covestro Products in a Medical Application" document. [ii] As defined in Commission Regulation VO (EU) 1935/2004.

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